COVER NOTE

from : Mr Bernhard ZEPTER, Deputy Secretary-General of the European Commission
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to : Mr Javier SOLANA, Secretary-General/High Representative

Subject : Towards an Internal Market without tax obstacles


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Preface

Origin of the study

This study has been prepared by the services of the European Commission in compliance with an official mandate by the Council of Ministers. It is accompanied by a communication from the Commission to the Economic and Social Committee, the European Parliament and the Council.

Mandate to the Commission for a study on company taxation in the European Community

The Commission is invited to present an analytical study of company taxation in the European Community. This study will be undertaken in the general context of the Vienna European Council conclusions emphasizing the need to combat harmful tax competition whilst taking into account that cooperation in the tax policy area is not aiming at uniform tax rates and is not inconsistent with fair tax competition but is called for to reduce the continuing distortions in the single market also in view of stimulating economic growth, and enhancing the international competitiveness of the Community, to prevent excessive losses of tax revenue or to get tax structures to develop in a more employment-friendly way. This study will also be undertaken on the basis of the ECOFIN Council conclusions asking to illuminate existing differences in effective corporate taxation in the Community and the policy issues that such differences may give rise to. This study should also highlight remaining tax obstacles to cross-border economic activity in the Internal Market.

The study will analyze differences in effective levels of corporate tax in Member States, taking into account, inter alia, the results of the report of the Ruding Committee (1992). Attention should be given to the influence of corporate tax bases on effective levels of taxation. Moreover, the study should also identify the main tax provisions which may hamper cross-border economic activity in the Single Market. On this basis, an assessment should be undertaken of the effects on the location of economic activity and investment. The Commission should highlight the tax policy issues involved in reducing tax-induced distortions and examine possible remedial measures, taking account of the respective spheres of competence of the Member States and the Community.

The Commission should endeavour to complete the study to enable a report to be presented to the ECOFIN Council during the first half of 2000.
Background and history of the mandate

The mandate for this study goes back to the call by the EU Ministers of Finance at their informal meeting of 26 September 1998 in Vienna for a comprehensive study on company taxation in the European Community. At that meeting, among other things, the Ministers discussed the Code of Conduct for business taxation and some suggested that further measures in the field of company taxation might be necessary in the future and asked the Commission to examine this question. The ECOFIN Council of 1 December 1998 in Vienna, in approving the first progress report of the Code of Conduct group, formally agreed to ask the Commission for this study on company taxation in the European Community. Moreover, it asked the Permanent Representatives Committee to define the concrete terms of the mandate for the study and requested the Taxation Policy Group to be consulted thereon. The European Council in Vienna on 11 and 12 December 1998 explicitly confirmed this agreement of the ECOFIN Council.

After preparatory discussions in the Taxation Policy Group and in the Council Financial Questions Group of 14 June 1999 and 24 June 1999, the Permanent Representatives Committee agreed on 22 July 1999 the official mandate to the Commission for a study on company taxation in the European Community.

Two panels of experts

In preparing the study, the Commission has been assisted by two specifically created panels of experts. The task of the first panel was to advise the Commission services on the choice of methodology for the evaluation of the effective tax rates in Member States as well as the interpretation of the qualitative and quantitative results of the analysis. The task of the second panel was to advise the Commission services on the remaining company tax obstacles to the proper functioning of the Single Market and to analyse these taxation obstacles from the point of view of the European business community and social partners.

The first panel was composed of academics and experts who have previously been involved in theoretical and empirical work related to the evaluation of effective level of company taxation. They were chosen on the grounds of their outstanding reputation and proven ability in this area. The members of panel I were

Prof. Krister Andersson (Swedish Institute for Economic Research)
Prof. Jacques Le Cacheux (Université de Pau and OFCE)
Prof. Michael Devereux (Warwick University)
Prof. Silvia Giannini (Università degli Studi di Bologna)
Dr. Christoph Spengel (Universität Mannheim)
Maître Jean Marc Tirard
Prof. Frans Vanistendael (Universiteit Leuven)

The secretariat of the panel was ensured by Carola Maggiulli (European Commission).
The second panel was composed of experts from among the business community and social partners at the Community level. The Commission services contacted a variety of leading business associations, trade unions and accountancy associations and invited them to designate a member of the panel. The members of panel II were:

- Dr. Carlo-H. Borggreve and Roland Walter for CEEP (European Centre of Enterprises with Public Participation)
- Prof. Bruno Gangemi for CFE (Confédération Fiscale Européenne)
- Dr. Piergiorgio Valente for EFFEI (European Federation of Financial Executives Institutes)
- RA Alfons Kühn for Eurochambres (Association of European Chambers of Commerce and Industry); as from April 2000 Eurochambres was represented by Dr. Harald Hendel
- Wilfried Rometsch for Eurocommerce
- Philip Gillett for ERT (European Round Table of Industrialists)
- Prof. Sven-Olof Lodin for IFA (International Fiscal Association)
- Prof. Sylvain Plasschaert for TEPSA (Trans European Policy Study Association)
- Dr. Fidelis Bauer for UEAPME (European Association of Craft, Small- and Medium-Sized Enterprises); as from May 2000 UEAPME was represented by Dr. Peter Zacherl
- Jos W. B. Westerburgen for UNICE (Union of Industrial and Employer’s Confederations of Europe)
- Christophe Quintard and Marina Ricciardelli for ETUC (European Trade Union Confederation)

Madeleine Lindblad Woodward from the Fédération des Experts Compatibles Européens took part in one meeting of the panel. The secretariat of the panel was ensured by Dr. Rolf Diemer (European Commission).

**Operation of the panel work**

Both panels operated under the Chair of the Commission (Michel Aujean).

Panel I met five times (in July and October 1999; in February and May 2000).

Panel II met nine times (in July and September 1999; in January, February, March, April, May, June and July 2000).

Two joint meetings took place (September 2000 and January 2001).

The calculations for the determination of the effective levels of taxation were contracted out to the Institute for Fiscal Studies (IFS – London), the Centre for European Economic Research (ZEW – Mannheim) and the University of Mannheim. Thus, two external studies have been produced which are available on request.
Acknowledgements

The Commission is indebted to the members of the two panels and their very helpful oral and written contributions.

The Commission is very grateful to Dr. Joann Martens Weiner (former economist, Office of Tax Policy, U.S. Department of the Treasury) and John Neighbour (OECD secretariat) who made very valuable presentations to panel II.

The Commission also wishes to acknowledge the very helpful submissions by the Fédération des Experts Comptables Européens.

In accordance with the mandate, the Commission services bear the sole responsibility for the study and its contents. Therefore, the present report does not necessarily represent the views of all or individual members of the panels of experts.
COMPANY TAXATION IN THE INTERNAL MARKET

Executive Summary

Introduction

(1) The conclusions of the ECOFIN Council in December 1998 requested the Commission to carry out an analytical study on company taxation in the European Union. This study should illuminate differences in the effective level of corporate taxation and identify the main tax provisions that may hamper cross-border economic activity in the Single Market. On this basis an assessment should be undertaken of the effects on the location of economic activity and investments. In July 1999 the Permanent Representatives Committee (COREPER) refined this request into a formal mandate for the Commission asking for a factual analysis and a policy assessment with a view to EU company taxation.

(2) The Commission has been assisted by two specifically created panels of experts one focussing on the method for calculating the effective tax rates in Member States and the other on the remaining tax obstacles to the proper functioning of the Single market. The first panel was composed of academics with appropriate experience and scientific reputation in relevant theoretical works. The second panel included experts from among the business community and social partners at the Community level. The individual members of the second panel were designated by the respective organisations.

The Ruding report and the impact of the Internal Market

(3) This study takes the report of the Committee of Independent experts on Company Taxation into account that was asked by the Commission in 1990 to determine whether differences in business taxation and the burden of business taxes among Member States lead to major distortions affecting the functioning of the Single Market and to examine all possible remedial measures (Ruding Committee). The underlying analysis of this earlier study is mostly still topical. In this context it has to be noted that little progress has been achieved in the field of company taxation as a result of its findings and recommendations. However, the context for studying company taxation in the EU has since then changed in various ways. Moreover, the mandate given to the Commission by the Council for the present study is broader than that given by the Commission to the expert committee in 1990 as it explicitly requests the analysis of tax obstacles in the Internal Market.

(4) The overall economic framework has changed significantly since the early nineties. An unprecedented wave of international mergers and acquisitions, the emergence of electronic commerce and the increased mobility of factors with the growing development of "tax havens" all change the scenery under which European Member States levy taxes on company profits. These general global developments are still on-going and are particularly strong within the Internal Market.

(5) Most significantly, the Internal Market had not been established yet in 1990. The same holds for Economic and Monetary Union. Both developments impact on how the functioning of company tax systems within the EU has to be evaluated. As economic integration in the Internal Market proceeded, the economic, technological and institutional barriers to cross-border trade continued to wane. At the same time, taxation systems adapted to this process only very gradually. The pattern of international investments is therefore likely to be increasingly sensitive to cross-border differences in corporate tax rules in an environment now characterised by full mobility of capital. Moreover, while considerable progress has been made in the removal of the wide range of barriers to the establishment of the Internal Market (including the recent agreement on the European...
Company Statute), the tax impediments to cross-border activities within the Internal Market are becoming increasingly important. These elements describe important specific EU dimensions on company taxation which did not exist in the same way in 1990.

(6) EU businesses are presently confronted with a single economic zone in which 15 different company tax systems apply. This causes losses of economic efficiency, generates specific compliance costs, and contributes to a lack of transparency. The Internal Market and Economic and Monetary Union also strongly impact on the way EU companies carry out business in the Community and set the - intended - incentive to create effective pan-European business structures. This is because EU companies increasingly no longer define one Member State but rather the whole EU as their "home market". The resulting structural changes lead to the EU-wide re-organisation and centralisation of business functions within a group of companies, many of which were traditionally present in many or even all Member States. Such re-organisation can be achieved via internal realignments, via mergers and acquisitions or through the creation of foreign branches. These tendencies, in turn, impact on the taxation of these companies. EU companies argue that their perception of the EU as their "home market" generally does not correspond to a tax reality, unlike the USA for US companies. Thus, a variety of legal and economic factors define a specific "EU dimension" for analysing company taxation.

The effective level of company taxation in the EU

(7) From the point of view of economic efficiency, tax systems should ideally be "neutral" in terms of economic choices. In such an analytical framework, the choice of an investment, its financing or its location should in principle not be driven by tax considerations. From this perspective, and in an international context, similar investments should not face markedly different effective levels of taxation purely because of their country location. Differences in the effective levels of corporate taxation may in fact imply welfare costs because economic activity may not take place in the lowest (pre-tax) cost location by the lowest cost producers. If the impact of differences in tax regimes favours one location over another, or one producer over another, then goods may be produced at a higher pre-tax cost. Therefore, the size of these tax differentials and dispersions deserves attention.

(8) However, a full welfare cost assessment of differences in effective corporation tax rates would require a broader analysis, taking into account the existence of other taxes and other economic parameters, as well as national preferences for equity and the provision of public goods. Moreover, to the extent that there are pre-existing distortions and/or imperfections in the market economy (market failures), taxes may be used to internalise these externalities (e.g. pollution), thereby enhancing economic efficiency. It is impossible to precisely quantify the size of tax differentials needed to correct or mitigate market failures. However, the larger the tax differentials, the larger the market failure must be unless there is to be a loss of efficiency and welfare. It should be stressed that this study has not attempted to quantify the size of any efficiency loss or welfare cost that might be associated with existing differences in effective corporation tax rates in the European Union.

(9) In any event, taxation ultimately involves a political choice and may entail a trade-off between pure economic efficiency and other legitimate national policy goals and preferences. Furthermore, in the Community context, the subsidiarity principle and Member States' competences in the field of taxation have to be taken into account when assessing differences in effective tax rates between Member States.

(10) The purpose of the analysis of differences in the EU corporations' effective level of taxation is twofold. First, it gives summary measures of the overall relative incentive (or disincentive)
provided by each country's tax law to undertake various types of investments at home or in another EU Member State. Second, it identifies the most important tax drivers influencing the effective tax burdens, that is the weight of each of the most important elements of the tax regimes in the effective tax burden.

(11) The analysis does not provide evidence of the impact of taxation on actual economic decisions. Although empirical studies show that there is a correlation between taxation and location decisions, because of the weaknesses of the existing methodologies and their limitations due to lack of available data, it has been considered that none of the existing approaches could have been usefully adopted in the current study without considerably extending the range of the work.

(12) Taxation is, of course, only one of the determinants of investment and financing decisions. The existence and quality of economic infrastructures, the availability of qualified work, as well as the short and medium-term outlook in different markets and countries are among the other important determinants of investment behaviour. The geographical accessibility of markets, transport costs, environmental standards, wage levels, social security systems and the overall attitude of government all play an important role too. Which of these factors are relatively the more important very much depends on the individual type of investment decision. Nevertheless, as economic integration in the EU proceeds in the context of the Economic and Monetary Union and the Internal Market, in an environment where capital is fully mobile, the pattern of international investment is likely to be increasingly sensitive to cross-border differences in corporate tax rules.

(13) The study presents estimates of effective corporate tax rates on domestic and transnational investments in the 15 EU countries (as well as the US and Canada in certain cases) taking the tax systems in operation as of the year 1999. In addition, it presents estimates of effective corporate tax rates on domestic investments for the EU Member States in 2001. In view of the structure and magnitude of the German tax reform approved in 2000, the effects of this reform, as of the 1st January 2001, are separately analysed. The calculations consider primarily corporation taxes in each country, but also include the effect of personal income taxation of dividends, interest and capital gains.

(14) The most commonly used indicators for analysing the impact of taxation on investment behaviour are based on forward-looking approaches which permit international comparisons and are especially tailored to provide an indication of the general pattern of incentives to investment that are attributable to different national tax laws as well as on the most relevant tax drivers that influence the effective tax burdens. In this study, the main body of the computation of the effective corporate tax burden builds on the methodology involving calculating the effective tax burden for a hypothetical future investment project in the manufacturing sector. In technical terms, the analysis relies on a revised and extended methodology of the so-called King & Fullerton approach, set out by Devereux and Griffith (1998). This computation is supplemented by data arising from the application of the "European Tax Analyzer" model which utilises the model-firm approach set out by the University of Mannheim and ZEW (1999). Considering that each methodology is based on different hypotheses and restrictions, the comparison of the results of these approaches permits the testing and, possibly, confirmation of the general trends arising from the computations.

(15) The results of the application of these approaches depend heavily on the assumptions underlying both the definition of the hypothetical investment in terms of assets and financing or of the future firm behaviour in terms of total cash receipts and expenses, assets and liabilities over time and of the economic framework. As far as the economic framework is concerned, the value of the real interest rate is a crucial element. The existing studies based on these approaches assume different hypotheses in relation to the economic framework and the definition of the investment. This study,
for example, like the Ruding report, calculates effective tax rates at a given post-tax rate of return, whereas other studies\textsuperscript{1} compute the effective tax rate for a given pre-tax rate of return. Differences in the assumptions underlying the hypothetical investment and the economic framework can give rise to somewhat different numerical results.

(16) These approaches do not permit, for methodological reasons, taking into consideration in the computation all the relevant features linked to the existence and functioning of different tax systems. For instance, the effects of consolidating profits and losses throughout the EU are not included because the model assumes all investments are profitable. Neither is it possible to quantify or include compliance costs. However, the most important features of taxation systems such as the rates, major elements of the taxable bases and tax systems are included. The results produced should therefore be understood as summarising and quantifying the essential features of the tax system.

(17) Effective tax rates can be calculated for a so-called "marginal" investment (where the post-tax rate of return just equals the alternative market interest rate) or for a "infra-marginal" investment project (i.e. one that earns an extra-profit). This study has analysed both marginal and infra-marginal (average) effective company tax indicators. These reflect different hypotheses related to the underlying methodology, as well as to the domestic or international localisation of the investment, the profitability of the investment or of the firm considered, and the size and behaviour of the companies. The computations have been supplemented by "sensitivity analysis" which tests the impact of different hypotheses on the results.

(18) The broad range of data computed does not intend to present "universally valid values" for the effective tax burden in different countries, but rather to give indicators, or illustrate interrelations, in a series of relevant situations. In fact, effective tax rates in a particular Member State depend on the characteristics of the specific investment project concerned and the methodology applied.

(19) A number of general conclusions regarding both the differences in the effective tax burdens and the identification of the most relevant \textit{tax} drivers which influence these tax burdens, can nevertheless be formulated on the basis of the results. Therefore, explanations can be given on how Member States tax regimes create incentives to allocate resources. A striking feature of the quantitative analysis is that, across the range of different situations, the relevant conclusions and interpretations remain relatively constant.

(20) When domestic investments are considered, the analysis for 1999 suggests that there is considerable variation in the effective tax burden faced by investors resident in the various EU Member States, depending on the type of investment and its financing. However, the Member States' tax codes tend to favour the same forms of investment by assets and sources of finance. The range of the differences in national effective corporate taxation rates, when personal taxation is not taken into account is around 37 points in the case of a marginal investment (between -4.1% and 33.2%) and around 30 points in the case of more profitable investments (between 10.5% and 39.1% when the hypothetical investment methodology is applied and between 8.3% and 39.7% when the "Tax Analyser" model is applied). The introduction of personal taxation substantially increases the effective tax burdens and the observed differences. Moreover, the analysis suggests that, in practically every situation analysed tax systems tend to favour investment in intangibles and machinery and debt is the most tax-efficient source of finance.

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\textsuperscript{1} see, for instance: Baker & McKenzie, Survey of the Effective Tax Burden in the EU, Amsterdam; 1999 and 2001
A recent study by Baker and McKenzie conducted under different hypotheses concerning the economic context and the applied tax codes, shows that in the most similar economic situation to that considered in this study (pre-tax rate of return of 6% as against a post-tax rate of return of 5% considered in the Commission study), the range of variation is 32 points in the case of a marginal investment (from 4.9% to 36.8%). When the pre-tax rate of return is fixed at 10% (base case in the Baker and McKenzie computation), the range of variation is 23 points (from 6.8 to 30.1). This study also shows that the most tax efficient method of finance is debt and that the tax systems tend to favour investments in intangibles and machinery.

(21) Differences between the effective tax burden in the EU Member States may be important for two reasons. First, differences in effective tax rates faced by companies located in different countries, but competing in the same market, may affect their international competitiveness: two different companies, competing in the same market, may face two different tax rates. Second, when multinational companies face only the tax rate of the country where the activity takes place then differences in the effective tax rates between countries could also affect the location choice of individual activities. This can occur either as a result of the provisions of international tax codes, for example when the repatriation of profits by way of dividend from a subsidiary to a parent results in no further taxation because the dividend is exempt, or as a result of tax planning. A multinational company may therefore face different tax rates, depending on where its activities are located. As indicated, this economic reasoning is based on pure tax considerations and cannot, on its own, explain the actual behaviour of companies.

(22) Clearly, the EU wide spread cannot be explained by one single feature of the national tax system. However, the analysis of general regimes tends to show that – leaving aside preferential tax regimes - the different national nominal tax rates on profits (statutory tax rates, surcharges and local taxes) can explain many of the differences in effective corporate tax rates between countries. Although tax regimes are designed as more or less integrated systems (in general high tax rates on profits seem to correlate with a narrower taxable base and vice versa), tax rate differentials tend to outweigh the differences in the tax bases. The quantitative analysis also shows that the relative weight of rates in determining the effective tax burden of companies rises when the profitability of the investment rises and that, consequently, any compensatory effects of a lower tax base on effective tax rates tend to disappear when the profitability rises. The study conducted by Baker and McKenzie concluded that, in general, the composition of the tax base does not have a great impact on the effective tax burden and that the level of the tax rate is the truly important factor for the difference in the tax burden.

(23) When transnational investments are considered, the results for 1999 show variations in the way each country treats investments in or from other countries. Thus, the effective tax burden of a subsidiary of a parent company in one country depends crucially on where that subsidiary is located. On the basis of the assumptions considered in this study, the range of variations of the effective tax burdens of subsidiaries located in different host countries can rise above 30 points regardless of the method of financing of the subsidiary. This provides an incentive for companies to choose the most tax-favoured locations for their investment, which may not be the most favourable location in the absence of taxes. Similarly, subsidiaries operating in a given country face different effective tax burdens depending on where their parent company is located. Even in this case the range of variation can reach more than 30 points.
The analysis of the effective tax burden of transnational investment also gives an indication of the allocation effects of international taxation by capturing the extent to which the tax treatment of transnational investments gives incentives to undertake transnational, as opposed to domestic, investment. The data show that, on average in the EU, outbound and inbound investment are more heavily taxed than otherwise identical domestic investments and, therefore, the additional components of the transnational system add somewhat to the effective tax rates on investment.

But, to the extent that companies are free to choose the most tax-favoured form of finance, then the international tax system works such that foreign multinationals operating in a host country are likely to face a lower effective tax burden than domestic companies. This seems to be true even when the treatment of multinationals is compared with the more favourable domestic treatment allowed for small and medium sized companies.

The spreads observed between the effective rates of taxation in the international analysis are the results of complex interactions between different tax regimes and cannot be explained by just one feature of taxation. However, as was the case for the domestic investment, the analysis tends to show that the most relevant tax component which provides an incentive to locate cross border and to choose a specific form of financing is the overall nominal tax rate. This is, in general, an important tax driver when the incentives of taxation to use particular sources of finance and specific locations are considered. The tax base does however have a greater impact in specific situations when a country applies, for instance, particularly favourable depreciation regimes.

It is worth noting that across the range of domestic and cross-border indicators presenting the effective tax burden at the corporate level, there is a remarkable consistency as far as the relative position of Member States, notably at the upper and the lower ranges of the ranking, is concerned. In general, Germany, and France tend to show the highest tax burdens while Ireland, Sweden and Finland tend to be at the lower range of the ranking. Only Italy's ranking changes materially when the profitability of the investment changes. Due to the working of the dual income system, marginal
investments are, in fact, subsidised, whereas more profitable investments suffer an effective tax burden which is in the middle range of the ranking.

(28) When the domestic analysis is updated to take into account the 2001 tax regimes, the overall picture is broadly unchanged in comparison to 1999. However, as a consequence of a pattern of generally declining statutory tax rates (albeit with relatively small reductions apart from Germany), more profitable investments benefited from reductions in effective tax rates in a number of countries. As a result, the range of differences in domestic effective tax rates in the case of a more profitable investment decreased from 30 to 26 percentage points.

(29) The German tax reform that entered into force at 1.1.2001 is a significant reform which implies a substantial cut in the corporation tax rate and in income tax rates, partly financed by the broadening of the tax base, including the abolition of the split rate system and the imputation system. However, despite these changes the German tax reform has only minor effects on the relative position of Germany in the EU country ranking and both the overall national corporate tax rate and the effective tax burden remains among the highest in the EU.

(30) Simulating the impact of a hypothetical harmonisation of particular features of taxation systems in isolation on effective tax rates shows that:

Introducing a common statutory tax rate in the EU would have a significant impact by decreasing the dispersion - both between parent companies and between subsidiaries - of marginal and average effective tax rates across the EU countries. To the extent that taxation matters such a scenario would be likely to go some way in reducing locational inefficiencies within the EU.

By comparison, no other scenario would have such an impact. For example, introducing a common tax base or a system consisting in applying the definition of the home country tax base to the EU-wide profits of a multinational tends to increase the dispersion in effective tax rates if overall nominal tax rates are kept constant.

Moreover, two remarks have to be made concerning these results for a common tax base. First, the methodologies applied do not permit to take into consideration all the elements of the tax bases. However, the "Tax Analyser model", whose results are similar to those arising from the simulations of hypothetical investment, does consider a more significant number of elements of the tax bases. Second, benefits which would arise under either a common consolidated tax base or a home country tax base approach such as loss consolidation and simplified transfer pricing cannot be modelled using the methodologies used in this report.

It is worth emphasising that these results are based on a static analysis and cannot capture the dynamic effects and reactions induced by the harmonisation of particular features of taxation in isolation.

(31) The potential distortions in the allocation of resources reported in the analysis of transnational investments indicate that there can be an incentive for companies to alter their behaviour in order to minimise their global tax burden. Therefore the study has considered some stylised examples of tax optimisation strategy of companies by means of an intermediary financial company focusing the attention on the likely effects of an abolition of these tax reducing financing structures. However, the removing of these possibilities of optimisation strategy will not contribute, per se, to solving the problem of tax-induced resources mis-allocations. Since the main tax driver for effective tax rate differentials is the overall national tax rate, companies located in "high tax" countries will be able
to compensate for the removal of these financial intermediaries by making greater use of differences in general tax rates and structuring their investments to take advantage of lower rates.

**Tax obstacles to cross-border economic activities in the Internal Market**

(32) The Council mandate also asks for a "highlighting [of the] remaining tax obstacles to cross-border economic activity in the Internal Market" and calls for the identification of "the main tax provisions which may hamper cross-border economic activity in the Single Market". For this purpose the present study focuses on additional tax or compliance burdens which companies incur as a result of doing business in more than one Member State and which therefore represent a barrier to cross-border trade, establishment and investment.

(33) The underlying cause of those additional tax and compliance burdens is the existence within the Internal Market of 15 separate tax systems. First, the fact that each Member State is a separate tax jurisdiction has a number of consequences. In particular:

- companies are obliged to allocate profits to each jurisdiction on arm’s length basis by separate accounting, i.e. on a transaction by transaction basis;
- Member States are reluctant to allow relief for losses incurred by associated companies whose profits fall outside the scope of their taxing rights;
- cross-border reorganisations entailing a loss of taxing rights for a Member State are liable to give rise to capital gains taxation and other charges;
- double taxation may occur as a result of conflicting taxing rights.

(34) Moreover, each Member State has its own sets of rules, in particular laws and conventions on financial accounting, rules for determining taxable profit, arrangements for collection and administration of tax and its own network of tax treaties. The need to comply with a multiplicity of different rules entails a considerable compliance cost and represents in itself a significant barrier to cross-border economic activity. The costs and risks associated with complying with more than one system may in particular discourage small and medium-sized enterprises from engaging in cross-border activity.

(35) These fundamental problems hamper cross-border economic activity in the Internal Market and adversely affect the competitiveness of European companies. In economic terms they result in a loss of potential EU welfare. The imminent enlargement of the EU makes it all the more urgent to find appropriate solutions.

(36) To some extent the problems faced by the EU reflect general difficulties in taxing international activities, and the work of the OECD and its forerunners has provided the basis for an extensive network of mainly bilateral double taxation treaties between Member States. The OECD has also published guidance on a range of international tax issues, in particular concerning the application of transfer pricing methods and on documentation requirements. In addition, the EU itself has taken several initiatives with a view to removing tax obstacles to cross-border co-operation and activity: Directive 90/434 ("merger directive"), providing for the deferral of taxation on cross-border reorganisation; Directive 90/435 ("parent-subsidiary directive"), eliminating double taxation on cross-border dividend payments between parent and subsidiary companies; and the Arbitration Convention (90/436), providing for a dispute resolution procedure in the area of transfer pricing.
Although going some way to resolving the obstacles to cross-border activity they do not provide a solution which keeps pace with the growing integration in the Internal Market.

(37) A basic concern of companies operating within the Internal Market is the removal of tax obstacles to income flows between associated companies. The Parent-Subsidiary Directive abolishes withholding taxes on payments of dividends between associated companies of different Member States. However, its effectiveness is reduced by the fact that it does not cover all companies subject to corporation tax and applies solely to direct holdings of 25% or more.

(38) There is the further problem that - independent of the directive- certain systems of company taxation have an in-built bias in favour of domestic investment. For example, under imputation systems applied in a number of Member States a tax credit is granted to resident (individual or corporate) shareholders for the tax paid on company level; that credit is usually not available to non-resident shareholders and is not normally granted in respect of foreign dividends. There is evidence to suggest that such systems form a serious obstacle to cross-border mergers within the EU and can have an influence on related business decisions (e.g. location of corporate seat).

(39) Payments of interest and royalties between associated companies of different Member States are often still subject to withholding taxes that effectively create situations of double taxation. The Commission has already presented a proposal for a directive on this subject [COM(1998)67], and it is expected that this proposal will be adopted in the context of the "tax package".

(40) In addition to obstacles to income flows, corporate restructuring can also be affected by one-off costs more directly linked to the restructuring operation itself. The tax-cost induced by cross-border mergers, acquisitions and internal reorganisations in the form of capital gains tax and various transfer taxes is often prohibitively high and forces companies to choose economically sub-optimal structures. Such obstacles place existing EU companies at a disadvantage as non-EU companies as new entrants will generally be better placed to set up the most suitable structure.

(41) The merger directive provides for deferral of capital gains charges in a number of situations. However, a number of problems remain:

- First, not all situations are covered. Like the Parent-Subsidiary Directive, it does not include all companies subject to corporate tax. It does not cover all types of tax charge (e.g. transfer taxes) that can arise upon a restructuring. Moreover, it does not cover all types of operation which may be involved in a restructuring, e.g. the centralisation of production or other activities. Furthermore, the conversion of existing operations (subsidiaries) into branches may endanger the future absorption of tax losses accumulated pre-conversion.

- Second, the directive's usefulness is reduced by the fact that currently there is no EU company law framework for cross-border mergers. Companies are therefore obliged to have recourse to share for share exchanges or transfers of assets. The recent agreement on the European Company Statute will change this situation in one respect and allow, as from 2004, for companies to merge into a new legal structure.

- Third, the implementation of the directive differs significantly between Member States. Even though such differences are to some extent intrinsic to the legal instrument of a "directive", the study identifies significant disparities which undermine the overall aims sought by the directive. In particular Member States, in implementing the Directive, have imposed varying conditions for the tax deferral provided for under the Directive with a view to preventing tax
avoidance, in some cases significantly limiting the scope of the Directive and leaving situations of double taxation unrelieved.

(42) The study identifies particular difficulties in relation to cross-border loss-compensation which, from a business perspective, constitute one of the most important obstacles to cross-border economic activity. The current rules in Member States generally allow only for the offsetting of losses of foreign permanent establishments but not for those of subsidiaries belonging to the same group but located in different EU countries. If available, the loss compensation often takes place only at the level of the parent company or is deferred in comparison to domestic losses (which creates significant interest cost). The differences which exist in Member States’ domestic loss compensation arrangements also impact on business decisions.

(43) The current loss compensation arrangements entail a risk of economic double taxation where losses cannot be absorbed locally. This situation provides an incentive in favour of domestic investment and of investment in larger Member States.

(44) In the area of transfer pricing, the tax problems for cross-border economic activity in the Internal Market have increased over the past years and are still growing. The problems consist essentially in high compliance costs and potential double taxation for intra-group transactions. A difficulty, according to business representatives, is that the transfer prices which are calculated for tax purposes often no longer serve any underlying commercial rationale in the Internal Market. There is in particular an increasing practice among larger companies to adopt, in EU intra-group trade, standard "euro" transfer prices for intermediate products, regardless of the production facility from which the goods are purchased within the group.

(45) There is also a tendency among Member States, fearing manipulation of transfer prices, to impose increasingly onerous transfer pricing documentation requirements. Moreover, the application of the various methods for determining the "correct" (i.e. "arm's length") transfer price for a determined intra-group transaction is becoming increasingly complex and costly. New technologies and business structures (which imply, inter alia, more emphasis on intangibles) cause growing difficulties to identify the comparable uncontrolled transactions often required for establishing the arm's length price. In addition, there are substantial divergences in the detailed application of transfer pricing methods between Member States. The same holds for their implementation of the relevant OECD guidelines. EU businesses therefore face uncertainty as to whether their transfer prices will be accepted by the tax administrations upon a subsequent audit. The study indicates that the combined effect of these difficulties for companies can be a significant increase in compliance cost for international activities.

(46) Double taxation in transfer pricing occurs when the tax administration of one Member State unilaterally adjusts the price put by a company on a cross-border intra-group transaction, without this adjustment being offset by a corresponding adjustment in the other Member State or States concerned. While inquiries made by the Commission services among Member States suggest that the number of transfer pricing disputes between Member States is fairly limited, a survey of multinational companies published by the accounting firm Ernst&Young reports a significant number of instances of double taxation arising from transfer pricing adjustments. This is consistent with representations made by business representatives, who complain moreover that the cost and time relating to the current dispute settlement procedures are often too high for enterprises with the result that it is often less costly to accept the double taxation. In this context the present study finds that the Arbitration Convention 90/436/EEC, which seeks to provide a binding dispute resolution
procedure, is rarely used and that certain of its provisions may act as a deterrent for taxpayers to make use of it.

(47) In short, the study concludes that, while there is evidence for aggressive transfer pricing by companies, there are equally genuine concerns for companies which are making a bona fide attempt to comply with the complex and often conflicting transfer pricing rules of different countries. Such concerns are becoming the most important international tax issue for companies.

(48) The study also identifies the area of double taxation conventions as a potential source of obstacles and distortions for cross-border economic activities within the EU. Although the intra-EU network of double taxation treaties is largely complete, there nevertheless remain some gaps. Most treaties within the EU follow the OECD Model but there are significant differences in the terms of the various treaties and their interpretation. There are also instances of divergent application of treaties by the treaty partners, leading to double taxation or non-taxation. Business representatives also refer to the increasing complexity of treaty provisions as a source of compliance cost and uncertainty. What is more, the study shows that tax treaty provisions based on the OECD Model, in particular non-discrimination articles, are not adequate to ensure compliance with the EU law principle of equal treatment. Moreover, the lack of co-ordination in the treaty practice of Member States in relation to third countries, for example regarding limitation of treaty benefits, is liable to give rise to distortions and partitioning of the Internal Market.

(49) The study also notes that certain areas of taxation which do not form part of company taxation may nevertheless entail significant obstacles to cross-border economic activity in the EU. This notably relates to the taxation of fringe benefits and stock options, of supplementary pensions as well as VAT. It is important to note that together with the company tax obstacles these difficulties have a cumulative effect for the companies concerned. As regards VAT, this is particularly true for small and medium-sized enterprises for which the nature of the various tax obstacles to cross-border economic activity is generally identical but which suffer from disproportionately - and sometimes prohibitively - high compliance cost for dealing with them.

**Remedies to the tax obstacles in the Internal Market**

(50) There are essentially two approaches which could be envisaged for tackling the company tax obstacles in the Internal Market:

- Targeted solutions which seek to remedy individual obstacles
- More comprehensive solutions which seek to address the underlying causes of the obstacles.

(51) A comprehensive approach providing EU businesses with a single common consolidated tax base for their EU activities would address most of the tax obstacles to cross-border economic activity that have been identified. A piecemeal approach only is unlikely to achieve this in a comparable manner. It should also be noted that clearly all proposals raise a number of technical issues which would need to be explored in greater detail.

(52) Regardless of the basic approach of remedies, it is important to note that in the absence of political solutions taxpayers have been compelled to have recourse to the legal process to overcome discriminatory rules and other obstacles. In consequence, the European Court of Justice (ECJ) has developed a large body of case law on the compatibility of national tax rules with the Treaty. National courts are also increasingly being asked to give rulings in this area. While the ECJ has made a significant contribution to the removal of tax obstacles for companies, it is unlikely that the interpretation of the Treaty is sufficient to address all tax obstacles to cross-border activity.
Moreover, ECJ rulings are confined to the particular case put to it and may therefore relate solely to individual aspects of a more general issue. The implementation of ECJ rulings is left to Member States, who often fail to draw the more general consequences which flow from them. There therefore seems to be scope for introducing a Community framework for exchanging views of the implications of significant ECJ rulings.

(53) One important example for the aforementioned principle is the problem of the bias in favour of domestic investment in certain systems of company taxation, notably imputation systems, for which the case law of the Court has particular significance. Recent rulings, such as Safir, Verkooijen and Saint-Gobain, suggest that tax systems which provide a disincentive to cross-border activity or investment may be contrary to the Treaty provisions on the fundamental freedoms. Such rulings raise important issues for the design of Member States’ tax systems for which more guidance on EU level would be desirable.

Targeted remedial measures

(54) The various problems relating to the divergence of application of (both the existing and future) EU Taxation Directives across Member States could be tackled via a regular exchange of best-practices and/or some form of peer review. This could also give the opportunity to develop a more common understanding of important concepts in EU company taxation, notably tax avoidance. Ensuring a more uniform application of EU tax law is an important step in order to reduce compliance costs and increase the efficiency of EU company taxation. At the same time, the need for litigation would be reduced.

(55) The shortcomings identified in the Merger Directive and the Parent-Subsidiary Directive suggest the need for amendment of those directives. The Commission has already presented proposals for amendment of the directives suggesting, in essence, that their scope be extended to cover other entities subject to company taxation [COM(93)293]. In addition to this and with a view to clarifying the scope of certain important provisions in the directives, notably those concerning avoidance and abuse, further amendments to the Directive and/or more detailed guidance on how those provisions should be implemented could help.

(56) As regards the merger directive, the study also identifies certain other areas where further amendments would facilitate cross-border restructuring. Within the logic of the existing Directive, it could first be examined to which extent specific transfer taxes arising on cross-border restructuring operations (notably on immovable property) could be taken into account. Second, the Directive could be clarified to make it clear that instances of economic double taxation should be avoided. One example for this could be to prescribe that capital gains arising on the sale of shares received in exchange for shares or assets are calculated on the basis of the market value at the time of the exchange, thus resolving previously accumulated "hidden reserves" without immediate tax consequences. A more radical change to the Directive would be to extend its scope so as to defer the triggering of tax charges where assets are moved to another Member State while preserving Member States’ tax claims. The parent-subsidiary directive could be amended to cover both direct and indirect shareholdings or, alternatively, provide for a lower minimum holding threshold.

(57) Finally, it may be noted that the recent agreement on the European Company Statute will provide a company law framework for cross-border mergers the absence of which has hitherto undermined the utility of the Merger Directive.

(58) As regards cross-border offsetting of losses, the Commission in 1990 presented a proposal for a directive [(COM(90)595] allowing parent companies to take into account the losses incurred by permanent establishments and subsidiaries situated in another Member State. The Council failed to
adopt the proposal and has ceased discussion of it. A review of the proposal conducted as part of
the present study suggests that a number of technical amendments could be made to the proposal.
For example, it could be envisaged calculating losses according to the rules of the State of the
parent company rather than that of the subsidiary as under the proposal.

(59) Alternatively, a similar result from the company's perspective could be achieved by devising a
scheme similar to the Danish system of 'joint taxation'. In essence under the Danish arrangements a
group of companies with a Danish parent company is taxed as if it were organised as a branch
structure so that Denmark taxes the consolidated results of the group. The advantage of this
approach over the Commission proposal lies in the greater symmetry between the taxation of
profits and the offset of losses.

(60) There are a variety of measures available that would help remedy the various transfer pricing
problems. The practical application of the Arbitration Convention could certainly be improved and
its provisions made subject to interpretation by the Court. Moreover, Member States could be
encouraged to introduce or expand bilateral or multilateral Advance Price Agreement programmes;
such instruments, although costly, are an effective means of dealing with the uncertainty relating to
transfer pricing. Subject to safeguards to prevent aggressive tax planning, a framework for prior
agreement or consultation before tax administrations enforce transfer pricing adjustments could
also be considered.

(61) More generally, the compliance costs and the uncertainty could be reduced by better co-ordination
between Member States of documentation requirements and of the application of the various
methods, for example by developing best practices. Such co-ordination could take place in the
context of an EU working group and should build upon and complement the OECD activities in
this field. It would be possible to develop that process further in order also to address the concerns
of business. The establishment by the Commission of a Joint Forum on transfer pricing comprising
representatives of tax authorities and business might allow the currently conflicting perspectives of
the two sides to be reconciled. While on the one hand tax administrations view transfer pricing as a
common vehicle for tax avoidance or evasion by companies and as a source of harmful tax
competition between Member States, business on the other hand considers that tax authorities are
imposing disproportionate compliance costs. The study finds that both sides have legitimate
concerns to which it is necessary to seek a balanced solution through a dialogue on EU level. A
more uniform approach by EU Member States would also contribute to a stronger position in
relation to third countries.

(62) The filling of the few remaining gaps in the existing network of double taxation treaties within the
EU would be helpful. Moreover, the current tax treaties of Member States could be improved in
order to comply with the principles of the Internal Market, in particular in relation to access to
treaty benefits. Better co-ordination of treaty policy in relation to third countries would also help. In
addition, the study identifies a possible need for binding arbitration where conflicts arise between
treaty partners in the interpretation and application of a treaty, leading to possible double taxation
or non-taxation. The most complete solution to such problems would be the conclusion under
Article 293 of the Treaty of a multilateral tax treaty between Member States, conferring
interpretative jurisdiction on the Court. Another possibility, leaving intact the existing bilateral
system, would be to elaborate an EU version of the OECD model convention and commentary (or
of certain articles) which met the specific requirements of EU membership.

(63) Despite the fact that tax compliance costs are regressive to the size of the company, the study finds
that the nature of the obstacles is essentially the same for all companies. Therefore specific tax
initiatives for small- and medium-sized enterprises do not seem to be justified. There are however
exceptions to this basic approach which could be usefully addressed mainly at Member State level. For instance, the administrative tax formalities, bookkeeping requirements etc. for small- and medium-sized enterprises should be less demanding than for bigger companies, also in cross-border situations. Moreover, the difficulties with the cross-border offsetting of losses hit small- and medium-sized enterprises particularly hard and therefore seem to deserve a specific remedy.

Comprehensive approaches on EU company taxation

(64) The study also examines more general remedial measures aimed at minimising or removing the obstacles in a more comprehensive manner and analyses a number of comprehensive approaches that have been presented to the Commission. All aim to address the various tax obstacles by providing multinational companies with a common consolidated tax base for their EU-wide activities:

- Under the mutual recognition approach of "Home State Taxation" the tax base would be computed in accordance with the tax code of the company's home state (i.e. where the headquarter is based), thus building on the existing tax systems and the related experience and knowledge. This approach is conceived as an optional scheme for companies in Member States with a sufficiently similar tax base.

- Another possibility would be to devise completely new harmonised EU rules for the determination of a single tax base on European level. This again would be an optional scheme for companies existing as a parallel system alongside present national rules. Generally known as "Common (Consolidated) Base Taxation", this approach is advocated in particular by some business representatives.

- A further model suggested in some literature would be a "European Corporate Income Tax". This, although originally conceived as a compulsory scheme for large multinationals, could also be an optional scheme operating alongside national rules. Under this model the tax could be levied at the European level and a part or all of the revenue could go directly to the EU.

- Finally, the more ‘traditional’ approach would be to harmonise national rules on company taxation by devising a single EU company tax base and system as a replacement for existing national systems.

(65) The most important fundamental advantages of providing EU businesses with a single consolidated tax base for their EU-wide activities, under whichever form, are as follows:

- The compliance cost resulting from the need to deal with 15 tax systems within the Internal Market would be significantly reduced.

- Transfer pricing problems within the group of companies would disappear, at least within the EU.

- Profits and losses would, in principle, be automatically consolidated on an EU basis.

- Many international restructuring operations would be fiscally simpler and less costly.

(66) The business representatives of the expert panel assisting the Commission emphasised these fundamental points. Under a comprehensive approach of whatever precise design compliance cost
would be reduced, many situations of double-taxation would be avoided and many discriminatory situations and restrictions would be removed.

(67) By definition, an essential element of all the solutions is that there should be group consolidation on an EU-wide basis. At present not all Member States apply that principle even at the domestic level and only two at the international level. Under all approaches (with the possible exception of the European Corporate Income Tax) Member States would retain the right to set company tax rates.

(68) To a varying extent, all comprehensive approaches could potentially be designed such that not all Member States would have to participate. In this context, it is important to note that the Treaty of Nice extended the possibility for enhanced co-operation by a group of Member States where agreement by all 15 is not possible. This may be particularly appropriate for Home State Taxation, which presupposes the participation solely of Member States with a fairly close tax base. However, a group of Member States could equally take advantage of this mechanism in order to introduce any of the other approaches.

(69) A further key element of all the comprehensive approaches is a mechanism for allocating the common consolidated tax base to the various Member States. For this purpose the USA and Canada use a formula apportionment system which allocates the tax base according to a key composed of factors such as payroll, property and/or sales. Another solution available to the EU would be to apportion the tax base according to the (adjusted) value-added tax base of the companies involved. Under all of these Member States would be allocated a specific share of the overall tax base according to apportionment keys and apply their national tax rate to that share.

(70) All the above models would meet the concerns inasmuch as they remove the need to comply with up to 15 different tax systems, largely eliminate the transfer pricing problems arising from separate accounting and effectively provide for cross-border loss compensation. They would also provide a tax solution for the European Company. An appraisal of the various models should take account of their respective characteristics.

(71) An important point to note is that Home State Taxation does not require Member States to agree on a new common EU base because it is based on the principle of mutual recognition by Member States of each other’s tax codes. The other approaches all entail agreement on an entirely new tax code.

(72) By contrast with a compulsory harmonised base, Home State Taxation, Common (Consolidated) Base Taxation and European Corporate Income Tax operate alongside and do not fully replace existing national systems. In certain circumstances however this can have the disadvantage that competing enterprises in other Member States are subject to different taxation rules. For example, under Home State Taxation three competing retail shops in Germany would compute their tax base under Belgian, French or German rules according to whether the home state of the group to which they belonged was Belgium, France or Germany. However, the differences may be relatively small given that an underlying assumption of the Home State Taxation model is that participating States will have similar tax bases. Under Common (Consolidated) Base Taxation or European Corporate Income Tax competing businesses may be subject to either local or Common (Consolidated) Base Taxation / European Corporate Income Tax rules, which may be quite different. It may however be possible to permit local companies to opt into the scheme, for example, where there are competition issues.
In addition the solutions based on a parallel rather than a single compulsory system raise a number of technical issues requiring further study. Among the main issues are those relating to restructuring, foreign income and double taxation treaties, and minority interests.

- First, as regards restructuring, since under Home State Taxation a company’s tax base is determined in accordance with the rules of its parent’s state, each time the ownership of a company changes and its shares are sold the method by which it computes its tax base could change. This equates in current terminology to a potential change of residence and is potentially very costly. For example a Belgian subsidiary sold by its German Home State Taxation parent to a French parent could find its tax base changing from German to French, or if France were not participating in Home State Taxation, back to a Belgian base. In contrast, as under Common (Consolidated) Base Taxation there would only be one tax base such a sale within the Common (Consolidated) Base area would not involve such a change, and even if a company were sold to a new parent from a non participating state treatment under the Common (Consolidated) Base system could perhaps be maintained.

- Second, the treatment of foreign income under Home State Taxation, Common (Consolidated) Base Taxation or European Corporate Income Tax is complicated by the current situation of bilateral double taxation agreements, the co-existence of exemption and credit relief tax systems and the need for a system of allocation. For example, a subsidiary in a state which operates the credit system, with a 3rd country branch may be entitled under its DTA to a credit for foreign tax paid by the branch. This could give rise to a claim under the DTA for the foreign tax credit even though the foreign income had been exempted under the Home State Taxation rules.

- Third, minority shareholders might find themselves receiving dividends under a taxation system which is incompatible with their existing local personal tax system. For example a minority shareholder might receive dividends paid under a Common (Consolidated) Base Taxation or European Corporate Income Tax imputation system whereas previously dividends had been paid under the local classical system. This can only be avoided if the payment of dividends by subsidiaries to minority shareholders remains subject to the local tax code which is the approach envisaged under Home State Taxation. This would imply additional record keeping.

These issues would not arise if Member States were to agree on the more traditional solution of a single harmonised company tax system, i.e. a common consolidated base with an agreed allocation system and method of dividend distribution. Nevertheless, despite their drawbacks, the other solutions meet the objectives of removing obstacles to cross-border activity without requiring such fundamental change. More generally, all the solutions would have the potential to contribute to greater efficiency, effectiveness, simplicity and transparency in EU company tax systems and remove the hiatuses between national systems which provide fertile ground for avoidance and abuse.

The assessment of tax obstacles in the Internal Market reveals that many of the factors causing compliance cost also tend to increase the administrative cost for tax administrations. This is particularly evident with a view to transfer pricing. Moreover, the co-existence of 15 company tax systems in one Internal Market opens considerable room for tax evasion and tax avoidance. Therefore, many remedial measures will also to some extent benefit the efficiency and effectiveness of tax administrations. Finally, almost all remedial measures, targeted or comprehensive, call for more mutual assistance and administrative co-operation between Member States which provides
reliable means for ensuring that tax audits will continue to be made in an appropriate way and that none of the remedies under consideration results in illegitimate and/or illegal tax evasion.

(76) In short, the report concludes that there are potentially significant benefits to be derived from providing, via a genuinely comprehensive solution, companies with a common consolidated tax base for the EU-wide activities. However, its findings are based mainly on the current stage of development of the research and further work would be necessary to implement any of the comprehensive approaches. Any solution going in this direction must obviously also take into account the competition rules laid down in the EC Treaty, in particular those concerning State Aids. Moreover, as already noted, the results of the quantitative analysis suggests that that the overall national tax rate is an important factor in determining the effective tax rate, and it is clear that a single or common base without further adaptations in practice would almost 'mechanically' accentuate this.
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PART I:
THE NEED FOR A STUDY OF COMPANY TAXATION IN THE EUROPEAN COMMUNITY

BACKGROUND TO THE MANDATE

The tasks given by the mandate to the Commission essentially ask for illuminating differences in the effective level of corporate taxation and, at the same time, identifying the main tax provisions that may hamper cross-border economic activity in the Single Market. The analysis should take into account, inter alia, the results of the report of the Ruding Committee (1992). The tax policy issues involved in reducing tax–induced distortions should be highlighted and possible remedial measures examined. In doing so, the analysis should take into account the respective spheres of competence of the Member States and the Community.

The general background to the mandate for this study and the reasons why the Council requested a comprehensive study on company taxation in the EU can be found in the discussions on tax policy at the Vienna European Council of 11 and 12 December 1998. At Vienna, the Heads of government, in endorsing the ECOFIN Council’s call for a study by the Commission on company taxation, concluded that "Cooperation in the tax policy area is not aiming at uniform tax rates and is not inconsistent with fair tax competition but is called to reduce the continuing distortions in the single market, to prevent excessive losses of tax revenue or to get tax structures to develop in a more employment-friendly way". The mandate for the study subsequently agreed by the Council explicitly refers to this common denominator between Member States. The statement condenses the current challenges for EU company tax systems: to achieve an efficient allocation of resources in an undistorted Internal Market, to ensure an equitable distribution of tax revenues among Member States and to guarantee the technical feasibility of taxing mobile tax factors. It thus also creates a link between the study and the general debate on tax competition and the efforts to curb harmful tax competition in the European Community, as well as the employment effects of taxation.

In March 2000, the European Council in Lisbon placed the mandate in a new perspective: “The Union has today set itself a new strategic goal for the next decade: to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion”. This overall objective adds strong emphasis on the need to achieve economically sound taxation systems that contribute to the smooth operation of the Internal Market and, in addition, to increase the competitiveness of EU companies. In other words, EU company taxation should contribute to more economic welfare in the Community. This forms an important guideline for the study. As already correctly noted in the Ruding report, one of the basic objectives of the Treaty of Rome, founding the European Communities, was to raise the welfare in all Member States and through the abolition of all obstacles to the efficient allocation of resources in the Internal Market to be erected.

The mandate is thus very topical. Notwithstanding the achievement of the Internal Market and the advent of Economic and Monetary Union, the European Union still has to confront a number of tax problems. One focus of this study is the efficient allocation of resources within the European Community - in other words, the undistorted location of economic activity and investment. This objective has not yet been achieved and, in giving the mandate for this study, the Council emphasised that company tax problems are one of the main reasons for this failure. As non-tax impediments to the functioning of the Internal Market have been mostly removed and the EU markets for goods, labour and capital become integrated, the allocation of

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3 Vienna European Council 11 and 12 December 1998, Presidency Conclusions, pt. 21
4 Lisbon European Council 23 and 24 March 2000, Presidency Conclusions, pt. 5
capital (economic activities and investment) is increasingly sensitive to taxation. Firms and individuals benefit from the freedom to move their capital to locations where the highest after-tax returns can be obtained and their investment decisions are thus more responsive to differences in effective tax rates between countries than without the Internal Market. At the same time, however, tax obstacles may still hamper the exercise of this freedom. It is therefore logical for the mandate to call for the analysis of these two different but related factors jeopardising allocational efficiency in the Internal Market. At the same time, it should not be overlooked that important general international developments have also significantly changed the view on international tax problems since the Ruding report was published.

Against this background, this part of the study briefly considers earlier initiatives to harmonise company taxation in the EU. It then, in accordance with the mandate, takes a look on the outcome of the work of the Ruding Committee (1990/92) and continues with an assessment of important developments which together form the framework for the subsequent analysis. Finally, some criteria for analysing company taxation in the European Community and the underlying economic considerations are explained. These criteria are used later in this study to evaluate possible solutions to the problems highlighted by the study.

**SOME HISTORY AND THE IMPACT OF THE RUDING REPORT**

**Earlier Commission initiatives in the area of company taxation**

Since the early years of the Community various committees and experts have put forward proposals for harmonising crucial elements of the corporate tax regimes of Members States. On the basis of the Treaty of Rome, the perspective was right from the start the objective to create within the Community conditions similar to a true Single Market. The first initiatives in the area of corporate income tax were thus marked by proposals for radical reform by establishing uniform rules for the core problem of the corporate income tax, e.g. the double economic taxation of companies and their shareholders. In 1962, the Neumark Committee developed concrete suggestions for the harmonisation of the company tax systems in the Community in the form of an imputation system with a split rate for retained and distributed profits. At that time, harmonisation was seen as the appropriate "soft" approach as opposed to uniform rules. The Tempel report of 1970 suggested the introduction of a classical dividend taxation system. Both reports thus identified, among other things, the tax treatment of cross-border dividend payments, unless harmonised, as a major problem within an internal market.

In 1975, having regard to the growing integration within the Community, the Commission put forward a proposal for a directive providing for the corporate tax rate to fall within a range of 45 % - 55 %, a partial imputation system and a common withholding tax of 25 % on dividends. The European Parliament did not give an opinion on the proposal, producing only an interim report in 1980, which said that the tax base should be harmonised at the same time. The proposal was withdrawn in 1990.

In 1984/85, the Commission proposed to harmonise the rules for the carry-over of losses (three years carry back and unlimited carry forward). This proposal was discussed in the Council only in 1985 and later withdrawn. In 1988, the Commission produced draft proposals on the harmonisation of the tax base for enterprises. It was considered at the time that the objective of optimal allocation of resources, important for the establishment of the Internal Market, would not be reached unless there was at least some

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5 Europäische Wirtschaftsgemeinschaft – Kommission: Bericht des Steuer- und Finanzausschusses (Neumark Bericht), Brüssel 1962

approximation of the rules to determine the taxable profits of enterprises. It was suggested this measure would produce greater transparency by the abolition of special incentive measures inside the tax base. The stability of the rules would also make it easier for enterprises to plan their activities in future. However, the proposals would still leave the necessary flexibility to Member States. This draft was never officially presented due to the reluctance of most Member States to support them.

These initiatives were not all successful for various reasons one of the most important of which is no doubt the unanimity requirement. Recognising the marked lack of success in progressing the above initiatives, in its communication of 1990 the Commission focussed on a different approach based on three ideas: direct tax measures should be geared to the completion of the Internal Market; they should be consistent with the principle of subsidiarity and all initiatives should be defined through a consultative process with the Member States.

On that basis, and following Commission proposals, three measures - two directives and one convention - were adopted in July 1990. The Merger Directive is designed to defer taxation of capital gains resulting from certain categories of business re-organisations, in order to create within the Community conditions similar to those of an internal market. The Parent-Subsidiary Directive deals principally with the elimination of double taxation on distributed profits between a subsidiary and a parent company of another Member State. Both directives apply since 1 January 1992. They are considered in more detail below. The principal objective of the Arbitration convention is to establish a procedure to resolve transfer pricing disputes giving rise to double taxation. The convention entered into force on 1 January 1995 but its application is currently suspended as its prolongation beyond 2000 still awaits ratification in several Member States.

Two further proposals were made, both in January 1991. The first proposal aimed to abolish withholding taxes levied on cross-border interest and royalty payments between companies of different Member States. After almost four years of negotiations in the Council, no rapid progress seemed possible on this proposal and the Commission decided to withdraw it so as to be able to carry out a comprehensive review of it (November 1994). The other, the imputation of foreign losses proposal is designed to allow an enterprise to offset against its results the losses incurred by its foreign subsidiaries and permanent establishments. The proposal was discussed in the Council in 1992, but not since then. It is considered in detail below.

**The work of the Ruding Committee 1990/92**

Also following the above-mentioned communication, in 1990 Commissioner Scrivener gave the Committee of Independent Experts on Company Taxation under the Chair of Mr Onno Ruding a precise mandate for the analysis of company tax issues. The Committee were asked to evaluate the importance of taxation for business decisions with respect to the location of investment and the international allocation of profits between enterprises, in order to determine whether existing differences in corporate taxation and the

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7 Commission communication to Parliament and the Council: Guidelines on company taxation [SEC(90)601]
10 Convention on the elimination of double taxation in connection with the adjustment of profits of associated enterprises [COM(90/436/EEC]. The extension of the convention to Austria, Finland and Sweden [OJ C 26 of 31/1/1996] is still pending ratification in some Member States as does the prolongation of the convention via a protocol signed on 25/5/1999 at the Ecofin-Council [OJ C 202 of 16/7/1999]
burden of business taxes among Member States led to major distortions affecting the functioning of the Internal Market. The mandate was based upon three main questions:

1) Do differences in taxation cause distortions in the functioning of the Internal Market?

2) If such distortions arise, can they be eliminated through the interplay of market forces and tax competition or is Community action required?

3) In the event that Community action is deemed to be necessary, what specific measures should be taken?

Unlike the Council mandate given for the present study, the mandate given to the Ruding-Committee did not explicitly call for analysing the tax obstacles to cross-border economic activity in the Internal Market.

The Ruding-Committee produced its report on 18 March 1992\textsuperscript{12}. Its main findings were that tax differences can affect the location of investment and cause distortion of competition (the average cost of capital in every Member State was lowest for purely domestic investments); and that some convergence had happened in the past but the main distortions could not be reduced solely through market forces or through independent action of Member States. The Committee issued recommendations that fell essentially into two categories: (i) on the elimination of double taxation and (ii) on corporation tax (rate, base, system).

Among other things, the Ruding recommendations were very favourable about the three measures agreed in 1990 and recommended the further extension of the two directives. The recommendations also welcomed the proposals for directives made in 1991. A detailed list of the recommendations of the Ruding report and the follow-up is presented in Annex 1.

The underlying approach of the recommendations appears to be one of a "soft" tax harmonisation designed to establish a level playing field for free and fair competition between Member States, by setting minimal standards for European tax legislation. The Community would thus not impose uniform rules, but only the basic standards which the Member States should observe in designing their tax system. This requires for example minimal standards with respect to the basic tax rate, and maximal standards with respect to what could be allowed for systems and rates of depreciation, provisions, and the treatment of stock in trade. These standards would only determine the limits beyond which Member States could not compete with their tax systems. Within these boundaries Member States would remain free to determine their own tax systems. In some cases such as depreciation of goodwill, harmonisation would mean that all Member States accept the same rule i.e. either a common positive or a common negative answer to the question of depreciation. This softer approach to harmonisation would still leave Member States with considerable room for manoeuvre.

These conclusions were, inter alia, based on a detailed comparison of the factual corporation tax systems of Member States. Under this approach, "tax obstacles" appear to be indirectly covered inasmuch they constitute either cases of double taxation or distortions of competition.

\textsuperscript{12} Report of the Committee of Independent Experts on company taxation (Ruding Committee), European Commission 1992
The follow-up to the Ruding report

The Commission indicated in its response to the report of June 1992 that priority should be given to the elimination of double taxation on cross-border income flows. A more qualified assessment was given of the second part of recommendations, as some of these seemed to go beyond what was strictly necessary at Community level. It was suggested that the proposed measures could have the effect of reducing the tax base, which might in turn involve an increase in tax rates.

The Council conclusions on company taxation of November 1992 introduced a number of criteria that should be taken into account in deciding whether action was appropriate at Community level. The need to eliminate double taxation was however recognised. At the same time, the need to ensure effective single taxation was stressed.

On, among other things, the basis of the Ruding recommendations, in July 1993 the Commission published two proposals to amend the two Directives of 1990 which were designed to extend the scope of these directives and notably to include more legal forms of enterprises. Both proposals received a favourable opinion of the European Social and Economic Committee and the European Parliament and are pending in the Council. However, so far no unanimous agreement could be reached in the Council of Ministers.

Since the mid-nineties, given the limited success of the earlier initiatives, a more comprehensive approach to tax policy has been reflected in EU tax policy discussions. In the area of direct taxation, the "traditional" harmonisation approach was complemented by the notion of tax co-ordination. At the informal ECOFIN meeting at Verona in April 1996, the Commission, contrasting the need for progress on tax matters in the EU with the limited number of actual decisions adopted in this area thus far, proposed a new and comprehensive view of taxation policy. This approach resulted in the 1997 tax package to eliminate harmful tax competition within the EU which to date forms the most important ongoing EU initiative in the area of direct taxation. As noted above, it is in this context that the Council asked for a comprehensive study on company taxation in the EU to be undertaken by the Commission.

Lessons from Ruding for the present study

Generally, the basic problems raised and most of the issues considered by the Ruding-Committee are still relevant. Any current analysis of EU company tax problems can therefore usefully take into account the work presented in the Ruding report. After ten years, however, the analysis needs to be updated in many respects. First and foremost, the Internal Market and, for most Member States, also Economic and Monetary Union is now a well-established reality whereas it was only a prospect for the Ruding – Committee. In combination with the relative lack of progress on company tax issues on EU level this means that the existing problems highlighted by Ruding have now become even more acute. The “tax package” of 1997 has shifted attention from distortion of market competition through basic structural elements of the tax system, to distortions caused by specific privileged tax regimes. At the same time the notions of “legitimate protection” of tax revenue and its equitable distribution Member States were introduced. Finally in fields closely related to taxation such as financial accounting law and company law

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13 Commission Communication to the Council and to Parliament subsequent to the conclusions of the Ruding Committee indicating guidelines on company taxation linked to the further development of the internal market” [Sec(92)1118] of 26 June 1992

14 see "Guidelines on Company Taxation linked to the Further Development of the Internal Market – Council Conclusions”; press release (10088/92 – Presse 216) after the ECOFIN Council meeting of 23 November 1992


new developments took place like the increasing influence of international accounting standards on tax accounting and the agreement on the European Company Statute.

Moreover, the economic framework and business strategies have significantly changed since 1992. Technological developments and more open and deeply-integrated markets impact on the behaviour of companies and it is necessary to look into possible repercussions this may have on the taxation of these companies, especially in cross-border situations.

In essence the basic analysis of the Ruding report still remains valid today. Because of deeper integration, because also of new developments in tax competition with more emphasis on specific tax regimes and the equitable distribution of tax revenue among Member States, the pressing need for tax co-ordination has become much clearer. However since the Ruding report very little has been achieved in the field of specific regulation, and in that respect its impact has been disappointing.

**IMPORTANT GENERAL DEVELOPMENTS SINCE THE RUDING REPORT**

**Company taxation and "globalisation"**

Although it sounds like a hackneyed phrase it is nevertheless true that the globalisation process has significantly gained momentum since the Ruding Committee produced its report. It has profoundly changed the international economic landscape and, subsequently, created new challenges for national company tax systems. Globalisation means, among other things, more integration of international markets due to new technological possibilities and the gradual reduction of market access barriers. This development is, as such, independent of the Internal Market, but not surprisingly its effects are particularly strong for countries that are already integrated in one market in which the liberalisation process is relatively advanced (e.g. telecommunications, energy, public procurement, financial services). The same holds for the companies that are based and operating in that integrated market. The result is increasing competition, both between market operators and between Member States. Tax competition is an increasingly important aspect of the latter.

Generally, the basic elements of the tax systems of most countries were established when economies were relatively closed, capital movements limited and information technologies less developed than today. Inasmuch as the tax systems of some countries do not yet reflect recent economic and technological developments there is scope for companies to exploit loopholes and for other countries to try to attract business from those countries. Hence, the opening of EU economies within the Internal Market and of that Internal Market towards the rest of the world makes a case for collective action, in particular on the coordination of EU company tax systems.

More specifically, the globalisation process has involved a significant increase in international mergers and acquisitions. Box 1 below explains the general trend, but this is particularly marked within the EU. Market integration in the EU favours the re-organisation of investment and production. This results in increasing flows of investment, goods and services both between related and non-related companies. In 1999, EU multinational enterprises accounted for $510 billion in foreign direct investment (FDI), i.e. almost two-thirds of global FDI outflows. The number of mergers and acquisitions involving EU firms increased to 12,796 in 1999, compared to 10,024 in 1998 and 8,382 in 1997, an increase of more than 50% in two years\(^\text{17}\). Western European mergers and acquisitions totalled $354 billion in sales and $519 billion in

purchases in 1999 \textsuperscript{18}, representing more than two thirds of the value of all world-wide mergers and acquisitions.

This development impacts on the way in which companies and tax administrations confront the taxation of cross-border mergers and acquisitions. When the Ruding report was written, these trends were already marked but were far from being as strong as they are today.

\begin{center}
\textit{Box 1 }
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\textbf{The globalisation of businesses \textsuperscript{19}}

The following figures illustrate that companies increasingly operate, in various facets, on a multinational scale. Tax administrations however broadly continue operating on a national scale.

- The number of multinational enterprises has increased from some 7,000 parent firms in 15 developed (EU and non-EU) countries at the end of the 1960s to some 40,000 at the end of the 1990s. There are now approximately 63,000 parent firms and 690,000 foreign affiliates operating world-wide.

- Accordingly, international production, trade and investment have increased significantly. Sales of foreign affiliates worldwide accounted for an estimated $13.6 trillion in 1999, compared to about $2.5 trillion in 1980, a figure twice as high as that of global exports. Multinational enterprises now account for about one-tenth of global GDP, compared to one-twentieth in 1982.

- This corresponds to a broad increase in foreign direct investment (FDI). The ratio of world FDI inflows ($865 billion in 1999) to gross domestic capital formation is now 14 \%, compared to 2 \% twenty years ago. In the same period, the ratio of world FDI stock to world GDP increased from 5 \% to 16 \%.

- At the same time, both the number and the value of mergers and acquisitions have increased significantly. The value of all mergers and acquisitions (cross-border and domestic) as a share of world GDP has risen from 0.3 \% in 1980 to 8 \% in 1999 while the value of completed cross-border mergers and acquisitions rose from less than $100 billion in 1987 to $720 billion in 1999. The total number of all mergers and acquisitions world-wide has grown at 42\% annually between 1980 and 1999.

Looking towards the future, the structural technological changes driving the globalisation process are creating new challenges for taxation and may introduce "tax termites"\textsuperscript{20} into national tax systems. The increasing use of electronic commerce could become a fundamental problem for the correct taxation at a national level of company profits\textsuperscript{21}. Electronic transactions leave far fewer identifiable traces than "real" transactions and many traditionally "physical" products are becoming virtual (e.g. software, music, films or educational services). This makes it increasingly difficult to identify the economic operators, the territory from which a transaction is made, etc.

The use of off-shore centres expanded during the 1990s. Indeed, the Ruding report expressed serious worries about the prospect of “increased tax competition in a Single Market without internal frontiers”. In recent years, both the EU and the OECD have been engaged heavily in efforts to curb harmful tax competition.

\begin{flushleft}

\textsuperscript{19} These figures are presented in UNCTAD (2000), Overview, p.9-13


\textsuperscript{21} Estimates of the European Information Technology Organisation indicate that the EU will have about 80 million internet users by 2002, the US 110 million. The total global electronic commerce is expected to reach a value of $ 330 billion by 2001-2002 and $ 1 trillion by 2003-2005. For the time being, however, 95\% of e-commerce transactions are pure business to business operations.
\end{flushleft}
Some commentators suggest that the taxation of corporate profits – already today a relatively minor source of state revenue – could eventually vanish as it will no longer be enforceable. Others argue that there is ultimately no economic case for taxing company profits as only individuals eventually bear taxes. However, others see economic justifications in taxing companies that consume public goods and stresses the practical link in levying both a corporate tax and a personal income tax. This study does not attempt to rehearse those arguments further; it is written on the clear assumption that company taxes will continue to be levied in the EU for the foreseeable future.

In this context it is however worth noting that, generally, corporate income tax has been fairly stable source of revenues for European governments in the past 10 years, after a period of growth in the 1970s and 1980s. Thus, at this point in time, there seems to be little empirical evidence of a "race to the bottom". Corporate income tax as a percentage of GDP varies considerably between the Member States. The following box gives some information in this respect.

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* The figures for 2001 and 2002 are forecasts.

Source of the figures: European Commission/Eurostat

The achievement of the Internal Market

The introduction of the Internal Market in 1993 significantly changed the scenery for the company tax systems of Member States. The Ruding report expressed serious worries about the prospect of increased tax competition in a Single Market without internal frontiers. As indicated above, the current work on the
tax package and notably the Code of Conduct for business taxation is addressing the issue of *harmful* tax competition. But in an increasingly integrated Single Market in which harmful forms of tax competition are being removed, the competition effects of the general features of EU company tax systems become significantly more important. The Internal Market thus accentuates general tax competition between Member States and it needs to be assessed which welfare effects this increased competition has. The analysis of part II of this study can be appraised in this context.

Moreover, the Internal Market has affected the perspective of EU companies: they now increasingly change their focus from the national state towards the Union as a coherent economic zone. This is evidence of the success of the Internal Market. However, it makes all the more urgent to address the remaining tax obstacles that prevent EU companies from exploiting its full benefits and that still bias companies towards national rather than multinational economic activity. EU businesses have to deal with 15 company tax systems and tax administrations in one market. This creates efficiency losses and unnecessary compliance costs. These run against the potentially high positive welfare effects relating to the opening of national markets via Internal Market integration and puts EU businesses at a relative competitive disadvantage (compared to third country operators). These issues are considered in part III.

More specifically, when EU multinational companies define the EU as their home market they generally wish to re-align their business structures accordingly by creating pan-European business units instead of country-based organisations. Small and certainly medium-sized companies can also face this problem. Although operating at a smaller scale and in fewer Member States, the basic idea of a market for goods and services extending beyond the domestic market (be it via e-commerce or distance selling) translates into practical business decisions and subsequent tax considerations for small and medium-sized enterprises. The Internal Market thus concretely determines the way EU companies carry out their business within the Community.

The creation of pan-European business structures can essentially be achieved by three means (which are not mutually exclusive): (i) cross-border intra-group restructuring and expansion within the EU by way of acquisitions or joint ventures, (ii) fully-fledged mergers and (iii) establishment of foreign branches. Within the EU, this trend is clearly driven by the Internal Market. However, in a broader perspective it is reinforced because businesses tend to concentrate their activities more and more on core activities (on EU level or beyond), thus disposing of non-related business units and in turn purchasing related ones from other companies. The result of this process of business re-alignment is that the number of cross-border mergers and acquisitions and of intra-group transactions cross-border can be expected to rise even further.

In the context of this transformation of traditional country-based organisations into more transnational organisations it is often necessary to move earning capacity cross-border, either by moving (parts of) the business itself (including intangibles like goodwill) or the shares of the company containing this business. Within a group of companies, both production facilities for final products or components and service functions are thus increasingly concentrated and relocated. This is because business functions are no longer organised according to national territories but along production lines and the value chain. Put simply: whereas a large company traditionally used to have production, marketing and R&D facilities in every EU Member State, it now typically concentrates the production in one country, marketing in another and R&D in a third.

As a consequence of the reduced number of production facilities, the cross-border intra-group trade between the few remaining manufacturing units and the associated marketing/sales organisations in other Member States will grow significantly, both in volume and value. Where in the past export to affiliated companies in other Member States was the exception rather than the rule, it is now not unusual that manufacturing units export most of their products to affiliates. OECD estimates of the early 1990s already indicate that over 60% of all international trade is trade between related companies. Thus, the tax problems
relating to transfer pricing take on a new dimension. While this issue is now dominating large parts of the
current discussions on international taxation it was hardly mentioned in the Ruding report.

As regards the re-alignment of other functions such as marketing, R&D and group financing, these
generally will be centralised either at the head office or in designated countries throughout Europe.
Consequently the costs of these functions have to be allocated through some sort of cost sharing
mechanism. Such cost sharing arrangements, sometimes involving a large number of units, are becoming
more and more complicated.

In short, the process of creating pan-European business structures is today at the root of many specific
cross-border tax problems that did not have the same importance when the Ruding report was produced.
These problems are considered in detail in part III.

The achievement of Economic and Monetary Union

The above trends are reinforced by the introduction of Economic and Monetary Union. For the euro-zone
countries the question of tax competition is even more important now that monetary and exchange rate
policy are no longer nationally available policy tools.22

Moreover, the transparency achieved by the single currency intrinsically generates a tendency of price
convergence (certainly for tangible goods) within the euro-zone. Consequently, it becomes logical for
multinational enterprises to set intra-group transfer prices EU-wide as a single harmonised price in euro per
product or product group, regardless from which production facility the goods are purchased.

This concept, which is often referred to as "euro pricing", can already be widely witnessed in business
practice. Transfer pricing is a traditional management tool and there is good reason to believe that euro
pricing is now also used similarly, its advantage being intra-group disputes about price levels and optimum
efficiency in the structure should disappear. In fact this concept treats the various factories in Europe as
production lines that happen to be based in different Member States but all belonging to the same single
European manufacturing unit. It is evident that such new tendencies impact on many features of
international company taxation, notably in the area of transfer pricing.

Economic and Monetary Union thus increases the integration achieved by the Internal Market even further
and. It also raises a further question as to which tax problems hamper the completion of an integrated EU
capital market. This somewhat separate problem is not specifically mentioned in the mandate for this study.
Moreover, unlike most other goods and services markets, the EU capital market currently still suffers from
relatively fundamental non-tax barriers. The Commission has recently put forward a number of measures to
remove the barriers to the Internal Market for financial services, and good progress is being made here in
collaboration with Member States23. For the purpose of this study, however, general tax problems within
the Internal Market are the most relevant.

EU company law developments

The basic agreement on the principles of the European Company Statute (Societas Europaea – SE) at the
European Council of Nice provides a genuinely new element for analysing company taxation in the


23 See, for instance, the basic Commission communication "Financial Services: Implementing the framework for financial
European Union. After the adoption of the appropriate legislative acts EU companies and specific other legal persons governed by the law of Member States will be able, as from 2004, to merge, create a holding company or form a joint subsidiary under the legal form of a European Company. Moreover, any public limited-liability company with a registered office and headquarter within the Community will be able to transform itself into a European Company without going into liquidation, provided it has a subsidiary or a branch in a Member State other than that of its registered office. This supplements the existing possibilities for co-operation between firms established in a number of Member States under the European Economic Interest Grouping (EEIG). Proposals for a European Company Statute have been on the Internal Market agenda since 1970. The agreement thus constitutes an important break-through.

The basic idea of the European Company Statute is to provide companies in the EU with an additional company law option as how to organise their activities at EU level. The existing national systems remain unchanged. As from 2004 EU corporations will thus be able to carry out their business free from the obstacles arising from the disparity and the limited application of national company laws. The registration of the new European Company, its formation and personality are governed by the domestic laws of Member States. The same holds for the subsidiary rules. It is however possible to transfer the registered office to another Member State without winding up the old or having to create a new legal person. The regulation deals with a significant number of legal issues encountered by the European Company. Those issues that are not covered are in principle subject to domestic laws.

As regards taxation, an earlier draft of the European Company Statute regulation included provisions on loss-compensation within the European Company (parent - subsidiary and parent - permanent establishment). However, these provisions were dropped in 1991 in order to facilitate agreement on the statute.

Ultimately, the tax regime applicable to the European Company is that of the Member State in which the parent-company is headquartered and, according to the general tax rules of the Member States, where the related subsidiary or permanent establishment is based. This is coherent inasmuch the whole idea of the European Company Statute is to remove certain company law obstacles but at the same time to keep companies anchored in the legal system of a specific Member State (and not in, say, an EU register or similar). Nevertheless, it is imperative to examine the existing body of EU law on direct taxation in order to identify necessary adaptations and, to consider the necessity of an appropriate EU tax regime. These issues are, among other things, addressed in parts III and IV.

**BASIC ECONOMIC CRITERIA FOR ANALYSING COMPANY TAXATION IN THE EUROPEAN COMMUNITY**

It follows from the foregoing that company taxation constitutes one of the most important remaining issue for the completion of the Internal Market and the full integration of the economies of Member States. At the same time all major initiatives to tackle the underlying problems have met with little success so far, while new external developments increase the competitive pressure on the EU as an economic zone and on EU businesses.

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24 Conclusions of the Presidency, European Council, Nice 7-9 December 2000, pt.22. See also the underlying legislative acts as proposed by the Commission: Amended proposal for a Council Regulation (EEC) on the statute for a European Company [COM(91)174]; Amended proposal for a Directive [COM(91)174] complementing the Statute for a European Company with regard to the involvement of employees.


26 COM(89)168
Against this background, this section briefly presents some criteria for the assessment of company tax systems. It then offers some basic considerations of how these criteria can be used in the context of this study for assessing the welfare effects of different effective levels of taxation and persisting tax problems in the Internal Market. They also serve as assessment criteria for the possible solutions to those problems described in parts III and IV of the study.

**General principles for the design of company tax systems**

It is common ground between economists and tax experts that an "ideal" company tax system has to be equitable, efficient, simple, transparent, effective and provide certainty. These inter-related general criteria can usefully serve as basis for the analysis of company taxation in the EU to be carried out in this study.

**Equity**

The requirement of equity has two dimensions. "Vertical equity" refers to the re-distributive feature of a tax system, i.e. to its capacity to operate a distribution of the tax burden among taxpayers according to their contributive capacity ("ability-to-pay-principle"). "Horizontal equity" holds that taxpayers who are in the same economic circumstances should receive an equivalent tax treatment. The concrete perception of these concepts is strongly related to societal values such as solidarity and fairness. Vertical and horizontal equity therefore strongly condition the political acceptability of a tax system. In the context of international company taxation, equity mostly relates to the fair allocation of the tax base between states in which international companies operate.

Inter-country equity traditionally involves three main principles: source-country entitlement, non-discrimination and reciprocity. Under the "principle of source-country entitlement" the source country has the prior right to tax profits earned within its jurisdiction. This principle can be justified for efficiency reasons and it can help to achieve some redistribution of resources across countries, since the proportion of foreign-owned businesses is generally higher in relatively poor countries than in richer ones. It is also sometimes justified as a *quid pro quo* for the provision of public infrastructure and services in the source country. The "principle of non discrimination" implies that countries agree, usually on a bilateral basis, not to discriminate against foreign firms and shareholders in their tax laws. This principle is strongly linked to horizontal equity, since the same tax treatment is applied to similar companies independently of nationality considerations. The "principle of reciprocity" can, for instance, be illustrated by the requirement of equality of the rates applied to any withholding tax levied on interest, dividends and royalties by states involved in a tax treaty. Reciprocity applies to any tax arrangement which leads to similar effective tax burdens on foreign-owned investments. This is particularly relevant when states have strongly differing tax rules and practices.

**Efficiency**

Generally, taxes should be neutral and influence in as limited a measure as possible economic decisions, for example the choice of location of an investment. Otherwise, economic activities may not take place in the lowest cost location by the lowest cost producers. Investing in a low tax jurisdiction may yield higher after-tax returns on capital than a similar investment in a high tax jurisdiction despite a lower productivity of the inputs used. The result of locational inefficiency is thus a lower level of productivity of capital, and reduced international competitiveness and growth for the EU as a whole. Therefore, an efficient tax system is in principle neutral to economic decision-making.

Tax systems can however be used to correct or mitigate a market failure. To the extent that there are other distortions or imperfections in the market economy, taxes may offset these externalities, thereby enhancing economic efficiency. A typical example would be negative environmental consequences, not fully taken into account by an individual agent, which an imposed tax would mitigate by decreasing the activities
harmful for the environment. There are also other instances when national governments will try to reduce existing (non-tax) incentives through the use of the tax system. A good company tax system should avoid distortions with regard to location, etc., unless these are deliberately decided (e.g. in economic “free zones” which are designed to boost economic development).

The two main concepts for considering the international economic benefits of efficiency and neutrality are "capital export neutrality" and "capital import neutrality". Both concepts are considered in detail in the analysis of the effective tax rates in part II.

Under "capital export neutrality" a tax system does not affect the decision by any specific company as to in which country to invest. Resident investors in a given country have no incentive to invest at home rather than abroad, or vice versa. The domestic/foreign composition of the investment income does not influence the world-wide tax thereon. Other things being equal, capital mobility would then tend to equalise the required pre-tax rates of return on investment across Member States, thereby eliminating differences in the cost of capital, and thus distortions in the demand for capital in the EU. Capital export neutrality could be achieved if income were taxed only in the investors’ country of residence and if there were no discrimination between domestic and foreign-source income in the capital-exporting country. This could be achieved if all countries applied the "world-wide" or "residence" principle, that is, levied taxes on the income accruing to their residents regardless of the source of that income.

A tax system achieves "capital import neutrality" when all investors, both domestic and from foreign countries, investing in any one national economy face the same after-tax rate of return on similar investments. This implies that the cost of capital and the tax rate for any inbound investment must not depend on the home country, that is the country of residence of the investor. In fact, the application of the residence principle can lead to cases where a domestic company investing in a given country is placed at a competitive disadvantage compared to a similar foreign company investing in the same country - because the tax rates applied in their home countries are different. Therefore, in order to avoid distortions of competition and to achieve capital import neutrality, income should be taxed according to the "source" or "territorial" principle. According to this principle, a government should tax all income originating within its jurisdiction at the same rate, regardless of the origin of the beneficiary of the income.

Inefficiencies do not only arise due to different tax treatments of cross-border investments. There may also be distortions in the decisions for the types of investment, as tax treatments applied to the assets used by companies or to the sources of financing of investment may vary considerably within and across countries.

Effectiveness

The effectiveness of a tax system refers to its capacity to achieve its basic objectives - to generate the desired level of revenues and to set the desired economic incentives. The effectiveness of a given tax system strongly depends on its interactions with other tax systems. For instance, measures like reduced statutory rates, accelerated depreciation allowances or investment tax credits may improve the international competitiveness of a country both by reducing the overall tax burden of domestic firms and by attracting foreign investments. However, in the case of a foreign multinational firm taxed on a residence basis in its home country, tax cuts in the country of source would have no effect on their total tax burden and, therefore, on investment. It would merely shift tax revenues from the source country to the home country of this firm as, under the credit method usually linked to the residence principle, firms receive a full credit for taxes paid abroad. The reduction of the tax liability in the host country is thus simply compensated by an increase of the tax liability in the home country (via a smaller tax credit).

It is self-evident that tax incentives (e.g. for investment) will, when efficient, directly reduce tax revenues. Although, depending on the type of measure, the revenue reducing effects may vary significantly. The indirect trade-off is more complex. Foregone tax revenues, i.e. "tax expenditures", may be partially or fully
offset as a consequence of an increase in investment and in the international mobility of tax bases, which in turn directly and indirectly generate increased tax revenues.

**Simplicity, certainty and transparency**

The requirement of a "simple" tax system is relatively straightforward. It implies the minimisation of the costs linked to the operation of the tax system. These costs are "compliance costs" for the taxpayers and "administrative costs" incurred by the administration to enforce the law. Administrative and compliance costs are intrinsic to any tax system: governments have to raise revenues and taxpayers have to comply with tax rules. However, one might wonder which amount of cost is proportionate for meeting these objectives. Generally, these costs are higher for international transactions involving more than one tax administration than for purely domestic operations. For instance, even the mere co-existence of two simple but conflicting principles – source or residence taxation – in principle creates cases of double taxation or unintentional double exemption that can only be overcome by appropriate – usually complex and costly - international agreements. The criterion of simplicity is thus linked to efficiency and effectiveness. Simple tax systems do not only mean relatively low costs; they usually do not provide intentional preferential tax regimes or unintentional tax arbitrage or tax avoidance opportunities. They may, however, also imply a loss of equity.

The requirement of simplicity also requires that the rules according to which taxes are levied are certain and clear to the taxpayer. Certainty relates to the stability of a tax system and of tax practices in a country. The uncertainty resulting from frequent changes in tax legislation and its interpretation has, as such, a negative or delaying impact on investment decisions. Simplicity and certainty are generally linked to the criterion of transparency of the laws, regulations and administrative procedures of a tax system. Transparency usually supports equity. For instance, it can help to avoid the replacement of direct State aid by tax incentives offered by administrations on a discretionary basis. Moreover, the transparency of a tax system is generally important for ensuring accountability of the policy-makers.

**The economic welfare effects of company taxation systems**

Broadly, one can say that if a company tax system meets some or all of the above criteria it contributes to more economic welfare. However, for the purpose of the study, it is necessary to clarify how these general criteria work within the EU in the context of the Internal Market and which trade-offs may exist. So far, it has been shown that the study is necessary to deal with two basic company tax issues of relevance in the context of European integration: (i) company tax obstacles to the Internal Market and (ii) differences in effective tax company tax rates or tax competition in general.

If one looks at the current situation of company taxation in the EU from the perspective of the above criteria it is possible to identify the risk of distortions to business decisions, in particular location decisions. At the same time, one can point to distortions in the provision and financing of public goods and/or in the distribution of tax burdens for a given supply of public goods and transfers. Both may reduce the overall welfare in the EU and both may work in different directions. By measuring the magnitude of the welfare loss, one can estimate the probable efficiency gains that would be generated by eliminating such distortions. This sort of measurement is very difficult, but valuable and meaningful conclusions are still possible.

**Distortions to business decisions**

It is fairly evident that differences in effective tax rates across countries (or within countries) for different types of investment, financing mode etc. will influence the incentive structure of investors. As mentioned above, according to economic theory, optimal decisions in a market economy should be based on prices that are not distorted. Taxation will affect the rate of return and therefore the prices an investor faces for
different investment opportunities. To what extent taxation has a negative impact on investment decisions, depends on to what extent taxes offset or reinforce other distortions in the economy. There are two different aspects that need to be considered for approaching this question and for evaluating the effects of different levels of taxation. First, the impact of taxation on economic efficiency depends on the economic environment in which the tax is imposed. As pointed out above, taxes are sometimes used to correct or mitigate a market failure and/or offset specific externalities. This increases economic efficiency. On the other hand taxes may be used to compensate for physical or locational disadvantages. This use of taxes often decreases overall economic efficiency, although it may increase local or regional social welfare. The second aspect is what could be called the “transmission mechanism”, i.e. to what extent incentives lead to changes in actual behaviour. To the extent that economic agents are not affected by the imposed taxes, there will be no negative effect stemming from the level of taxation.

It is essentially an empirical question to what extent investment decisions are affected by taxes, as predicted by economic theory. Consequently, the associated welfare implications are also to a large extent an empirical question. Despite these difficulties in assessing the precise effect on investment decisions and welfare levels for ordinary citizens, it is still possible to draw valuable conclusions. If there are really significant differences in the effective level of taxation, then one can certainly argue that there would have to be a very complex structure of externalities to justify such variation in tax structure and tax rates. For example, on pure economic grounds it is hard to imagine that debt financing should be favoured above equity financing, since the negative macro effects to the economy from excess debt levels are substantial, particularly in times of financial turbulence.

It is also hard to imagine that it would be desirable that similar investments face markedly different effective levels of taxation purely because of their country location. Even if one cannot on economic grounds rule out the need for different levels of taxation in various countries, given their natural resources and skill levels etc, one must question the size of the differences and their dispersion. To the extent that there are no convincing economic justifications for these variations in levels of taxation across countries, types of investments and modes of financing, it can be concluded that, overall, the tax systems distort investment allocations. Decreasing these distortions would hence enhance economic efficiency and growth in the Union. It would contribute to a better allocation of resources in the Internal Market that is based on real economic factors rather than tax considerations.

Furthermore, as mentioned above, the tax differences also entail large administrative costs and they foster tax planning behaviour with further costs to the business community and society at large. With reduced tax distortions, these efforts would be put to economically better use.

To some extent, one could compare the situation with unifying the tax structure to the creation of the single currency. Certainly, the benefits from lower transaction costs are substantial (but often assessed to a fraction of a percent of GDP) but the benefits of a single currency go beyond that. It enhances growth prospects, thereby promoting a more efficient economy. Removing obstacles and creating a level playing field in the area of taxation, would have its largest impact on enhanced competition and value added to European consumers.

Differences in effective tax rates and tax competition

One of the elements that has changed most drastically since the early 1990s is what is commonly called "tax competition". As indicated above, the effects of globalisation and the creation of the Internal Market and Economic and Monetary Union may have given rise to, on the one hand, more tax competition between countries, both within the Internal Market and world-wide, for different tax bases, and, on the other, to specific initiatives designed to combat harmful tax competition. Reference is notably made to the work carried out in the context of the EU Code of Conduct for business taxation and the OECD Forum on
harmful tax practices. Moreover, the European Commission has stepped up its efforts in the control of fiscal State Aids under the EC Treaty.

For the purpose of this study it is not necessary to review the history and results of these initiatives in detail. However, it is most important to note that as a result of these efforts many preferential tax regimes for companies are being changed, abolished or phased out. It follows from this development that the general features of the company tax systems of Member States will become more important for economic decisions than today. Therefore, differences between Member States in (general) effective company tax rates also become more important in comparison to a situation where the recourse to preferential regimes is possible. This development provides a common thread for the present study. EU enlargement will compound the underlying trends.

The welfare implications of tax competition in general are manifold, as tax competition affects the tax structure, the tax burden and, ultimately, the financing and the provision of public goods. Tax competition may affect to different extents the various existing tax bases, thereby inducing differentiation or approximations of effective tax rates, and the corresponding increase or diminution of a number of tax distortions. At the same time, it may induce a change in the overall tax burden, in the form, for instance, of a downward pressure (a "cap") on the overall tax level. Its effect on welfare will then depend on a number of factors, such as the State expenditures and revenues structures, the overall public finance position of the State, etc.

To sum up, taxation ultimately involves a political choice and a trade-off between some costs in terms of efficiency and other goals, such as redistribution or reduction of market failures and funding of public goods and services, being pursued through taxation. The same applies in the European context.

**The structure of this study**

Part II of this study is devoted to the detailed analysis of the company tax systems in the European Community. This includes a comparative analysis of the qualitative features of the company tax systems in Member States and the detailed determination and calculation of the effective rates of company taxation in Member States under various scenarios.

Part III then examines company tax obstacles in the Internal Market how market operators are hampered in the exploitation of the "four freedoms" and how their decisions on the location of economic activity and investment is influenced by concrete tax rules.

Finally, part IV looks into possible remedial measures for the obstacles identified in part III. This includes an analysis of both targeted measures for resolving specific tax problems as well as more comprehensive approaches that would resolve a majority of these problems at a stroke.
PART II:
QUALITATIVE AND QUANTITATIVE ANALYSIS OF COMPANY TAX SYSTEMS IN THE EU

A. ANALYSIS OF THE COMPANY TAX LAW

1. INTRODUCTION

Why a Qualitative Analysis?

Effective Tax Rates are principally the product of the nominal tax rate and the rules governing the computation of the tax base. In some countries financial accounting standards may influence to a certain extent the rules governing the tax base and specific tax incentives over and above the general computational rules, may also have an impact. Where there are large differences between the nominal and the effective tax rate a comparison of the structural elements which make up the tax base between countries can assist in the identification of the causes.

The Quantitative Analysis in Part II B includes the results of two economic models based on a ‘forward-looking’ concept. One is based on a hypothetical simple manufacturing investment with a well-defined but limited number of computational rules and covers all the Member States. The other is based on a hypothetical model firm in the manufacturing sector and uses more computational rules, but does not cover all the Member States. (Part II B explains the models and the results in detail.) Through sensitivities and simulations the models identify and quantify the effect of certain structural elements of the tax base, including the nominal tax rate, on the effective tax rate.

The Qualitative Analysis complements this to enable a comparison between more of the structural elements. To the extent that the relationship between nominal rates and effective rates is relatively constant (as is illustrated by the quantitative analysis) it should be possible to identify similarities and differences between Member States’ approach to company taxation by comparing a number of the major structural features of each Member State’s tax legislation.

Ten structural elements of a typical tax system were identified\(^\text{27}\) as being the most material in determining a corporate entity’s tax liability and hence the effective tax rate. These were:

Statutory rate, tax accounting rules, depreciation, provisions, losses, capital gains, mergers and acquisitions, group relief/consolidation (including inter-group dividends), inventories and expense deductions.

Some of these categories were further subdivided and the tables prepared for each Member State include descriptions of thirty eight sub-categories.

\(^{27}\) Messrs Tirard and Vanistendael, members of Panel I prepared a detailed paper ‘Measuring effective rates of corporate income tax in the EU - a qualitative report’ on which this section draws heavily. That paper in turn made extensive use of IBFD data concerning individual Member States’ tax legislation.
The ten structural elements were selected as the most important ‘common’ elements. Specific measures such as those identified by the Primarolo Group\(^28\) as providing for a significantly lower effective level of taxation than those levels which generally apply in a particular Member State and regarded as potentially harmful were excluded as they are the subject of separate initiatives.

**What can such a qualitative analysis reveal?**

In the tables the basic structural elements of a tax system are identified and for each Member State the approach adopted by that Member State is briefly explained. It is therefore possible to classify the different approaches for each structural element and identify groups of Member States who follow a similar approach, i.e. apply the same or similar treatment to particular elements. Groups or individual Member States who apply a different treatment, outside this ‘average’ can also be identified.

As mentioned above the Quantitative Analysis models necessarily summarise the structural elements of each Member State tax system and this Qualitative Analysis includes a number of important elements which could not be included in the models, such as certain rules governing capital gains, the treatment of losses including carry back and carry forward rules, and domestic consolidation.

In addition to facilitating a comparison of the different treatments by Member States of the basic structural elements the analysis also permits comparisons within the Member States to understand how certain features interact. For example some Member States do not tax certain capital gains nor give relief for capital losses whereas others tax and permit loss relief.

The analysis does not attempt to identify which approach to a specific element is the ‘best’. Each Member State has established its rules with the aim of constructing a coherent tax system to meet its particular needs. Without quantifying the effects of the specific measures it is not possible to say, for example that one particular method of calculating depreciation is better than another. The Quantitative Analysis, in particular in some of the simulations, is where the effect of particular tax measures can be quantified. However, the Qualitative Analysis does reveal the range and complexity of methods in use for example in depreciation, where the overall aim of each Member State is likely to be broadly similar and might raise the question of why such a diversity is necessary.

The tables do not seek to explain every aspect of each Member State’s tax system. As explained above only the basic elements have been included, and within each sub-category only a summary description of the principle rules has been presented. In many instances there are exceptions and slight amendments to the main rules applicable in certain circumstances but unless these were considered material they have been excluded.

In the context of this report the Qualitative Analysis is also useful in the consideration of the comprehensive approaches. In Part IV some of these approaches to EU company taxation are discussed, one based on the mutual recognition of Member States of each other’s tax codes and others based on a common or harmonised tax base. Where a group of the same Member States consistently follows similar approaches to a number of the structural elements those Member States would appear to be more able to participate in any comprehensive approach based on mutual recognition than those who in general follow different approaches. Where particular structural elements are characterised by a wide range of different approaches, or fundamentally different approaches, it might suggest that mutual recognition in this particular area would be particularly difficult, for example in the treatment of foreign income.

\(^{28}\) Code of Conduct Group (Business Taxation) Report to ECOFIN Council 29 November 1999
A common or harmonised base implies, at the very least, that the basic structural elements of the Member States’ existing tax systems be aligned, or in the event of the existing national systems remaining alongside the new system in parallel, that a new tax code be drafted. The tabulation of the basic structural elements of Member States’ current systems illustrates the number of features which would need to be harmonised and the identification of groupings of Member States who already have structural similarities.

Findings

Tax Rates

The tax rate is the most visible element determining the effective tax rate in any corporate income tax system. Rates vary considerably from one Member State to another and in addition to the main statutory or ‘headline’ rate details concerning reduced rates, surcharges, minimum rates and special rates are also given where applicable. Two Member States, Germany and Italy, at the 1999 reference date had a ‘dual rate’ system distinguishing between retained and distributed profits. A number of Member States assist small and medium enterprises by having a specific reduced rate for companies whose profits are below a certain threshold or via a system of progressive rates but there is no standard definition. Certain industries are also sometimes subject to rates other than the main statutory rate. Certain types of income, such as capital gains are also subject to different rates.

With the exception of Ireland these variations from the statutory rate, although important to the companies subject to them, are not considered to be material to an overall comparison of EU rates, as the majority of enterprises competing across the EU will be subject to main statutory rate, adjusted in some cases for ‘temporary’ surcharges. Ireland is a special case because although the main rate is 40% there is a special rate of 10% applicable to certain companies including those in the manufacturing sector and for the purposes of this study it is more appropriate to consider the rate of 10% as the ‘main’ rate.29

The range of statutory rates is substantial. Ireland’s rate of 10% is the lowest followed by a group of Member States with rates around 30% (Sweden 28%, Finland 29%, Luxembourg 30%, UK 30%, Denmark 32%). At the upper end there is a group with rates around 40% (Belgium 39%, Italy 37% + 4.25%, Greece 40%). Germany’s rate was in this grouping but as from 2001 the new statutory rate is 25% plus ‘Trade Tax’ typically at 12 to 13%. The extent to which these differences in statutory rates are reflected in effective rates is covered in the Quantitative Analysis in Part II B.

Accounting Rules

Differences between financial accounting rules and tax accounting rules can have a significant effect on effective tax rates. With a few specific exceptions the rules applied within each Member State are applied to all companies and sectors. Part IV explains in some detail the two ‘traditions’ of ‘dependence’ and ‘independence’. The tables show how three Member States (Ireland, the Netherlands and UK) take a similar approach in permitting differences between the financial accounting and the tax treatment of certain items. In the remaining Member States there is a much closer relationship between the two. However, because the financial accounting rules in operation across the EU are not completely harmonised to a certain extent such comparisons are rather difficult as both the financial accounts and the tax accounts of any given enterprise could be prepared according to different rules in different Member States. The Quantitative Analysis necessarily effectively assumes a common definition of accounting profits for the purpose of calculating a effective rates although the Tax Analyser work does include certain sensitivities concerning different accounting conventions and this is also referred to the section on the Economic

29 The information is based on applicable legislation as at 30 June 1999. The developing rate structure in Ireland underlines the appropriateness of basing any comparisons on the lower rate.
Effects and the results of the Quantitative Analysis in Part IV C in relation to the Comprehensive Approaches. A more detailed comparison would require not only the tax treatment of particular transactions in all the Member States to be compared, but also the normal accounting treatment of the same transactions to be compared.

**Depreciation**

The significance of the rules on tax depreciation as regards the effective tax rate varies depending on the capital asset intensity of particular sectors of activity. When the rate of depreciation permitted for tax purposes exceeds the true economic rate of depreciation there is effectively an tax incentive for investment. In many Member States this appears to be the case.

The initial depreciable base for capital assets is uniform across the EU in that it essentially equates to the cost. The only exception is Greece where an element of revaluation is permitted in certain cases. The most common methods in use are the reducing balance and straight line or a combination of the two. There are also sundry other methods in certain circumstances. However, it is in the rates where the greatest variations are seen with some Member States also providing a number of rates depending on the type of asset involved.

Given the range of methods, rates and asset categories it is difficult to compare the depreciation rules without carrying out a series of computations. When choice is also involved any comparison becomes even more complex. In contrast some Member States\(^{30}\) have a relatively simple system, which when combined with group relief and an unlimited loss carry forward can give the same amount of flexibility as the more complex approach where the amount and timing of depreciation ‘claims’ is an important factor.

It is more straightforward to compare which assets are not eligible for depreciation. Member States take quite different approaches to the depreciation of intangibles. Concerning patents and trademarks a number of different rates and methods are applied but the biggest contrast concerns the treatment of goodwill. Twelve Member States permit some form of depreciation but four Member States (France, Ireland, Portugal and UK) do not permit any depreciation. In principle land is treated as a non-depreciable asset across the EU. Some Member States do however permit in certain circumstances a deductible provision for a permanent loss in value of some non-depreciable assets. The rules for the accounting for tax depreciation in general follow the overall rules governing financial and tax accounting in the sense that in most Member States depreciation is only deductible to the extent that it is provided for in the financial accounts, whereas in Ireland, the Netherlands and UK this is not a requirement.

**Provisions**

Provisions may be divided into two main categories. First, the type whose purpose is to ensure that the financial statements of the company accurately reflect the true position in accordance with the accounting principle of prudence, taking into account the necessity to ensure that assets are not overvalued and that expenses are allocated to the correct accounting period. Second, the type whereby profits may be transferred to what could be considered a tax free reserve which could be considered a kind of tax incentive. The categories compared in the tables are mainly of the first type with the exception of pension reserves.

There are three main possibilities for the rules governing bad debt provisions: general provisions, specific provisions and provisions limited in value and all three are used in the EU; sometimes in combination. In

\(^{30}\) Compare for example the complexity of Spain’s rules, with a 10 year loss carry-forward limit to the relative simplicity of the UK’s rules, with an unlimited loss carry forward.
some sectors there are special rules reflecting the relative importance of debts to the business activity, such as in banking and other finance activities.

As regards provisions for future expenses in the most part these are deductible although in several Member States provisions for repairs are not, possibly to avoid this category being used as a type of tax free reserve.

The major differences appear in the category of Pension reserves which could be considered to be in the second category of provisions as outlined above, a type of tax free reserve. However, this particular category of reserve is heavily dependent on the method by which pensions in general are provided for in individual Member States.

One approach would be the example of the UK where provisions for pensions could generally be described as non deductible, but where the general system is that a company does not have a liability to pay pensions, but agrees to make contributions to a separate pension fund which will eventually pay the pensions. In this case the UK company would have no reason to make a provision for pensions, it would be required to make a payment to the pension fund to the extent required by the fund, and the payment would be deductible. An example of the contrasting approach would be the situation in Germany where the liability remains with the employing company and the pension fund assets are not separated from the company’s.

Companies have the option to fund pensions by provisions (discounted at 6%) to what could be considered a tax free reserve. However, given the summarised nature of the tables it is difficult to comment in any detail on the detailed implications in each Member State.

The main effect of these different approaches to pension provisions is that in some Member States companies have the opportunity to obtain a tax deduction on the basis of a provision and can therefore retain the cash within the company, in others deductions are received only when the cash has been paid out. Whereas the actual tax situation of two similarly prudent companies who provide for the future pensions of their employees might be similar, one company might be able to retain the cash in the business, the other not.

**Losses**

The possibility of carrying losses forwards for relief against future profits is particularly important for new business start ups if they are unable to utilise the losses before they time expire. Seven Member States still retain time limits and these vary between 10 years (2 Member States) and 5 years (4 Member States). The possibility of carrying losses backwards against previous profits also varies across the EU with nine Member States not permitting carry back at all and the remainder permitting it for between 1 year (3 Member States) and 3 years (2 Member States).

The approach of Member States to losses illustrates how structural elements in a tax system can change over time. Until a few years ago losses were subject to time expiry in a number of Member States. However, there is now far more scope to carry losses forward for longer periods and the trend is moving towards more generous rules. Similarly loss carry back is now more widely available than in the past and both these factors can have a significant impact on the effective tax rates of companies in the EU. This development is particularly marked because the time expiry of losses is permanent. Other elements, such as depreciation, generally tend to concern timing differences: for asset categories eligible for depreciation it is only the speed at which relief for its loss of value is obtained where there are differences between Member States.

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31 Member States are split approximately 50:50 in their approach.
Loss carry forward provisions also illustrate the parallelism between structural elements and specific tax incentives. The latter are not considered here but it is interesting to note that an unlimited loss carry forward (structural) could be considered equivalent to an extended tax holiday to new businesses (incentive), although in fact the structural element could prove more beneficial in cases where losses are incurred during a tax holiday but time expire before they can be offset against subsequent profits.

**Capital Gains**

The treatment of capital gains can be divided into two main areas: tangible assets and intangible assets such as shares. In general the rules relating to tangible assets have moved closer together. All Member States observe the realisation principle; although in certain circumstances some Member States permit unrealised permanent losses in value to be recognised. With the exception of Ireland, France and Greece the applicable rate of tax is the same as for trading income. Only Denmark, France and Italy have no provision for rollover relief and only Ireland (related to the separate rate of tax) and the UK (possibly for historic reasons) treat capital losses differently from trading losses. Only Denmark, Spain (for immovable property), Ireland and the UK make allowances for inflation when computing capital gains. Overall the treatment of capital gains and losses is broadly similar between Member States and the rate is largely determined by the normal statutory rate.

With respect to intangibles, specifically shares, there is greater contrast in treatment. A growing number of Member States exempt gains (and losses) on the sale of shares, or apply a reduced rate of tax to gains (and losses) whereas some tax (and relieve) at the normal rate.

**Mergers and Acquisitions**

With respect to mergers and acquisitions the situation is relatively similar across the EU. All Member States permit, under certain conditions, some sort of deferral of gains on mergers. The deferral can be achieved by two means: a full deferral until subsequent realisation (similar in effect to rollover relief), or a deferral by means of an instalment plan for tax payments due on any gains arising as a result of the merger. The deferral also provides for the transfer of the existing tax base of the ‘old’ company although there are generally strict rules concerning the transfer of losses.

This area of taxation is very technical and other than identifying the broad similarities it is not possible to provide a detailed comparison between Member States on the basis of the summarised information presented in the tables. However, it is worth mentioning that some Member States have extended the deferral rules provided for in the Merger Directive to domestic mergers.

**Group Relief (‘Consolidation’)**

Member States fall into one of three categories as regards group relief. Denmark, and in a more restricted way France provide group relief on a world wide basis. Belgium, Greece and Italy in contrast have no provision for group companies to offset gains and losses. The remaining Member States provide for group relief within their jurisdictions although the precise rules concerning eligibility and the actual method of achieving the relief vary widely.

These differences, like the ones concerning loss carry back and forward, create fundamental permanent differences between the taxation of enterprises in different Member States. Depending on the geographical

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32 Italy also has a reduced rate but only for certain gains on assets held > 3 years and no roll over relief as such.

33 EC Directive 90/434 OJ 1990 L225/1
spread, and corporate structure of an international enterprise its overall effective tax rate can be significantly effected by the range of rules across the EU.

Inter – Company Dividends

The main distinction between Member States concerns whether they operate a credit system or an exemption system. In general the exemption system is considered more advantageous to the tax payer. The ‘generosity’ of a tax system can also be measured by considering to what extent the relief granted in a Member State is more generous than the minimum required by the ‘Parent Subsidiary’ Directive 34. The majority of Member States (Belgium, Denmark, Finland, France, Germany, Ireland, Luxembourg, The Netherlands, and the UK) are more generous than required by the Directive and make no distinction between dividends from Member States, and from outside the EU. Spain provides more generous relief than required under the Directive, but makes a distinction between EU and non EU dividends. Austria provides the minimum relief in accordance with the Directive but extends this to non EU dividends and finally Greece, Italy, Portugal and Sweden apply only the Directive.

This illustrates that the Directive is essentially operating as a minimum standard, which a majority of Member States are prepared to go beyond. To the extent that the Directive sought to provide for the same treatment across the EU it has not achieved this aim.

Inventories

In periods of low inflation the rules relating to stock valuation are unlikely to have a decisive impact on effective tax rates. However, even when inflation is low individual sectors may be subject to large variations in stock valuations when particular commodity prices vary, such as crude oil which over very short periods has fluctuated from over US $30 per barrel, down to US $10 and back to US $ 30. The distinction between Member States who permit the LIFO method of valuation, and those who do not can therefore be an important factor. The majority of Member States do accept this basis for stock valuation but Finland, France, Sweden and the UK do not.

In certain industries the extent to which certain administrative and overhead expenses are included in stock valuations may have a impact on the final stock valuation and hence the taxable profit and effective tax rate for a given period but the summarised tables to do not permit a detailed comparison between policies in different Member States. Such considerations would only be applicable in certain industries.

34 EC Directive 90/435 OJ 1990 L225/6
**Expenses**

The basic rules concerning expenses are broadly similar. Although differences tend to be permanent rather than simply timing, and therefore potentially more significant, where there are differences they tend to be very specific and in most cases concern relatively low value items such as entertaining and travelling. However, without going into a great deal of detail it is not possible to make a general distinction between Member States.

The treatment of interest, specifically thin capitalisation is an exception. Several Member States do not have formal rules on thin capitalisation and this could lead to substantially different effects on the effective tax rates in Member States when comparing those who do have protective rules and those who do not.

**Conclusions**

On the basis of the tables it is not possible to draw general conclusions concerning the quantitative impact of the variations in the structural elements. However, it is clear that there are substantial qualitative differences in certain areas. Within each category one can identify ‘clusters’ of Member States who approach specific elements in a similar manner. However, it is difficult to identify a group of Member States who consistently, across all the structural elements, form a coherent grouping on the basis of their current tax systems or a group or individual Member State who are consistently outside the ‘norms’. In a number of cases the changes which would be required to bring Member States closer together would not appear to be major and in a number of the categories one could question the ‘need’ for the detailed differences.

It has been suggested that the tax treatment of structural elements of the tax base is compensatory and in terms of the overall effective tax rate a high nominal tax rate is indicative of a ‘narrow’ tax base, and a low nominal tax rate is indicative of a ‘broad’ tax base. Analysing the individual structural elements reveals that there are differences and these may themselves be compensatory, for example within a Member State restrictive rules on the depreciation of goodwill might be ‘compensated’ for by generous tax depreciation of tangible assets. ‘Compensation’ could therefore exist at two levels – at the rate/base level, and within the different elements of the calculation of the base. The qualitative analysis helps in identifying the potential compensatory factors, and in identifying the different clusters of Member States. For example with respect to the statutory rate ‘clusters’ around 30% and around 40% can be identified and at the ‘extremes’ the tables show that the highest rate is currently four times the lowest rate. For a single market this is a wide range. However, without measuring the relative financial effect of each of the structural elements any statement concerning the degree to which one measure compensated for another would be subjective. It is for this reason that the Quantitative Analysis is necessary in order to place objective values on the structural elements and test the hypothesis that the treatment of the existing structural elements is compensatory and to quantify the respective impact of these on the effective tax rate.
## Member State Tables

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<th>Structural elements</th>
<th>Belgium</th>
<th>Finland</th>
<th>Austria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tax Rates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Standard</td>
<td>39 %</td>
<td>35 %</td>
<td>29 %</td>
</tr>
<tr>
<td>- Reduced</td>
<td>28 % profits 1-25.000 EURO</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td>36 % profits: 25.000 – 90.000 EURO</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td>41 % profits: 90.000 – 325.000 EURO</td>
<td>these reduced rates are subject to conditions</td>
<td>n.a.</td>
</tr>
<tr>
<td>- Surcharge</td>
<td>temporary surcharge of 3% calculated on income tax actually due as computed before deductions.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>- Minimum Tax</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
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</tr>
<tr>
<td>- Special Rates</td>
<td>21,5 %: Belgian office for business and agriculture</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td>19,5 %: approved investment funds in real estate or unlisted shares</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td>5 %: approved professional credit associations and some approved building societies</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>2. Tax Accounting Rules</td>
<td>taxable income is computed on the basis of &quot;sound business practice&quot; unless tax law provides otherwise</td>
<td>taxable income is computed on the basis of the relevant rules of tax law which, in general, closely follow those of the business accounts</td>
<td>taxable income is computed on a net worth comparison of the company’s assets at the beginning and the end of the tax year (Betriebsvermögensvergleich)</td>
</tr>
</tbody>
</table>
practice” is prudence only when recorded in the accounts. Commercial valuations are binding for tax purposes unless the law provides otherwise.

<table>
<thead>
<tr>
<th>3. Depreciation</th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Basis</td>
<td>historic acquisition or production cost</td>
<td>historic acquisition or production cost (not below residual value)</td>
<td>historic acquisition or production cost</td>
</tr>
<tr>
<td>Structural elements</td>
<td>Belgium</td>
<td>Finland</td>
<td>Austria</td>
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<tr>
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</tr>
</tbody>
</table>
| **Methods**         | - straight line  
- declining balance (excluding intangible assets, cars and assets used by lessee)  
- combination of declining balance and straight line | - straight line  
- declining balance depreciation (excluding buildings)  
- combination of declining balance and straight line depreciation  
- depreciation on the basis of asset’s usage (for assets with great variety in annual use)  
accelerated depreciation is permitted for certain assets (e.g. environmentally friendly investments) | - declining balance depreciation  
- straight line for intangibles and long term expenditures  
- depletion method for natural resources  
- assets of which the acquisition value is small or of which the economic life does not exceed three years may be expensed a taxpayer may choose any depreciation percentage between 0% and a maximum depreciation rate | - straight line depreciation |
| **Rates**           | declining balance is double the rate of straight line with a maximum of 40 % depreciation rates are fixed by administrative practice: office buildings (3 %), industrial buildings (5%), equipment (10-25 %), computer equipment (33%), rolling stock (20%)  
calculated depending on useful life of the asset, depreciation on the basis of the asset’s output, in general:  
office buildings: 1,5 % - 3 %  
industrial buildings: 2 % - 4 %  
machinery and equipment: 10 % - 20 %  
personal computers: 25 % - 33 %  
trucks: 30 %  
over the probable economic life of the asset except statutory rates for various kind of assets  
the maximum depreciation rates are:  
for residential and administrative buildings: 4%  
for commercial and industrial buildings: 7%  
for light construction and buildings used for research activity: 20%  
for machinery and equipment: 25%  
vehicles: over 5 successive years | although standard rates have been developed, individual depreciation rates are allowed  
buildings of business companies: up to 4 %  
businesses (bank or insurance): 2,5 %  
other buildings: 2%  
machinery and equipment: average useful life (German depreciation tables as possible reference)  
cars: 12,5 %  
movable fixed assets, purchased in the second half of the financial year, are depreciable at 50 % of the annual depreciation rate | |
<p>| <strong>Accounting</strong>      | tax deduction must be recorded in business accounts, no deferral of depreciation allowed | tax deduction must be recorded in business accounts, no deferral of depreciation allowed (OPEN to be verified!) | tax deduction must be recorded in business accounts. If the depreciation for accounting purposes is lower than that which is allowed for tax purposes, the additional (tax) depreciation (i.e. the difference) is to be recorded under a special heading. Depreciation taken for accounting purposes can also be deferred for tax purposes | tax deduction must be recorded in business accounts. Depreciation is mandatory and cannot be postponed |</p>
<table>
<thead>
<tr>
<th>Structural elements</th>
<th>Belgium</th>
<th>Finland</th>
<th>Austria</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Intangibles</td>
<td>intangibles, including goodwill, are depreciated on a straight line basis</td>
<td>intangibles (including goodwill if purchased from a third party) are depreciable, in principle with all depreciation methods, depreciation of goodwill is not compulsory</td>
<td>straight line depreciation with maximum period of 10 years. Goodwill idem, except that when the probable period of use does not exceed 3 years, the acquisition value may be expensed</td>
</tr>
<tr>
<td>- Non depreciable assets</td>
<td>Land</td>
<td>Land</td>
<td>the decrease in value of fixed assets not subject to wear and tear, such as land and certain securities can only be written off for tax purposes if the decrease in value is substantial and the taxpayer produces evidence of this or when such assets are disposed of.</td>
</tr>
<tr>
<td>As an exception the value of land or financial assets may be written down to the fair market value if the fair market value has gone permanently below the acquisition cost.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. Provisions</td>
<td>provisions are deductible if loss is sharply defined or expense is likely to occur in accordance with current events. Provisions for probable losses and charges.</td>
<td>Equalization reserve: in anticipation of certain future expenditure, the reserve enables recurrent costs to be spread evenly over a period of time. Risk reserve deductible by the company equal to annual gross premium charged by insurance company for same risk.</td>
<td>Not deductible except for guarantees, for aircraft and shipping or in construction industry for buildings. Claims do not have to be legal and certain in amount, a wide scope is generally given to taxpayers’ estimates, if based on objective facts and especially on business experience.</td>
</tr>
<tr>
<td>- Risks and future expenses</td>
<td>Specific provisions are allowable. General provisions are not allowed.</td>
<td>Both specific and general provisions are allowable provided that they accord with ‘sound business practice.’ Specific provisions are allowable if they are in accordance with generally accepted accounting principles. General provisions are not allowable but there are exceptions in the case of financial traders.</td>
<td>Specific provisions are allowable. (National Administration to comment otherwise) Provisions for doubtful claims are allowed, although a valuation at the lower going-concern by a direct write-off is more common.</td>
</tr>
<tr>
<td>Topic</td>
<td>Details</td>
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<td></td>
</tr>
<tr>
<td>- Pensions</td>
<td>only deductible if (1) there is a firm pension obligation by the employer, (2) total of resulting legal and extra-legal pension &lt; 80% of last salary, (3) only for the amount necessary to build up the pension over a number of years (4) deductions or reserves are recorded in the commercial accounts</td>
<td></td>
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</tr>
<tr>
<td>Contributions to an outside pension fund are generally deductible (subject to conditions)</td>
<td></td>
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</tr>
<tr>
<td>Contributions to a pension reserve are only deductible if the pension payments are managed or maintained by the company itself and if there is an irrevocable obligation to pay a pension</td>
<td></td>
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</tr>
<tr>
<td>Contributions to a reserve for future pension payments are deductible if (1) an early retirement scheme is provided for, (2) for employees older than 47 years without an early retirement scheme in their employee contract and (3) for whom future payments actually can be expected</td>
<td></td>
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</tr>
<tr>
<td>provisions for probable future payments of employee pensions, are not tax deductible until the costs effectively occur</td>
<td></td>
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<tr>
<td>Contributions to a reserve for future pension payments are deductible (1) in case of an obligation under an agreement to pay old age pension, (2) for the ratable share of future pension obligations as actuarially computed, (3) reduced by 20 % plus a reduction for a discount at an interest rate of 6% per annum</td>
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<tr>
<td>Structural elements</td>
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<tr>
<td>Repairs</td>
<td>Non deductible</td>
<td>a tax free replacement reserve, as long as it is intended that the asset (tangible or intangible) is to be repaired or to be replaced, within a maximum of 4 years</td>
<td>a tax free replacement reserve, provided that the asset is replaced, within 2 years only allowed if the assets are lost or damaged or in case of disposal of business premises, see below under 6 ‘Capital gains’; exemptions</td>
</tr>
<tr>
<td>5. Losses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Carry Forward</td>
<td>no limitation in time</td>
<td>no limitation in time</td>
<td>up to 10 tax years</td>
</tr>
<tr>
<td>- Carry Back</td>
<td>Not available</td>
<td>Up to 3 years</td>
<td>Not available</td>
</tr>
<tr>
<td>- Transfer of losses</td>
<td>Not available</td>
<td>No special restrictions except in case of mergers (see 7)</td>
<td>see below under 8a ‘Group relief’</td>
</tr>
<tr>
<td>6. Capital Gains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale of Fixed Assets:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>- Timing Rules</td>
<td>capital gains are taxable at the time of realization, recorded but unrealized gains are exempt (except for recorded gains on inventory and work in progress)</td>
<td>Capital gains are taxable at the time of realization, as ordinary business income</td>
<td>capital gains are taxable at the time of realization, as ordinary business income exception: replacement reserve for business premises; see below under ‘exemptions’</td>
</tr>
<tr>
<td>- Accounting Rules</td>
<td>No special rule</td>
<td>No special rule</td>
<td>No special rule</td>
</tr>
<tr>
<td>- Inflation</td>
<td>no inflation correction since 1950 exemption for inflationary gains originating before 1950</td>
<td>no inflation correction</td>
<td>no inflation correction</td>
</tr>
<tr>
<td>- Rates</td>
<td>no special rate</td>
<td>no special rate</td>
<td>no special rate</td>
</tr>
<tr>
<td>- Exemptions</td>
<td>roll over relief on condition of reinvestment within 3 years (exemption of gains on assets sold and decrease of depreciation base of reinvestment, with the amount that has been exempted from tax) recorded gains are only exempt when recorded on a separate blocked reserve account (unavailable for distribution)</td>
<td>roll over relief in the form of a replacement reserve for gains on tangible or intangible assets to be repaired or replaced within 4 years. Depreciation on new assets is reduced by amount of tax except replacement reserve</td>
<td>roll over relief in the form of a tax free replacement reserve for business premises and shares (which entitle the taxpayer to use the business premises) and in case of damage or loss for other assets, upon condition of reinvestment within two years</td>
</tr>
<tr>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale of shares</td>
<td>no taxation of gains realized upon the sale of shares,</td>
<td>Exemption for gains on transfer of substantial holding</td>
<td>no special regulations</td>
</tr>
<tr>
<td>Structural elements</td>
<td>Belgium</td>
<td>Finland</td>
<td>Austria</td>
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</tr>
<tr>
<td><strong>Capital Losses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- fixed assets</td>
<td>deductible as ordinary loss, gains taxable as ordinary gains</td>
<td>Deductible as ordinary loss</td>
<td>deductible as ordinary loss</td>
</tr>
<tr>
<td>- shares</td>
<td>no deduction of losses</td>
<td>Losses on the realization of a substantial holding of shares are not deductible, except for losses resulting from liquidation.</td>
<td>deductible as ordinary loss if the shares have been held as fixed assets or as inventory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>losses incurred from the disposal of shares in a stock company or a limited liability company, may only be set off against other income in seven equal portions starting in the year of disposition</td>
<td></td>
</tr>
<tr>
<td><strong>7. Mergers &amp; Acquisitions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Deferral of taxation</td>
<td>Available in accordance with Mergers Directive</td>
<td>Available in accordance with Mergers Directive - including domestic transactions</td>
<td>Available in accordance with Mergers Directive - including domestic transactions</td>
</tr>
<tr>
<td>- Transfer of losses</td>
<td>corporate reorganizations: amount of loss carry forward is reduced by multiplying the amount of the loss with the ratio between tax base of net assets of transferor company and total net tax base of transferor and transferee company Total loss of loss carry forward in case of change in shareholders control No deduction of losses against profits resulting from transactions not at arm’s length</td>
<td>The following losses do not qualify for loss compensation: losses incurred by a company which discontinues its business if not at least 70% of its shares continue to be held by the same shareholders losses sustained by a company having the status of an investment institution do not qualify for compensation with profits made by that company after it has obtained a different status</td>
<td>the losses of the transferor company are carried forward, provided that the combined holdings of the transferee company and its shareholders have, since the beginning of the loss year, exceeded 50% of the shares in the absorbed company the loss carry forward is completely forfeited when more than 50% of the shares are sold tax treatment of divisions is the same as that for mergers however, tax authorities may, upon application by the taxpayer, grant a dispensation as regards this general rule</td>
</tr>
<tr>
<td>Transfer of tax bases</td>
<td>Available in accordance with Mergers Directive</td>
<td>In order for the merger to be tax free the acquiring company should take over the assets of the acquired company at the same book value</td>
<td>Reorganisation transactions provided for in the Merger Directive entail transfer of of the tax base in the sense that for tax (depreciation) purposes the assets are transferred at their remaining balance value</td>
</tr>
<tr>
<td>Structural elements</td>
<td>Belgium</td>
<td>Finland</td>
<td>Austria</td>
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</tr>
<tr>
<td>Group Relief</td>
<td>no consolidation</td>
<td>Consolidation</td>
<td>no consolidation, but group contributions</td>
</tr>
</tbody>
</table>

**- Conditions**

- n.a.
- Resident NV’s (public company) or BV’s (limited company), cooperative societies and mutual guarantee companies. The ownership of at least 99% of the shares subject to the same tax regime. Additional “standard conditions” in order to safeguard the imposition and the collection of the corporate income tax. Additional requirements for foreign entities: capital divided in freely transferable shares, subject to income tax in the country of residence, ...
- Minimum share participation of 90% and effective business requirements with exception of financial, insurance and pension institutions
- (1) a relationship of subordination between parent and subsidiary called (Organschaft), and (2) a profit and loss pooling agreement (Ergebnisabführungsvertrag) of at least 5 years

**- Type of Relief**

- n.a.
- Taxation in the hands of the parent company, as one fiscal unit: full transfer of losses, all transactions between members of the group are disregarded: fixed assets can be transferred at book value within the group
- Members of the group may make payments to other members that are tax deductible by the payer company and taxable to the payee company
- Pooling of all income and taxation in the hands of controlling parent
<table>
<thead>
<tr>
<th>Domestic companies</th>
<th>95% exemption of gross amount of dividend if holding equals or &gt; 5% or 1,250,000 EURO</th>
<th>Interest fully deductible, except for dividend stripping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-resident companies: Idem, except no relief for dividends from holdings in tax havens or companies in countries with substantially lower tax rate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domestic companies</th>
<th>Fully deductible 100% exemption if holding equals or &gt; 5% of share capital or capital in joint account and if shares are not held as current stock</th>
<th>Non-resident companies: Idem, but 2 further requirements: (1) the non-resident entity must be subject to a national tax on profits, whatever the rate is, (2) held as a non-portfolio investment or equal conditions as set forth in the EC Parent-Subsidiary Directive (&gt;25%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the participation exemption applies, expenses related to shareholdings in resident and non-resident companies are not deductible</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domestic companies</th>
<th>Dividends received are taxable but with full credit for corporate income tax</th>
<th>Non-resident companies: Parent-subsidiary directive dividends received are exempt, when there is a treaty and resident company owns 10% in voting power or 25% in capital stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic companies</td>
<td>Full tax exemption for dividends received by domestic companies + permanent establishments of EU companies in Austria, no conditions</td>
<td>Non-resident companies: Full tax exemption for dividends received, condition: shareholding of 25% no taxation of capital gains on shares held in non-resident companies</td>
</tr>
<tr>
<td>Structural elements</td>
<td>Belgium</td>
<td>Finland</td>
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</tr>
<tr>
<td><strong>9 Inventories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Valuation Rules</td>
<td>cost or fair market value, whichever is lower</td>
<td>Valuation either (1) at cost, (2) at cost or at market value, whichever is lower, or (3) base stock method</td>
</tr>
<tr>
<td>- Allocation Methods</td>
<td>Any of FIFO, LIFO, the unit method (each item priced individually) and the average weighted price method. The base stock method is not allowed</td>
<td>LIFO, FIFO, and the “initial stock system” (with or without replacement reserve)</td>
</tr>
<tr>
<td><strong>10. Deduction of expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- General Rules</td>
<td>deductible business expenses and charges are those incurred or borne by the taxpayer to obtain or retain business income, i.e. those that are of a professional nature</td>
<td>deductible expenses include all expenses directly or closely connected with the conduct of a business and others if they conform to “sound business practice”</td>
</tr>
<tr>
<td>- Non-deductible expenses</td>
<td>There is a non-exhaustive list, including among others: part of the expenses for cars, restaurant and entertainment expenses, excessive interest, exempt fringe benefits, fines and penalties and income tax itself</td>
<td>An exhaustive list of expenses are no longer deductible (e.g. fines) or only up to 75 % of certain expenses having a mixed character such as certain gifts, foodstuff, clothes, meals</td>
</tr>
<tr>
<td>Thin capitalization</td>
<td>debt/equity ratio of 1/1, but only for loans granted by individual shareholders; a 7/1 debt-equity ratio applies to debt if the creditor is exempt or taxed at a reduced rate in respect of the interest paid on the debt.</td>
<td>no thin capitalization rules, but certain limitations on the deductibility of inter-company interest expenses (e.g. for expenses related to artificial conversion of equity into debt).</td>
</tr>
<tr>
<td>Structural elements</td>
<td>France</td>
<td>Ireland</td>
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<td>--------------------</td>
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<td>---------</td>
</tr>
<tr>
<td><strong>1. Tax Rates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Standard</td>
<td>33 1/3%</td>
<td>40%</td>
</tr>
<tr>
<td>(for resident corporations which are not quoted in the Athens stock exchange and for non resident corporations)</td>
<td></td>
<td>(for resident corporations which are not quoted in the Athens stock exchange and for non resident corporations)</td>
</tr>
<tr>
<td>Open quoted companies???</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Reduced</td>
<td>19% applied to capital gains on sale of long term qualifying shares and certain royalties and industrial patents</td>
<td>20% and 30% applied to capital gains</td>
</tr>
<tr>
<td>- Surcharge</td>
<td>10% of standard tax charge (Standard plus surcharge = 36 2/3%)</td>
<td>n.a.</td>
</tr>
<tr>
<td>- Minimum Tax</td>
<td>5,000 FRF to 200,000 FRF depending on turnover</td>
<td>n.a.</td>
</tr>
<tr>
<td>- Special Rates</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

**2. Tax Accounting Rules**

- Taxable income is computed on the basis of business accounts, unless tax law provides otherwise
- Taxable income is computed on the basis of business accounts, unless tax law provides otherwise
- Although based upon accounting income, income liable to corporation tax is subject to significant adjustments (e.g. depreciation is added back to taxable profit and replaced by "capital allowances")
- Taxable income is computed on the basis of business accounts, unless tax law provides otherwise
<table>
<thead>
<tr>
<th>Structural elements</th>
<th>France</th>
<th>Ireland</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3. Depreciation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>- Basis</strong></td>
<td>historic acquisition or production cost</td>
<td>Acquisition or production cost of the asset or its value after revaluation. From 1992, companies are required to revalue fixed assets every four years. The capital gain arising from revaluation is subject to a special tax.</td>
<td>Depreciation is replaced by capital allowances</td>
</tr>
</tbody>
</table>
| **- Methods**       | - straight-line method  
- declining-balance method (optionally available for certain assets)  
Accelerated depreciation may be available for certain environmental protection assets. | - straight-line depreciation  
- Declining balance depreciation may be used for plant and machinery acquired after 1st January 1993.  
- free depreciation for fixed assets with a purchase price of not more than Drs 200,000 in the year the asset is purchased or first used.  
In the tax-incentive areas, more favourable treatment is granted in many cases which may result in a very substantial increase in the permitted rates of depreciation. | - straight-line for plant and machinery and certain buildings over a seven-year period.  
- straight-line for industrial buildings 4%  
- reducing balance for motor vehicles  
In addition, allowance for capital expenditure on new plant and machinery and buildings used for the purposes of a trade carried on either in the Customs House docks area or Shannon can be accelerated and depreciated at the rate of 100% in the year in which it is incurred. | - straight-line method  
*Accelerated depreciation* is available up to twice the normal amount of depreciation in the year of acquisition and the next two years. If the assets are acquired second-hand, such accelerated depreciation is allowed only in the taxable period they are put into use. If the cost of the tangible property is less than ITL 1 million, it can be deducted entirely in the period of acquisition. |
| **- Rates**         | Straight-line depreciation rates are determined in accordance with normal length of use of the asset, set by reference to standard practice for the industrial or business sector concerned. Declining-balance depreciation rate is equal to normal straight-line rate multiplied by a coefficient that varies from 1.5 to 2.5 depending upon the probable length of use of asset. | The applicable rates are set out by law. Rates of declining-balance method are those which apply to the straight line method multiplied by the factor of 3.  
For plant and machinery and certain buildings for the first six years the annual rate is 15% and in the seventh year is 10%  
For motor vehicles – 20%  
For industrial buildings – 4% | Rates of depreciation are fixed by ministerial decree and vary according to the nature of the asset and the activity carried out. More intensive use may justify more rapid depreciation.  
If the depreciation taken in a taxable period is less than the maximum allowed *(reduced depreciation)*, the difference is deductible in subsequent years, unless depreciation taken is less than half of the maximum and there is no proof of a lesser use of the asset as compared to the normal use in the sector. |
### Accounting

<table>
<thead>
<tr>
<th>Country</th>
<th>Deduction Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Tax deduction must be recorded in business accounts, no deferral of depreciation allowed. Companies are required to account for depreciation at least equal to the relevant straight-line depreciation. That fraction of depreciation that does not reach this limit is lost.</td>
</tr>
<tr>
<td>Ireland</td>
<td>Tax deduction must be recorded in business accounts, no deferral of depreciation allowed.</td>
</tr>
<tr>
<td>Italy</td>
<td>Tax deduction must be recorded in business accounts.</td>
</tr>
</tbody>
</table>

### Structural Elements France Ireland Italy

<table>
<thead>
<tr>
<th>Structural Elements</th>
<th>France</th>
<th>Ireland</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intangibles</strong></td>
<td>Only intangible assets with a limited life may be depreciated (e.g. patents, industrial processes). Research expenses may be deducted from profits from the financial year in which they were incurred, or may be capitalised and depreciated on a straight-line basis over a maximum period of five years.</td>
<td>Intangible assets, including goodwill, may be depreciated. Research and development costs may normally be written off in the years in which they are incurred.</td>
<td>Goodwill acquired from third parties may be depreciated over a period of not less than 10 years. Cost incurred to acquire patents and know how is deductible over 3 years. Research and development costs may be either deducted from the income for the fiscal year during which they are incurred or depreciated in equal shares over five years. Trademarks may be depreciated up to one tenth for each taxable period.</td>
</tr>
<tr>
<td><strong>Non depreciable assets</strong></td>
<td>Land, goodwill, trademarks</td>
<td>Land</td>
<td>Land, Goodwill</td>
</tr>
</tbody>
</table>

### Provisions

<table>
<thead>
<tr>
<th>Risks and Future Expenses</th>
<th>France</th>
<th>Ireland</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deductible</td>
<td>Non deductible</td>
<td>Deductible</td>
<td>Tax law specifically states which reserves and provisions are recognized for tax purposes. No other reserves and provisions are recognized for tax purposes, even though they may be recognized for company law purposes. In addition to those already mentioned in this section, the law allows a provision to cover the risks from foreign exchange, and the one on account of expenses incurred for lotteries and other prizes (such as coupon savings schemes in supermarkets).</td>
</tr>
<tr>
<td><strong>- Bad debts</strong></td>
<td><strong>Specific provisions are allowable</strong></td>
<td><strong>General provisions are allowable within the following limits:</strong> Deductible up to a max of 0.5% of turnover, without exceeding 35% of trade receivables</td>
<td><strong>Specific provisions are allowable</strong></td>
</tr>
<tr>
<td>Structural elements</td>
<td>France</td>
<td>Ireland</td>
<td>Italy</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------</td>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>- Pensions</td>
<td>Non-deductible</td>
<td>Deductible</td>
<td>Non deductible, however, contributions to approved pension schemes are deductible</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Deductible Amounts allocated to a reserve for personnel severance and welfare are deductible in the amount accrued during the fiscal year in conformity with statutory and contractual provisions governing the employment of individual workers. The setting aside is allowed on an accrual basis.</td>
</tr>
<tr>
<td>- Repairs</td>
<td>Deductible</td>
<td>Non deductible</td>
<td>Deductible if in accordance with standard accounting principles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>In general, the deduction of actual costs for repair and maintaining expenses is allowed up to 5% of the value of fixed tangible assets according to the record of depreciable assets at the beginning of taxable year. Any excess can be deducted in equal parts in the following five taxable periods. Companies operating ships or aircraft may set up a reserve for cyclical repairs and maintenance, the maximum annual deduction being 5% of the cost as shown in the register of depreciable assets at the beginning of the year. Any excess in the reserve must be included in taxable income in the current year. Any excess in actual expenses must be claimed as for normal repairs and maintenance. Companies involved in the construction and operation of public works may make a tax-deductible allocation to a reserve. The maximum annual amount set aside is 5% of the cost of the goods they will have to transfer to the public body without compensation.</td>
</tr>
</tbody>
</table>

5. Losses
<p>| - Carry Forward | Up to 5 years (but indefinitely for losses attributable to depreciation). The loss carry over is only disallowed in case of a substantial modification of activity (liquidation, merger, change of trade) | Up to 5 years | No limitation in time. Losses may be carried forward only against future income of the same trade | Up to 5 years | No limitation for losses derived in the first 3 years from the beginning of the business activity. |</p>
<table>
<thead>
<tr>
<th>Structural elements</th>
<th>France</th>
<th>Ireland</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Carry Back</td>
<td>3 years - to release a credit against tax; If not used refundable in cash after 5 years</td>
<td>Not available</td>
<td>One year</td>
</tr>
<tr>
<td>- Transfer of losses</td>
<td>Only available within a group, or under certain mergers</td>
<td>No special restriction except in case of mergers</td>
<td>Available between members of a group trading in Ireland.</td>
</tr>
</tbody>
</table>

6. Capital Gains

<table>
<thead>
<tr>
<th>Sale of Fixed Assets: - Timing Rules</th>
<th>Taxed at the time of realisation</th>
<th>Taxed at the time of realisation</th>
<th>Taxed at time of realisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Inflation</td>
<td>No inflation correction</td>
<td>No inflation correction</td>
<td>Cost of asset is adjusted by applying a multiplier based on the Consumer Price Index.</td>
</tr>
<tr>
<td>- Rates</td>
<td>Standard rate; a reduced rate of 19% (plus surcharges) applies to capital gains on long term (5 years) qualifying shares and certain royalties and industrial patents.</td>
<td>Standard rates; reduced rates apply to capital gains on the sale of shares (20%) and the sale of industrial property rights such as patents (30%) (table not completed for all elements)</td>
<td>20%</td>
</tr>
<tr>
<td>- Exemptions and reliefs</td>
<td>Not available</td>
<td>Roll-over relief Capital gains derived from the sale of fixed assets are tax exempt if reinvested in other fixed assets within 2 years of sale.</td>
<td>Roll-over relief Capital gains derived from the sale of fixed assets are tax exempt if reinvested in other fixed assets within 3 years of sale, or 1 year before.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sale of shares</th>
<th>Taxable</th>
<th>Taxable</th>
<th>Taxable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Losses</td>
<td>Deductible as ordinary loss.</td>
<td>Deductible as ordinary loss</td>
<td>Cannot be set off against trade profits. Can only be set against gains in the same year or carried forward and set off against future capital gains.</td>
</tr>
<tr>
<td>- fixed assets</td>
<td>Capital losses on sales subject to 19% can only be set off against similar “long-term” gains (e.g. capital gains on sale of a substantial holding of shares).</td>
<td>Losses can only be set off against gains from the sale of listed shares.</td>
<td>As for fixed assets</td>
</tr>
<tr>
<td>- shares</td>
<td>As for fixed assets</td>
<td>As for fixed assets</td>
<td></td>
</tr>
</tbody>
</table>

7. Mergers & Acquisitions

<p>| - Deferral of taxation | Deferral of taxation of capital gains granted for mergers and exchanges of shares – subject to prior approval. And Contribution of part of a business in exchange for shares/asset contributions | Mergers and similar transactions (e.g. division and contribution of a sector activity) may be made tax free only if they qualify under special incentive laws (aimed at creating large | Domestic re-constructions and amalgamations are tax neutral. Cross border transactions in accordance with Directive 90/434 are tax neutral. Generally exchanges of shares are tax neutral. | Tax neutral for domestic. The same treatment applies to intra-EU similar transactions. |
| also qualify without approval. Deferral of taxation may also benefit cross-border (EU and non EU) similar transactions upon prior approval. | companies). | neutral. |</p>
<table>
<thead>
<tr>
<th>Structural elements</th>
<th>France</th>
<th>Ireland</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Transfer of losses</td>
<td>No special restrictions in case of acquisition (assuming there is no modification of activity). In case of merger, the losses of the absorbed company can only be transferred to the absorbing company with special agreement – available only to industrial companies, industrial support companies and SMEs in financial difficulty.</td>
<td>No special restriction in case of acquisition. In case of merger, losses of merging companies are not carried forward.</td>
<td>On a transfer of a trade between 75% associated companies losses can be transferred to the transferee. Otherwise, the losses carried forward at the date of transfer cannot be set against the future profits of the new company. In case of acquisition, losses cannot be carried forward if the majority of the voting rights of the company is transferred and the activity of the company is changed. In case of merger the transfer of losses of each company is subject to certain limitations. The values of the assets and liabilities of the merged companies are maintained by the company resulting from the merger. The company resulting from the merger takes over all the tax attributes and obligations of the merged companies.</td>
</tr>
<tr>
<td>- Transfer of tax bases</td>
<td>When tax neutral regime applies capital gains realised on depreciable assets transferred upon merger have to be taken into income over 5 years (plant &amp; machinery) or 15 years (buildings) and taxed at standard corporate tax rate. In counterpart the new basis for depreciation is the fair market value of the assets transferred. Deferral of taxation for capital gains realised on non-depreciable assets and for provisions transferred.</td>
<td>Under the standard regime a merger of two Greek companies gives rise to taxation of capital gains resulting from the re-evaluation of assets. However, then a merger qualifies for the tax incentive regime, the value of assets and liabilities of the absorbed company should be taken over by the absorbing company.</td>
<td>Where transactions are tax neutral the acquirer takes them for capital gains tax purposes at their historic cost to the seller. See above</td>
</tr>
</tbody>
</table>

8aGroup Relief

<table>
<thead>
<tr>
<th>Conditions</th>
<th>France</th>
<th>Ireland</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No tax consolidation regime.</td>
<td>No system of tax consolidation as such but members of a group of companies are permitted to transfer losses and excess capital allowances to one another. A group is made up of parent and 75% subsidiaries.</td>
<td>No special group regime for corporate tax purposes.</td>
<td></td>
</tr>
</tbody>
</table>

8.1Intercompany dividends

| Domestic companies: dividends received are 95% exempt if minimum holding of 10% Non-resident – same treatment | Domestic companies: full exemption. Non-resident companies: - Unilateral relief: dividends received are taxable with credit only for withholding tax - Parent subsidiary directive and tax treaty; dividends received are taxable but with full credit | Domestic companies: exemption. Non-resident companies: full credit for foreign taxes if 25% ownership. | Domestic companies: dividends received are taxable (IRPEG) but with full credit for corporate income tax (dividends are not subject to IRAP) Non-resident companies: - 60% of dividends received from a non EU affiliated company are tax exempt - Dividends received from a EU |
affiliated company with a 25% ownership are 95% exempt.
<table>
<thead>
<tr>
<th>Structural elements</th>
<th>France</th>
<th>Ireland</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9 Inventories</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Valuation Rules</td>
<td>Lower of cost and market value</td>
<td>Lower of cost and market value</td>
<td>Lower of cost or market value</td>
</tr>
<tr>
<td>- Allocation Methods</td>
<td>FIFO and average cost method.</td>
<td>LIFO, FIFO and average cost method.</td>
<td>LIFO, FIFO and average cost method.</td>
</tr>
<tr>
<td><strong>10 Deduction of expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- General Rules</td>
<td>Deductible if they are justifiably incurred in the interest of the company and result in decrease of net assets</td>
<td>Deductible if related to business activity</td>
<td>Deductible, if revenue expenses incurred for the purposes of the trade.</td>
</tr>
<tr>
<td>- Non-deductible expenses</td>
<td>In respect of hunting, fishing, holiday homes and yachts. There is also a limitation for depreciation allowances for passenger vehicles the cost of which exceeds FF 65,000.</td>
<td>Corporate tax and penalties for failure to file tax returns or for late payment of taxes</td>
<td>Penalties for late payment of taxes, Capital expenditure. Some restrictions on deductibility of business entertainment and motor expenses.</td>
</tr>
<tr>
<td>- Thin capitalization</td>
<td>Debt/Equity ratio of 1.5:1 but only for loans granted by controlling shareholders (i.e. shareholders who manage the borrowing company or own more than 50% of its share capital)</td>
<td>No special rules.</td>
<td>No special rules.</td>
</tr>
<tr>
<td>Tax Rates</td>
<td>Sweden</td>
<td>Germany</td>
<td>Spain</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Standard</strong></td>
<td>28 %</td>
<td>32 %</td>
<td>40 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>35 %</td>
</tr>
<tr>
<td><strong>Reduced</strong></td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 %</td>
</tr>
<tr>
<td><strong>Surcharge</strong></td>
<td>n.a.</td>
<td>n.a.</td>
<td>5.5 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimum Tax</strong></td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Special Rates</strong></td>
<td>30 %</td>
<td>26 %</td>
<td>40 %</td>
</tr>
<tr>
<td>investment trusts</td>
<td></td>
<td>for pension funds</td>
<td>hydrocarbon companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5% on dividends on shares and capital gains in pensions funds</td>
<td>25 % mutual insurance companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>rural and cooperative banks</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and 25 % cooperatives</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10% or 25% non-profit organizations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>pension plans and funds</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>collective investment entities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>investing in securities and in real estate</td>
</tr>
</tbody>
</table>
### 2. Tax Accounting Rules

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable income is computed on the basis of business accounts, unless tax law provides otherwise</td>
<td>Taxable income is computed on the basis of business accounts, unless tax law provides otherwise (principle of authoritativeness)</td>
</tr>
<tr>
<td>Deductions for tax purposes are allowed only when recorded in the accounts</td>
<td>All expenditure and most income is taxed on accruals basis but certain limited classes of income are taxed only on the realization basis</td>
</tr>
<tr>
<td>All expenditure and most income is taxed on accruals basis but certain limited classes of income are taxed only on the realization basis</td>
<td>Exceptionally only when authorized by the tax administration, different allocation and timing criteria may be used by the taxpayer.</td>
</tr>
</tbody>
</table>

### 3. Depreciation

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Basis</td>
<td>Historic acquisition or production cost</td>
</tr>
</tbody>
</table>

Historic acquisition or production cost (less residual value), regularized asset value under 96 Royal-Decree Law is amortized under this new net value.
<table>
<thead>
<tr>
<th></th>
<th>Sweden</th>
<th>Germany</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods</td>
<td>- straight-line on acquisition cost (excluding for buildings)</td>
<td>- straight-line (buildings)</td>
<td>straight line – declining balance (not for buildings, furniture and tools) - sum-of-the-digits (not for buildings, furniture and tools)</td>
</tr>
<tr>
<td></td>
<td>- declining balance (ships, plant, machinery and equipment)</td>
<td>- declining balance (not for buildings constituting a business asset or for intangibles)</td>
<td>no change in method is allowed</td>
</tr>
<tr>
<td></td>
<td>100 % depreciation in first year allowed for assets of low value or useful lifetime of less than three years and for EDP software</td>
<td>- production methods - output method or depletion method (for specific categories of fixed assets, e.g. mines)</td>
<td>free depreciation for mining, R&amp;D and certain agriculture associations under Act 19/1995</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the only change in method allowed is from the declining balance to the straight line method</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>the economic owner has the right to claim the depreciation accelerated or additional depreciation for the new Länder (20%-50%) and investment by SME (20%) movable fixed assets, purchased in the second half of the financial year, are depreciable at 50 % of the annual depreciation rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buildings: 2 – 5 % depending upon the estimated lifetime of the asset (the National Tax Board has published guidelines)</td>
<td>Buildings: maximum of 5-8 %</td>
<td>Immovable property</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Machinery, equipment, plants, intangibles: 20 % (straight line) - 30 % (declining balance)</td>
<td>Ships, plant, machinery and equipment: maximum of 30 %</td>
<td>Industrial and commercial buildings (excluding those used for living accommodation): straight line 2.5 % for buildings before 1925, 2 % for buildings between 1925 – 31/03/85, 4 % for buildings after 31/03/1985 living accommodation: declining balance (5 % for the first 8 years, 2.5 % for the following 6 years and 1.25 % for the remaining 36 years) plant, machinery and equipment (the declining balance rate is limited to three times the allowable straight-line rate, with a maximum of 30 %) straight line rates: machinery (10 %), office equipment (20 %), office furniture (10 %), computers (20 %), cars, trucks, etc (20 % -25 %)</td>
<td>Depreciation may be taken at any rate up to the maximum rate Maximum rates and maximum period of amortisation (industrial buildings and warehouses: 3 % – 68 years, office buildings: 2 % -100, equipment and machinery: 8%,10%,12% - 18,20,25, tools: 30% - 8, computer hardware: 25% -8, office installations: 8% - 25, trucks, cars, vans: 16% - 14) for declining balance depreciation straight line rates are to be multiplied by 1.5 (depreciation in less than 5 years), 2.0 (between 5-8 years), 2.5 (8 years or more) rates are to be multiplied by 2.0 for second hand assets</td>
</tr>
</tbody>
</table>

| Sweden |    |    |    |
| Germany |    |    |    |
| Spain |    |    |    |
### Accounting
- Accounting tax deduction must be recorded in business accounts (not required for buildings).
- There is no link between tax depreciations and business depreciations.
- Tax deduction must be recorded in business accounts, depreciation is mandatory and cannot be postponed.
- Any depreciation must be accounted for (either as a deduction from the value of the asset, either as a provision on the balance sheet), but in cases of free depreciation, lesser market value of assets is tax deductible under certain conditions. Special restrictions are set for editorial funds and securities.

### Intangibles
- Intangibles are depreciable like machinery and equipment.
- Intangibles (including goodwill) are depreciable on a straight line basis and at a rate of maximum 14.28% (seven years).
- Knowledge and patents (including licenses), however, can be deducted 100% in the first year provided the intangibles are linked to the business of the enterprise.
- Intangibles are depreciated on a straight line basis over their useful life (except goodwill with a fixed depreciation period of 15 years).
- Intangibles are depreciable in trademarks and patents: annual maximum limit of 1/10 of total amount. Goodwill: annual maximum limit of 1/10 of the total amount if acquired from an unrelated party, if not depreciation depending on the actual decrease in value.

### Non-depreciable assets
- Land.
- Offices, premises used for business in the financial sector (bank, insurance, brokerage etc.), accommodation (except hotels), healthcare and land.
- As an exception, the value of land or financial assets may be written down to the fair market value if the fair market value has gone permanently below the acquisition cost.

### 4. Provisions

#### - Risks and future expenses
- Provision for future liabilities, that may be encountered under guarantee given to customers.
- 20% of taxable income may be allocated to a profit periodization reserve that remains tax free for another five years.
- Generally not available. Provisions for guarantee obligations are deductible under narrow and strict conditions and provided they are not immaterial.
- Insurance companies can make tax free provisions to cover future payments to insured persons.
- Provisions for foreseeable expenses are deductible when the expense has its cause in the financial year.
- Provisions that are mandatory for commercial accounting purposes are also mandatory and deductible for tax purposes (principle of reversed Massgeblichkeit or authoritativeness).
- Provisions for environmental risks are deductible when action is mandatory.
- Provisions for breach of copyrights and patents, where a claim has been lodged or is very probable.
- Claims do not have to be legal and certain in amount, a wide scope is generally given to tax payers' estimates, if based on objective facts.
<table>
<thead>
<tr>
<th></th>
<th>Sweden</th>
<th>Germany</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bad debts</strong></td>
<td>Specific provisions are allowable.</td>
<td>Specific provisions are allowable.</td>
<td>Specific provisions are allowable. General provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td>There is a limited allowance for general provisions.</td>
<td>There is a limited allowance for general provisions.</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td>A special rule applies to banks. They may deduct a provision for debts</td>
<td>A special rule applies to banks. They may deduct a provision for debts outstanding, rather than on</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td>outstanding, rather than on actual losses</td>
<td>actual losses</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Specific provisions are allowable (must be made in the form of a partial write off following</td>
<td>General provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>revaluation).</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td><strong>Pensions</strong></td>
<td>the creation of a tax-free reserve is allowed (up to certain maximum</td>
<td>According to the pension legislation employers cannot set up pension schemes for its employees</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td>amounts), although subject to certain legal requirements (such as</td>
<td>(other than general managers) unless the pension commitments are covered by an authorized</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td>insurance against insolvency)</td>
<td>insurance company or pension fund; thus the funds must be outside the control of the employer.</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internal pension funds are therefore not allowed</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provisions for pension payments are deductible for tax purposes provided they are supported by</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>actuarial computations based on a formal and binding pension plan; discounted at an interest rate</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of 6%, no restrictions in the actual use of the provision</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>only contributions to pension schemes which meet requirements under pension legislation are</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>deductible, i.e. only for capitalisation schemes which are not controlled by the employer</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contributions to internal pension funds are not deductible</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>there is a specified maximum contribution per year per person which varies with age of employee</td>
<td>Specific provisions are allowable only for SME’s.</td>
</tr>
<tr>
<td>- Repairs</td>
<td>replacement reserves (1) may be created to cover damage by fire or other accidents to machinery and equipment, buildings and installations in the soil, as well as for the expropriation, or forced sale of machinery and equipment, (2) have to be used within 3 years, (3) for costs of repair and maintenance of the type of assets for which the reserves are created for</td>
<td>Generally not available</td>
<td>Provisions (mandatory for tax purposes) for substantial maintenance or repair work caused in the financial year which reduce profits are tax free if the maintenance is carried out in the first three months of the following financial year</td>
</tr>
<tr>
<td>- Losses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Losses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Carry Forward</td>
<td>no limitation in time</td>
<td>Up to 5 years</td>
<td>no limitation in time</td>
</tr>
<tr>
<td>- Carry Back</td>
<td>by means of a profit periodization reserve (cf. “Risks and future expenses”)</td>
<td>Not available</td>
<td>losses incurred in 1999 and 2000 may be carried back up to DEM 2 million for 1 year prior to the year in which the losses were incurred</td>
</tr>
<tr>
<td>- Transfer of losses</td>
<td>Restricted</td>
<td>Available only within 'Organschaft’</td>
<td>Not available</td>
</tr>
<tr>
<td>6. Capital Gains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sale of Fixed Assets:</strong></td>
<td><strong>Sweden</strong></td>
<td><strong>Germany</strong></td>
<td><strong>Spain</strong></td>
</tr>
<tr>
<td><strong>- Timing Rules</strong></td>
<td>capital gains are taxable at the time of realization, as ordinary business income</td>
<td>Capital gains are taxable at the time of realization, as ordinary business income</td>
<td>capital gains are taxable as ordinary business income at the time of realization</td>
</tr>
<tr>
<td></td>
<td>note on immovable property: all depreciation taken as well as costs of improvements etc. deducted within 5 years preceding the disposal of the property are reversed and recorded as income for tax purposes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>- Accounting Rules</strong></td>
<td>No special rule</td>
<td>No link to accounting rules</td>
<td>No special rule</td>
</tr>
<tr>
<td><strong>- Inflation</strong></td>
<td>no inflation correction</td>
<td>no inflation correction</td>
<td>no inflation correction</td>
</tr>
<tr>
<td><strong>- Rates</strong></td>
<td>no special rate</td>
<td>No special rate</td>
<td>no special rate</td>
</tr>
<tr>
<td>- Exemptions</td>
<td>machinery and equipment: roll over relief: an amount equal to the capital gain is deducted from the aggregated depreciable base, so no tax arises in the year of disposal and the actual tax liability is postponed, in whole or in part, to subsequent years, through reduced depreciation allowances in those years</td>
<td>For gains on real property roll over relief applies in case of reinvestment</td>
<td>capital gains from the sale of a qualifying investment in a foreign company are tax exempt replacement of assets: the taxation of capital gains (arising from the sale of land, buildings or the production of agricultural and forestry enterprises) may be deferred by creating a tax free replacement reserve, subject to a 6 year holding period prior to the sale roll over relief in case of involuntary disposition of the assets: tax free reserve deductible from assets reinvested within maximum two years</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
</tr>
<tr>
<td>Sale of shares</td>
<td>taxable in principle as ordinary profits special rules for computing the capital gain for quoted shares: the acquisition cost may alternatively be calculated as 20% of the sales price (the deemed purchase price)</td>
<td>Gains from the sale of shares etc. are exempt when held for 3 years or more. Does not apply to gains on shares in foreign financial companies that has been subject to substantially lower tax burden than compared to Denmark (unless it has been subject to Danish CFC-taxation)</td>
<td>No special rule.</td>
</tr>
<tr>
<td>Capital Losses</td>
<td>may generally be offset against any income in the current year</td>
<td>Capital losses on immovable property may only be set off against capital gains on immovable property</td>
<td>Deductible as ordinary losses</td>
</tr>
<tr>
<td></td>
<td>Sweden</td>
<td>Germany</td>
<td>Spain</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>- losses on</td>
<td>losses on shares and other securities not deemed to be necessary for</td>
<td>Losses on the sale of shares etc. held for more than three years are not</td>
<td>Deductible as ordinary losses</td>
</tr>
<tr>
<td>shares</td>
<td>the company’s business, may be set off only against capital gains of</td>
<td>deductible</td>
<td>As for fixed assets above</td>
</tr>
<tr>
<td></td>
<td>the same type (+ carry indefinite forward)</td>
<td>capital losses on shares sold before 3 years of ownership may only be</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>set off against capital gains on shares also held for less than 3 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(but not against other capital gains)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>they may be carried forward for 5 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>a capital loss on a financial contract based on shares is only deductible</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>to the extent it does not exceed the income on the same contract</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>during the preceding 5 tax years and under condition that no other</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>losses on financial contracts based on shares have been set off</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>against this income. Carry forward is available up to 5 years.</td>
<td></td>
</tr>
<tr>
<td>7. Mergers &amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisitions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Deferral of</td>
<td></td>
<td>Rules allow for deferral of capital gains</td>
<td>Provided for mergers, divisions, exchange of shares and transfer of</td>
</tr>
<tr>
<td>taxation</td>
<td></td>
<td>taxation including recapturing of depreciations in case of mergers,</td>
<td>assets. That includes cross-border operations under the Directive 90/434, exemption on transfer of shares in case of mergers and reorganization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>divisions, transfer of assets and exchanges of shares (tax free merger</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>etc.)</td>
<td></td>
</tr>
</tbody>
</table>
### Transfer of losses

<table>
<thead>
<tr>
<th>Description</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mergers: the absorbing company obtains the same right to carry forward and to carry back as the absorbed company before the merger; losses incurred by either of the companies prior to the year of the merger may not be deducted during the first five years after the merger. Acquisitions: if a company acquires control over a loss-making company, the loss-making company permanently loses its right to deduct losses in excess of 200% of the acquisition price, and it may not set off losses against group contributions received from the other company during the first 5 years after the change of ownership.</td>
<td>In case of a tax free merger etc. losses from prior income years of both the absorbing and the absorbed company cannot be carried forward. In case of a taxable merger only the loss in the absorbed company cannot be carried forward. Special rules apply for companies under joint taxation. With respect to acquisitions: if more than 50% of the company’s capital and the end of the tax year is owned by shareholders other than those at the beginning of a tax year, the carry forward of losses is sometimes restricted (to restrict trading in loss companies). A loss carry-over is disallowed if more than 50% of a company’s shares are sold and the company continues or restarts its business mainly with new assets unless the introduction of new assets serves to rehabilitate the loss-making business and the company continues the business for 5 years in the same scope. No loss carry-over when a company is converted into a partnership and vice versa. Limitation of loss carry forward in case of a change in ownership, the difference between the acquisition cost of the shares and the nominal value of the shares, cannot be carried forward if (1) ownership of the majority of the share capital has changed after the losses did occur (2) the purchasers owned, at the end of the loss year, less than 25% of the share capital, and (3) the company did not carry out a business activity prior to the change in ownership.</td>
</tr>
</tbody>
</table>

### Transfer of tax bases

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>No consolidation concept, group relief is achieved by group contributions or a commission system of a company acting on behalf of one or more similar companies.</td>
</tr>
<tr>
<td>Germany</td>
<td>Consolidation</td>
</tr>
<tr>
<td>Spain</td>
<td>Consolidation (Organschaft)</td>
</tr>
</tbody>
</table>

**8a. Group Relief**

- **Sweden**: No consolidation concept, group relief is achieved by group contributions or a commission system of a company acting on behalf of one or more similar companies.
- **Germany**: Consolidation
- **Spain**: Consolidation (Organschaft)
### Conditions

<table>
<thead>
<tr>
<th>Group Contributions:</th>
<th>All companies must be Swedish entities. Parent company must hold 90% of shares. Commission system agreement in writing. Commissioner company does not carry on any other business activity (exclusive commissionary).</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% direct or indirect interest in the other company</td>
<td>Joint taxation with a non-resident company is allowed.</td>
</tr>
<tr>
<td>(1) the controlled company must generally be a resident company. (2) the controlling company can be an individual, a partnership, or a company. (3) a financial, economic and organizational integration. (4) a profit-and-loss pooling agreement.</td>
<td></td>
</tr>
<tr>
<td>Consolidation is voluntary, The controlling company must be a resident entity in Spain which owns, directly or indirectly, more than 90% of the dependent corporation or corporations for a minimum period of 1 year prior to making the request for consolidation and should maintain such holding during an additional year. Consolidation lasts for periods of 3 financial years, and may be extended indefinitely.</td>
<td></td>
</tr>
</tbody>
</table>

### Type of Relief

<p>| Group contributions: paying group contributions in order to equalize profits in the group commission system; taxation of the companies on activities carried out by the commissionary company. |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pooling of all profits and losses and taxation in the hands of the controlling company | Taxation in the hands of the parent company, as one fiscal unit: pooling of all profits and losses. Losses of a controlled company incurred prior to the group taxation cannot be transferred as long as group taxation applies. |
| Taxation in the hands of the parent company, as one fiscal unit: consolidated profits and losses within the group are eliminated, only the consolidated net income is subject to corporate tax. |
| Losses of companies currently within the group, prior to the period of consolidation can only be offset against profits earned by the same company. |
| In addition, when the consolidation period expires, remaining losses from the consolidated period cannot be carried forward and applied against affiliated corporations. |</p>
<table>
<thead>
<tr>
<th></th>
<th>Sweden</th>
<th>Germany</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8b. Intercompany dividends</strong></td>
<td><em>Domestic companies:</em> exemption of dividends on business-related shares (25% of the voting rights or necessary for the business)</td>
<td><em>Domestic companies:</em> dividends derived by companies holding less than 25% of the capital of the paying company, are subject to a reduced effective tax rate of 21.12% (34% of the dividend is tax free and the remaining 66% is taxed at the normal rate of 32%) Dividends received by companies holding more than 25% of the shares, are fully exempt (shares must be held for minimum 1 year)</td>
<td><em>Domestic companies:</em> full and refundable imputation credit, intercompany dividends from foreign companies may be received tax free under certain Double Taxation Treaties</td>
</tr>
<tr>
<td></td>
<td><em>Non-resident companies:</em> exemption under EU directive, with a minimum effective tax requirement of 15%</td>
<td>Non-resident companies: <em>Idem, except for dividends from holdings in a foreign financial company subject to a substantially lower tax burden than compared to Denmark (unless it has been subject to Danish CFC-taxation)</em></td>
<td><em>Domestic companies:</em> full tax credit for shareholdings in excess of 5%, half tax credit &lt; 5% Non-resident companies Full tax credits for shareholdings &gt; 5% Or Exemption method in certain cases</td>
</tr>
<tr>
<td></td>
<td><strong>not below the lower of cost, or market value or alternatively at 97% of inventory’s total acquisition cost</strong></td>
<td><strong>The tax payer can choose between the market value at the end of the financial year, the purchase price, or cost of manufacture. Different methods may be used for each group of inventory (and principles can be changed yearly).</strong></td>
<td><strong>the lower of acquisition or manufacturing cost, or fair market value when the decrease in value is presumed to be permanent</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>acquisition or production cost or lower market value. Provisions are tax deductible</strong></td>
</tr>
<tr>
<td>Allocation Methods</td>
<td>FIFO is mandatory</td>
<td>For tax purposes only FIFO or weighted average method</td>
<td>LIFO except for perishables weighted average value for group valuation of similar goods</td>
</tr>
</tbody>
</table>
### 10. Deduction of expenses

<table>
<thead>
<tr>
<th>Country</th>
<th>Rule Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sweden</strong></td>
<td>All expenses incurred in obtaining or safeguarding income subject to taxation are deductible. In general expenses incurred in acquiring, securing and maintaining of business income, are deductible. All costs and expenses that are allowed for accounting purposes are deductible. Non-deductible expenses include corporation tax, dividends paid out, fines, gifts, gaming expenses, etc.</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>In general deductions are allowed for all expenses caused by the operation of the business. Non-deductible expenses include expenses relating directly to tax-free income or capital gains, penalties, expenses for guest houses, etc. or (2) only partly deductible (inter alia, 50% of fees paid to a member of the supervisory board, 80% of expenses for business meals, gifts in proportion to taxable income or the total of turnover and salaries, etc.).</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>All costs and expenses that are allowed for accounting purposes are deductible. Non-deductible expenses include interest expenses paid to controlling non-resident companies relating to debt in excess of a 4:1 debt/equity ratio are not deductible provided that the controlled loan could not have been obtained from a third party. A debt/equity ratio of 3:1 applies in general. Where there is a treaty, the ratios are determined in line with market conditions.</td>
</tr>
</tbody>
</table>

**- General Rules**

- All expenses incurred in obtaining or safeguarding income subject to taxation are deductible.
- In general, expenses incurred in acquiring, securing, and maintaining business income are deductible.
- All costs and expenses that are allowed for accounting purposes are deductible.

**- Non-deductible expenses**

- Entertainment expenses in excess of certain limits, gifts (except under the general definition of business expenses).
- 75% of entertainment expenses.
- Tax rules define expenses that are (1) not deductible (inter alia, expenses relating directly to tax-free income or capital gains, penalties, expenses for guest houses, etc.) or (2) only partly deductible (inter alia, 50% of fees paid to a member of the supervisory board, 80% of expenses for business meals, gifts in proportion to taxable income or the total of turnover and salaries, etc.).
- Non-deductible expenses include corporation tax, dividends paid out, fines, gifts, gaming expenses, etc.

**- Thin capitalization**

- No special rules.
- Interest expenses paid to controlling non-resident companies relating to debt other than a debt of a 4:1 debt/equity ratio are not deductible provided that the controlled loan could not have been obtained from a third party.
- A debt/equity ratio of 3:1 for debt with fixed interest, 0:1 for debt on which variable interest is paid, and a holding company privilege increases the debt/equity ratio for fixed interest-bearing loans to 9:1.

- A debt/equity ratio of 3:1 applies in general. Where there is a treaty, the ratios are determined in line with market conditions.
<table>
<thead>
<tr>
<th>Structural elements</th>
<th>Luxembourg</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Tax Rates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Standard</td>
<td>30%</td>
<td>34%</td>
</tr>
<tr>
<td>- Reduced</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>- Surcharge</td>
<td>4%</td>
<td>up to 10%</td>
</tr>
<tr>
<td>- Minimum Tax</td>
<td>n.a.</td>
<td>equal to the difference between 1% of the previous year's turnover (cannot be less than PTE 100,000 or more than PTE 300,000) and the previous year's ordinary corporate tax prepayments)</td>
</tr>
<tr>
<td>- Special Rates</td>
<td>n.a.</td>
<td>0% Pension funds</td>
</tr>
<tr>
<td><strong>2. Tax Accounting Rules</strong></td>
<td>taxable income is computed on the basis of business accounts, unless tax law provides otherwise</td>
<td>taxable income is computed on the basis of business accounts, unless tax law provides otherwise all expenditure and most income is taxed on accruals basis</td>
</tr>
<tr>
<td><strong>3. Depreciation</strong></td>
<td>historic acquisition or production cost</td>
<td>Acquisition or production cost or a &quot;regularised net value when revaluation has been legally authorised.</td>
</tr>
<tr>
<td>- Basis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Methods</td>
<td>Two methods are generally allowed: Straight-line depreciation is obligatory for buildings and intangible assets and declining-balance depreciation may be used for tangible fixed assets other than buildings</td>
<td>Depreciation is normally calculated on the straight-line method but for most new fixed assets (not for buildings, passenger vehicles and office furniture), by the declining balance method. Different methods could be used when justified and recognised by General Direction of Taxes. Free depreciation is possible for assets whose value is not bigger than 40,000S.</td>
</tr>
<tr>
<td>Structural elements</td>
<td>Luxembourg</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>Rates</strong></td>
<td>The applicable rates are determined by standard practice. The declining-balance rates generally may not exceed three times the straight-line rates subject to a limit of 30% of the value of the depreciated asset (four times and 40% for scientific and technical research equipment)</td>
<td>Rates fixed by law and vary according to sector and nature of asset. For declining balance depreciation, straight-line rates are to be multiplied by 1.5 (if useful life is less than 5 years), 2 (between 5-6 years) and 1.5 (more than 6 years). Rates are weighted for assets subject to more intensive use than normal.</td>
</tr>
<tr>
<td><strong>Accounting</strong></td>
<td>Tax deduction must be recorded in business accounts.</td>
<td>Tax deduction must be recorded in business accounts.</td>
</tr>
<tr>
<td><strong>Intangibles</strong></td>
<td>Intangible assets may be valued at their &quot;useful value&quot; to the extent that this is lower than the cost of acquisition. Acquired goodwill is depreciable over 10 years.</td>
<td>May be depreciated at the applicable rate based on the number of years of expected use, subject to a minimum of 3 years. R&amp;D expenses may be written off as incurred or depreciated over maximum of 5 years on straight-line basis.</td>
</tr>
<tr>
<td><strong>Non depreciable assets</strong></td>
<td>Land</td>
<td>Land (in case of buildings, 25% of the value is deemed to be land) Goodwill, trademarks &amp; patents not depreciable unless they suffer an effective reduction in value recognised by the General Direction of Taxes.</td>
</tr>
<tr>
<td><strong>4. Provisions</strong></td>
<td>Specific provisions deductible in principle but subject to any specific tax rules</td>
<td>In general only deductible if legislation specifies</td>
</tr>
<tr>
<td>- Risks and future expenses</td>
<td>Deductible</td>
<td>Specific provisions deductible – e.g. foreseeable expenses as result of pending law suits, environmental risks in extractive industries.</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structural elements</th>
<th>Luxembourg</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Bad debts</td>
<td>Specific provisions are allowable</td>
<td>Specific provisions are allowable. General provisions are not allowable.</td>
</tr>
<tr>
<td></td>
<td>Specific provisions are allowable in certain circumstances. A debt is doubtful if debtor is insolvent, payment depends on court proceedings, or it is more than 6 months overdue in which case the following deductions are permitted - 25% for &gt; 6 &lt; 12 months 50% for &gt; 12 &lt; 18 months 75% for &gt; 18 &lt; 24 months 100% for receivable held for over 24 months It is not possible to deduct debts with associated parties or public administrations or backed up by guaranties. Special rules apply to banks and insurance companies</td>
<td>Specific provisions are allowable. General provisions are not allowable.</td>
</tr>
<tr>
<td>- Pensions</td>
<td>Deductible</td>
<td>Non deductible. Payments to certain schemes are deductible.</td>
</tr>
<tr>
<td>- Repairs</td>
<td>Non deductible</td>
<td>Non deductible</td>
</tr>
</tbody>
</table>

5. Losses

| - Carry Forward | No limitation in time | Up to 6 years | No limitation in time Losses may be carried forward only against future income of the same trade |
| - Carry Back    | not available         | not available | 1 year, extended to 3 years if trade ceases. |
| - Transfer of losses | No special restrictions except in case of mergers | Subject to the consolidation rules no special restrictions except in case of mergers, and where there is a significant change in nature or conduct of business | Allowed if trade transferred between companies in common ownership. |

### 6. Capital Gains

| Sale of Fixed Assets: | Capital gains are taxable as ordinary business income at the time of realisation. | Capital gains are taxable as ordinary business income at the time of realisation. | Capital gains are taxable as ordinary business income at the time of realisation. |
| **- Timing Rules** | | | |

| - Inflation | No inflation correction | The acquisition price of tangible fixed assets held for 2 years is adjusted to take account of inflation. | The acquisition price of assets is adjusted to take account of inflation. |

| - Rates | No special rate. | No special rate. | No special rates. |
### Structural elements

<table>
<thead>
<tr>
<th></th>
<th>Luxembourg</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Exemptions</td>
<td>Capital gains derived from the sale of a building or a non depreciable asset are tax exempt if reinvested in similar assets within 2 years of the sale</td>
<td>Roll over relief for fixed assets on condition of reinvestment within 3 years. Minister of Finance can authorised to extend the period to a fourth year. Roll over relief for fixed assets on condition of reinvestment within 4 years (1 year before and 3 years after the sale)</td>
</tr>
<tr>
<td>Sale of shares</td>
<td>Capital gains on the sale of shares are exempt if the participation represents at least 25% of the capital and has been held for a period of at least 12 months preceding the beginning of the financial year in which the sale occurred</td>
<td>Taxable Taxable</td>
</tr>
</tbody>
</table>

### Capital Losses

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- fixed assets</td>
<td>Deductible as ordinary loss</td>
<td>Deductible as ordinary losses Can only be carried forward and set off against capital gains</td>
</tr>
<tr>
<td>- shares</td>
<td>Deductible if gain would have been taxable</td>
<td>Deductible as ordinary loss if held as investment, financial assets or as inventory. Can only be carried forward and set off against capital gains</td>
</tr>
</tbody>
</table>

### 7. Mergers & Acquisitions

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Deferral of taxation</td>
<td>Domestic: tax neutral.</td>
<td>Domestic mergers, division and similar transactions are tax neutral, subject to certain conditions. The same regime also applies to cross border operations of the same type in the framework of the Directive 90/434/CEE. UK company law does not provide for mergers and divisions of the type covered by the Merger Directive. Consequently most “mergers” are accomplished through an exchange of shares. Subject to certain conditions capital gains arising on the exchange of shares are deferred until such time as the new shares are disposed of. Divisions may be carried out by liquidating the company or by distribution of shares. In both cases the shareholders are exempt from capital gains tax subject to various strict conditions. The UK has not implemented the Merger Directive as regards mergers and divisions.</td>
</tr>
<tr>
<td>- Transfer of losses</td>
<td>In case of merger, the absorbing company cannot take over the losses of the absorbed company</td>
<td>In case of merger, the transfer of losses from the absorbed company to the absorbing company is only possible if a prior ruling is granted (it should be Losses incurred before the change of ownership of a company cannot be carried forward if there is also a major change in the nature or conduct of the</td>
</tr>
</tbody>
</table>

---

**Luxembourg**

- **- Exemptions**
  - Capital gains derived from the sale of a building or a non depreciable asset are tax exempt if reinvested in similar assets within 2 years of the sale.

- **Sale of shares**
  - Capital gains on the sale of shares are exempt if the participation represents at least 25% of the capital and has been held for a period of at least 12 months preceding the beginning of the financial year in which the sale occurred.

**United Kingdom**

- **- Exemptions**
  - Roll over relief for fixed assets on condition of reinvestment within 3 years. Minister of Finance can authorised to extend the period to a fourth year. Roll over relief for fixed assets on condition of reinvestment within 4 years (1 year before and 3 years after the sale).

- **Sale of shares**
  - Taxable

---

**Capital Losses**

- **- fixed assets**
  - Deductible as ordinary loss

- **- shares**
  - Deductible if gain would have been taxable

---

**7. Mergers & Acquisitions**

- **- Deferral of taxation**
  - Domestic: tax neutral.

- **- Transfer of losses**
  - In case of merger, the absorbing company cannot take over the losses of the absorbed company.
**- Transfer of tax bases**

| In order for the merger to be tax free, the absorbing company should take over the assets of the absorbed company at the same book value. | In order of the merger to be tax free, the absorbing company should take over the assets of the absorbed company at the same book value. | There are no specific provisions dealing with mergers. |

**Structural elements**

| Luxembourg | United Kingdom |

**8a Group Relief**

**- Conditions**

| Luxembourg applies the German concept which allows a Luxembourg company to treat the Luxembourg resident subsidiaries in which it owns at least 99% as if they were establishments for corporate tax purposes. Consequently, the profits made by one company may be set off against the losses made by another company belonging to the same group. | Consolidation. Type of relief: taxation in the hands of the parent company as one fiscal unit. The income and losses of companies within the same group are aggregated subject to the following limit: The consolidated taxable profits may not be lower than 65% of the aggregate taxable profits of the consolidated companies should there be no consolidation. | No consolidation as such. Conditions: A group is made up of either 51% or 75% subsidiaries depending on the type of group treatment being claimed. |

**- Type of Relief**

| See above | Conditions: in addition to the granting of permission by the Ministry of Finance for five years – extensible –, the following requirements must be met: all the companies of the group must have their principal offices or effective management in Portugal. The controlling company's shareholding in each subsidiary must be at least 90% (directly or indirectly). All companies are subject to Corporate Tax general rules. Losses of companies currently within the group, prior to the period of consolidation can only be offset against profits earned by the same company. When the consolidation period expires, remaining losses from the consolidated period cannot be carried forward and applied against affiliated corporations. The "group relief" allows tax losses to be transferred between members of a group (upwards, downwards or sideways). Where assets are transferred between companies in a group, no capital gain or loss arises to the transferor. | The "group relief" allows tax losses to be transferred between members of a group (upwards, downwards or sideways). |

**8. Intercompany dividends**

<p>| Domestic companies: full exemption for dividends received (minimum participation of 10%) | Domestic companies: dividends received are 95% exempt if minimum holding of 25% for 2 years. &lt; 25% tax | Domestic companies: full exemption. Non-resident companies: dividends received are taxable but with full credit |
| Non-resident companies: idem if the non-resident subsidiary is subject to minimum corporate tax (15%) | credit of 60% of underlying IRC available. Non-resident companies: -Non EU: dividends received are taxable with full tax credit only if provided by tax treaty. Deduction of withholding at source is provided with the limit of the corresponding domestic taxation. -EU: dividends received are 95% exempt if 25% ownership, for 2 years. | for withholding tax and underlying corporate tax |</p>
<table>
<thead>
<tr>
<th>Structural elements</th>
<th>Luxembourg</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9 Inventories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Valuation Rules</td>
<td>At lower cost or “going concern” value.</td>
<td>At cost or fair market value. Provisions referred to market value are tax deductible.</td>
</tr>
<tr>
<td>- Allocation Methods</td>
<td>LIFO, FIFO and average cost allowed.</td>
<td>LIFO, FIFO and average cost methods allowed.</td>
</tr>
<tr>
<td><strong>10. Deduction of expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- General Rules</td>
<td>Deductible if does not serve to increase the net assets and incurred in the interest of the firm</td>
<td>Deductible if related to the carrying out of the objectives of the company</td>
</tr>
<tr>
<td>- Non-deductible expenses</td>
<td>So-called &quot;hidden profit distributions&quot; which include unduly high salaries and transactions not at arm's length with shareholders or related parties. Fines</td>
<td>State taxes, illegal expenses, 20% of representation and passenger vehicle expenses; fines, the acquisition cost of leisure craft and aircraft and any non justified or substantiated expenses. There is also a limitation for depreciation allowance for passenger vehicles the cost of which exceeds £ 12,000.</td>
</tr>
<tr>
<td>- Thin capitalization</td>
<td>Although no specific legislation against thin capitalisation in practice debt/equity ratios are applied by the tax authorities.</td>
<td>As a general rule, debt/equity ratio of 2:1 with respect to loans granted by a non-resident related party. (Limitation does not apply if the loan conditions are at arm's length). Coefficient is referred to the shareholder participation.</td>
</tr>
</tbody>
</table>
B. QUANTITATIVE ANALYSIS OF THE EFFECTIVE LEVELS OF COMPANY TAXATION IN MEMBER STATES

INTRODUCTION

This part of the study presents effective corporate tax rates on domestic and transnational investments in the 15 EU Member States taking the tax systems in operation in 1999. Moreover, in view of the structure and magnitude of the German tax reform approved in 2000, the analysis developed in this section also takes account of the effects of this reform as of the 1st January 2001.

Effective tax rates are tax rates which take into account not only the statutory corporate tax rates but also other aspects of the tax systems which determine the amount of tax effectively paid. In other words, they take into account the tax base and the manner (if any) in which corporate and personal tax systems are integrated.

Systems of taxing profits are, however, far too complex to be encompassed fully in the methodologies developed so far in order to calculate effective tax rates. A number of the special features of individual tax systems thus have to be ignored, for instance special sectoral incentives. However, the main features of the national tax systems are captured in the calculations presented in this report. The methodologies used in this study build, on the one hand, on a revised and extended methodology from the so-called King & Fullerton approach, set out by Devereux and Griffith (1998) and, on the other, on the "European Tax Analyser model", set out by the University of Mannheim and ZEW (1999).

The purpose of the quantitative analysis developed in this part of the study is twofold. First, it gives summary measures of the overall relative incentive (or disincentive) provided by each country's tax law to undertake various types of investment at home or in the other EU countries. This provides an indication not only of the general pattern of incentives to investment that are attributable to Member States' tax law, but also of the extent to which taxation in each country discriminates in favour or against inward and outward investment. Second, it identifies the most important tax drivers influencing the effective tax rate, that is the weight of each of the most important elements of a tax regime. From the pure point of view of economic efficiency, decisions related to the location and the organisation of an investment in terms of choices of assets and sources of finances should not be driven by tax considerations. In order to highlight the policy issues involved in reducing potential tax-induced economic distortions to the allocation of resources, this part of the study investigates the contribution of particular features of taxation to the lack of neutrality in taxation systems.

Taxation is, of course, only one of the determinants of investment and financing decisions. Among the other determinants of investment behaviour are: the market size, the short and medium-term economic outlook in different markets and countries; the cost of capital in relation to the cost of other productive inputs; the profitability of investments; the availability of finance and government investment grants, the existence and quality of economic infrastructure, the availability of qualified labour. The geographical accessibility of markets, transport costs, environmental standards, wage levels, social security systems and the overall attitude of government all play an important role too. The relative importance of these determinants varies between countries and over the business cycle. Nevertheless, as economic integration in the EU proceeds in the context of Economic and Monetary Union and the internal market, in an environment where capital is fully mobile the pattern of international investment is likely to be increasingly sensitive to cross-border differences in corporate tax rules.

Other taxes, such as those on payroll and social security contributions or energy taxes may also affect costs, and thus the location of investment, particularly in the short to medium term. At national level, EU governments have a number of common concerns regarding the corporation tax which is the focus of the
mandate given to the Commission by the Member States. The main focus of this report is corporation tax including its interaction with some elements of personal tax.

In this part of the report, the cost of capital, marginal effective tax rates and average effective tax rates are computed for different types of domestic and transnational investments in the manufacturing sector in each Member State. The contribution of various features of Member States' tax laws to the lack of neutrality of the tax regimes is assessed by means of a series of simulations. Some cases of the effective tax burden of SMEs as well as some cases of tax planning are analysed separately.

This quantitative analysis relies heavily on the report "The effective levels of company taxation in the Member States of the EU", produced for the Commission by the Institute for Fiscal studies, the University of Mannheim and the Centre for European Economic Research (ZEW) of Mannheim. The calculations presented in the boxes "Tax Analyser" are based on the report "Computing the Effective Average Tax Burden for Germany, France, the Netherlands, the UK, Ireland and the USA using the "European Tax Analyser" Model" produced for the Commission by the University of Mannheim.

**METHODOLOGY**

**Existing approaches to measure companies' effective tax burden: backward and forward-looking concepts**

The existing approaches to measure the effective tax burden are based on two types of analysis implying either backward-looking concepts or, alternatively, forward-looking concepts. Both approaches have their respective advantages and disadvantages and can lead to different quantitative results. Even if the results of the application of different methodologies are not directly comparable, the existence of tax induced distortions seems to be confirmed by a variety of studies regardless of the particular approach adopted. Nevertheless, the size of the observed differences as well as the relative situations of countries do vary depending on the methodology applied.

*Backward-looking approaches*

One approach to measure the effective tax burden in policy-making is based on aggregated data from existing firms. As this looks at the capital stock, profits or other relevant data accumulated in the past it is called a backward-looking approach. By referring to the observation of ex-post data, it measures "actual" rather than "hypothetical" tax rates. Within this framework, one can distinguish between approaches based on firm-specific data or on aggregated economic data.

Approaches based on firm-specific data generally express the effective tax burden as a percentage of the tax liability relative to the profits from companies' annual accounts. Data can either be taken from individual financial statements or consolidated returns. Although these measures have the advantage of showing the actual tax burden borne by companies, they could be misleading if they are used to assess and compare the effective domestic tax burden in international comparisons. This is because approaches based on ex post company-specific data do not take into account the interaction between personal and corporate taxation which is relevant when the marginal investor is domestic. In addition, they fail to measure the incentive for additional investment or to correctly consider the foreign source income from individual or consolidated company accounts. Moreover, the data sometimes tends to show significant yearly fluctuations depending on business cycle effects. For these reasons backward-looking profit based

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35 Recent studies of Buijjnk et al (1999) and Nicodème (2001) applied a backward-looking approach based on the financial data of EU companies in order to estimate effective tax rates in the manufacturing sector.
indicators are imprecise indicators of the investment incentives of taxation. But, they do permit an assessment of effective actual tax burdens by firm size, sector or industry, which may be useful in addressing equity concerns.

Measures for the tax burden using aggregate economic data from national accounts are computed as a percentage of domestic corporate taxes (in general only corporate income tax) relative to various income measures, such as aggregated domestic corporate profits or the corporate operating surplus. Although these formula are mathematically correct, it is hazardous to make an international comparison of corporate tax rates on the base of aggregated economic data. On the one hand, the methods and definition of the National Accounting Systems differ between countries and, on the other, these data are not sufficiently developed to distinguish different sources of taxation. Moreover, as is the case for tax rates based on firm-specific data, tax rates based on macroeconomic data sometimes tend to show significant fluctuations from one year to another due to business cycle effects.

*Forward-looking approaches*

Consequently, the most commonly used indicators for analysing the impact of taxation on investment behaviour are based on forward-looking concepts and involve calculating and comparing the effective tax burden for hypothetical future investment projects over the assumed life of the project or, alternatively, the effective tax burden for hypothetical future model firm behaviours, using the statutory features of the tax regimes.

These approaches permit international comparisons and are especially tailored to "isolate" the effects of taxation thus providing an indication on the general pattern of incentives to investment that are attributable to different national tax laws. It is worth noting that the results of the application of these approaches rely on the assumptions underlying the definition of the hypothetical investment in terms of assets and financing and of the future firm behaviour in terms of total cash receipts and expenses, assets and liabilities over time. Moreover, these approaches do not take into account in the computation all the features of a tax system.

The results produced by the application of these approaches summarise and quantify the essential features of the tax system in a relatively straightforward manner. They provide an estimate of the discrimination of Member States' tax law between various forms of investment and different sources of financing as well as of the discrimination in favour or against inward and outward investment. They also identify the most important tax drivers influencing the effective tax burden. Therefore, these approaches can illustrate the distortive effect on the allocation of resources of a tax system for typical investments or typical firm behaviour, which may be useful in assessing the investment incentives of taxation and addressing efficiency concerns.

Nevertheless, the actual effect of the tax system will, of course, vary according to the particular investment project which a company undertakes. Moreover, the measurement of effective corporate tax differentials does not provide evidence of the effects of taxation on actual business location.

*The theoretical framework of this study*

The approach taken in this study is based on the general forward-looking framework introduced above and is in part similar to that taken by previous studies of the international comparison of effective tax
The computation of the effective corporate tax rate builds on two different methodologies which involve calculating the effective tax burden either for a hypothetical future investment project or, alternatively, for a hypothetical model firm behaviour. In technical terms, the analysis relies on a revised and extended methodology from the so-called King & Fullerton approach, set out by Devereux and Griffith (1998) and on the "European Tax Analyser" model, set out by the University of Mannheim and ZEW (1999). The main computations are based on the hypothetical future investment approach and they are supplemented by the "European Tax Analyser" model, which utilises the model firm approach.

Considering that each methodology is based on different hypothesis and restrictions, it has been considered useful to compare the results of these two different approaches in order to test them and, possibly, to confirm the general trend arising from the computations.

It is worth noting, however, that the analysis of a hypothetical investment is more complete, in the sense that it covers a broader range of cases for all the European Union Member States. For technical reasons linked to the availability of data and the nature of the model, the "European Tax Analyser" only covers a limited numbers of countries and cases.

The main body of the quantitative study thus relies on the application of the analysis of a hypothetical investment and is complemented, where relevant and possible, by results arising from the computation of the behaviour of a hypothetical model firm.

The taxation of a hypothetical investment

The King and Fullerton approach (reviewed by Devereux and Griffith) is based on the assumptions that all markets, especially production factors markets, are competitive and the production function has the usual properties, notably constant return to scale. In this situation, the decision to invest and locate somewhere is influenced only by capital taxation, not by taxes or contributions on other factors such as wages, energy etc. and the incidence of these other elements of the tax system is borne by other agents (see Annex A for a more detailed description of the methodology).

This approach computes directly the tax "wedge" between the rate of return on investment of a series of hypothetical investments and a given alternative rate of return on savings. In the absence of taxes, when the decision taker invests money to finance a project he earns a rate of return equal to that earned on the project itself. When a tax is introduced, the two rates of return can differ. The size of the tax wedge depends, among others, upon the system of corporate taxation, the interaction of taxation and inflation, the tax treatment of depreciation and inventories, the treatment of different legal forms of income, and a number of other elements linked to the definition of the tax base. It is clear, therefore, that the effective tax rate on an investment project depends upon the industry, where it is located, the particular asset purchased, the way the investment is financed, and the identity of the investor who supplies the finance.

   a) Cost of capital and Effective Marginal Tax Rate

The basic approach for the computation is to consider an incremental "marginal" investment located in a specific country undertaken by a company resident either in the same country (domestic case), or in
another country (transnational case). A marginal investment is one whose expected rate of return is just sufficient to convince the investors that the project is worthwhile. This minimum rate of return is widely referred to as the "break-even" rate of return. Given a post-tax rate of return required by the company's shareholder (for instance on interest earned in some alternative use of the capital), it is possible to use the tax code to compute the pre-tax rate of return of the hypothetical investment, that would be required in order to obtain the minimum post-tax rate of return. This is known as the cost of capital.

A company that is contemplating a new investment project has, on the one hand, to compute the overall cost of the asset, taking into account not just the initial outlay, but also any reduction of that outlay due to tax relief received as a result of the investment. On the other hand, the company must also calculate the after-tax returns that it expects the investment to generate in the future. The company would undertake the investment provided the present value of the after-tax profits from the investment is greater than the initial cost of the asset minus the present value of any tax relief. Hence, the principal impact of taxation on investment is through the cost of capital. The difference between the cost of capital and the required post-tax rate of return (expressed as a percentage of the cost of capital) is known as the effective marginal tax rate (EMTR) that is, the rate applied to a marginal investment.

For example, if the minimum rate of return required by the company's shareholder is 5% and the company must earn 6.67% before tax (the cost of capital) in order to pay this 5% rate of return to the investor, then the effective marginal tax rate is 25% (6.67%-5%/6.67%). The difference between 6.67% and 5% represents the impact of taxation on the cost of capital.

This approach is based on the presumption that companies will undertake all investment projects which earn at least the required rate of return. For a given required post-tax rate of return, the more severe the tax system, the higher is the cost of capital, i.e. the required pre-tax rate of return, and hence the less likely that any specific investment project will be undertaken. In comparing such investments in alternative locations, the underlying economic model would predict that, ceteris paribus, locations with a higher cost of capital or EMTR would have less investment.

b) Effective Average Tax Rate

The current study goes beyond this approach, however, to also consider the effective "average" tax rates (EATR) on various forms of incremental investment which are more profitable than the marginal investment explained above. The rationale for doing so is that often a company that has taken the decision to undertake a specific profitable investment has to choose between two or more mutually exclusive locations. Examples include the location decision of multinationals in choosing a site for one new factory, and the choice of investment projects in the presence of binding financial constraints. In this case, the impact of taxation on the choice is likely to be measured by the proportion of total income taken in tax in each location. The measure used in this study is computed as the net present value of tax revenue expressed as a proportion of the net present value of the income stream (excluding the initial cost of the investment). The literature commonly defines the effective average tax rate as the effective tax burden held by an infra-marginal (average) investment as opposed to the effective marginal tax rate, which is the effective tax burden held by a marginal investment.

In this study, two computations are therefore made for each of the alternative hypothetical investment projects with two different rates of profitability, which illustrate respectively:

I) The EMTR, where the real before tax return is the minimum rate which is required to undertake the investment ("marginal investment"),

II) The EATR, where the incremental investment project is not marginal, but generates a considerably higher rate of return ("average investment")
**Box 3:**

*Properties of the measure of effective average tax rate used in the computation*

The properties of this measure have been explored by Devereux and Griffith (1999).

One attractive feature of the measure is that, in the absence of personal taxes, the EATR for marginal investments is identical to the EMTR. At the other extreme, for extremely profitable investments, the EATR tends to the statutory tax rate. An example of this is given in Figure 1, which presents a range of values of the EATR for different levels of profitability for Belgium. The figure shows the average EATR for the investments analysed in this study.

![Effective Average Tax Rate and Profitability in Belgium](image)

The line begins at the marginal investment, where the EATR is the same as the EMTR. When the level of profitability of the investments rises, so does the EATR. The reason is that allowances against the cost of the investment become relatively less important when the cost of investment becomes smaller relative to the returns. At very high levels of profit, the stream of income from the project far exceeds the costs. In this case, virtually the only element of the tax regime to matter is the overall statutory tax rate. When profitability reaches very high levels, the EATR gets very close to the statutory Belgium tax rate of 39%.

The equivalent figure for each of the other 14 EU Member States is presented in Annex D.
c) Hypotheses and assumptions

Estimates of the effective tax rates on domestic and transnational investments in the 15 EU Member States are presented as at June 30, 1999. In the transnational case, the analysis is extended to the case of investors located in the USA and in Canada. Calculations consider primarily corporation tax in each country, but also include the effects of personal income taxation of dividends, interest and capital gains.

Several assumptions need to be made in order to define the hypothetical investment project analysed, and the economic conditions under which it is assumed to take place. Besides these, the exercise is limited to parameters of the various tax regimes which can be captured in the context of the analysis of a hypothetical investment project. Thus, as in every study of this kind, the hypothetical investments analysed are rather simple manufacturing sector investments, and a number of detailed features of actual tax systems cannot be incorporated in the model as for instance different kind of provisions in the different Member States. The fact that the analysis is limited to the manufacturing sector is due to the impossibility to quantify, in the framework of the model the number of different specific provisions applying to the service sector across the EU Member States (e.g. the special provisions applying to the financial service sector). Moreover, this approach does not, for methodological reasons, take into consideration all the relevant features linked to the existence and functioning of different tax systems. It does not, for instance, quantify the effects on the tax burden of the possibility of consolidating profits and losses throughout the EU because, by definition, it only takes into account investments which make profits. The quantification of compliance costs is also impossible.

The computation is also based on the hypothesis that all taxes due are paid and therefore that the results are not affected by different levels of tax enforcement. In fact, there is no reason to believe, nor is there any empirical evidence, that possible shortcomings in the enforcement of tax laws have a significant impact on the location of business activities within the EU.

The assumptions and parameters underlying the computation are given in Annex B. Sensitivity analysis investigates the impact of the assumptions and of some elements of tax systems on the results.

It is worth noting that, for the sake of comparison, the definitions of investment and of the economic variables underlying the computations are the same for all countries considered. The purpose of the analysis is to understand how taxation influences the profitability of the same hypothetical investment in different countries and not to give a picture of the actual economic situation for each country.

Due to these assumptions and restrictions, the numerical estimates arising from the application of the model should be interpreted with caution and should be understood as summarising and quantifying the essential features of tax systems.

\[ The \, taxation \, of \, a \, model \, firm \]

The conceptual framework of a model firm approach is significantly different. No explicit assumption is made about the competitive situation of production factor markets and therefore the incidence of factors others than capital taxation, but implicitly the reasoning is based on the assumption that some elements of the non-corporate tax system (for instance some payroll taxes) are in fact borne by companies. So this methodology differs from the Devereux and Griffith model as far as the incidence of some elements of tax systems on companies is concerned. It can be argued that it is somewhat arbitrary to consider that only some elements of the non-corporate tax system are borne by firms. Nevertheless, the purpose of the present study is not to test the empirical relevance of the "Tax Analyser" model hypotheses. As already mentioned, the data arising from the application of the Tax Analyser model are presented only with the
purpose to test and, possibly, confirm the general picture arising from the application of the "hypothetical investment" approach. (The methodological framework and the hypotheses and assumptions of the Tax Analyser model are given in Annexes G and H).

The calculations are based on an industry-specific mix of assets and liabilities taking as a base case a typical medium-sized manufacturing company. Based on this (in general, existing) capital stock, the future pre-tax profits are derived on the basis of estimates for the future cash receipts and cash expenses associated with this initial capital stock. In order to determine the post-tax profits the tax liabilities are derived by taking into account the tax bases according to the national rules and then applying the national tax rates.

This approach does not need to characterise optimal investment behaviour but it relies heavily on the particular characteristics of the model firm, in particular the initial capital stock and the expected development of the capital stock over the simulation period.

a) Average effective tax rates

The tax effects of infra-marginal investments, i.e. of investments that are more profitable than the marginal investment, are central to this model and the taxation of an existing capital stock is analysed. Consequently, this model only computes effective average tax rates which measure the effective tax burden of projects that earn more than the capital costs.

The effective average tax rate is expressed by the difference between the pre-tax and the post-tax return of the capital invested in the corporation divided by the pre-tax return.

b) Hypothesis and assumptions

Estimates of the effective average tax rates for Germany, France, the Netherlands, the UK, Ireland and the USA are presented as at 1999. The calculations consider primarily corporation tax in each country, but also include the interaction of corporate and personal income taxes, the individual income tax rates including surcharges and capital taxes at the shareholder level. The effective average tax rate is derived by simulating the development of a medium-sized manufacturing company over a ten year period.

Several assumptions need to be made in order to simulate such a development, notably the company's initial total assets and liabilities and the expected development of the capital stock over the simulation period. The model firm's structure refers to a typical German medium-sized manufacturing company. With regard to investment, the assumptions ensure that the initial capital stock at least remains constant.

In contrast with the analysis of the taxation of a hypothetical investment, this model takes into account a large majority of the relevant tax provisions. (The assumptions and parameters are given in Annex H). Box 4 compares the tax provisions taken into account in the two models.

As already mentioned, the results of this model rely on the particular characteristics of the company. Sensitivity analysis investigates the impact of alternative rules for profit computation and different business data. Moreover, as is the case for the analysis of a hypothetical investment, the application of this methodology does not take into consideration some features linked to the existing and functioning of different tax systems, such as, for instance, loss consolidation or compliance costs.

For the sake of comparability and in order to isolate the effects of taxation, it is assumed that the model firm in each country shows identical data before any taxation. The purpose of the analysis is to understand how taxation influences the profitability of the same capital stock in the different countries and not to give a picture of the actual situation in each country.
The inclusion of the German corporate tax reform

The reference date for the computation of effective tax rates on domestic and international investments for all countries is 1999. In the meantime, a number of Member States have introduced some changes to their corporation tax codes.

In view of the fact that there is always a tax reform in progress in at least one Member State, it is inevitable that the data arising from the computation can only present a picture of a situation at some point in the past. Any comparison has to be made on a consistent basis and constantly updating the national tax codes is impracticable. Moreover, it is impossible to take into account in the application of the models the effect of tax reforms that are announced but not yet completely defined. However, the overall results of the analysis should not be fundamentally affected by reforms aimed at revising particular individual features of national tax systems.

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<table>
<thead>
<tr>
<th>Hypothetical investment</th>
<th>Tax Analyser</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Depreciation (methods and tax period for all considered assets);</td>
<td>- Depreciation (methods and tax period for all considered assets, extraordinary depreciation);</td>
</tr>
<tr>
<td>- Inventory valuation (production costs, lifo, fifo, and weighted average);</td>
<td>- Inventory valuation (production costs, lifo, fifo and weighted average, inflation reserves);</td>
</tr>
<tr>
<td>- Elimination and mitigation of double taxation of foreign source of income (exemption, foreign tax credit, deduction of foreign taxes);</td>
<td>- Development costs (immediate expenses or capitalisation);</td>
</tr>
<tr>
<td>- Investment incentives (extraordinary depreciation, special tax credits, special tax incentives). These are considered only in the sensitivity analysis (section 5).</td>
<td>- Taxation capital gains (roll-over relief, inflation adjustment, special tax rates);</td>
</tr>
<tr>
<td></td>
<td>- Employee pension schemes (deductibility of pension costs, contributions to pension funds, book reserves);</td>
</tr>
<tr>
<td></td>
<td>- Provisions for bad debts;</td>
</tr>
<tr>
<td></td>
<td>- Elimination and mitigation of double taxation of foreign source of income (exemption, foreign tax credit, deduction of foreign taxes);</td>
</tr>
<tr>
<td></td>
<td>- Loss relief</td>
</tr>
</tbody>
</table>
That said, as the German corporate tax reform approved in 2000 addresses in both a quantitatively and qualitatively significant manner all the main relevant characteristics of the German corporate tax system, the analysis developed in this section also takes account of the effects of this reform.

Therefore, an additional separate set of effective tax rate data for Germany as at the 1st January 2001 have been computed, as well as additional comparative tables which take into account the 2001 situation for Germany and the 1999 situation for the other countries (see annexes E and J). Where relevant for the analysis of the effects of effective tax rate differentials, the inclusion of the new German situation in the EU context is commented on in this section. All the tax reforms introduced in other Member States are less significant as far as corporate taxes are concerned, both quantitatively and qualitatively.

The simulations of the harmonisation of particular features of taxation are based on the 2001 situation for Germany and on the 1999 situation for the other countries. As such policy simulations refer to a hypothetical future situation, the use of a consistent basis is less relevant here and indeed to ignore the German reform would be highly misleading.

The effective tax burden of SMEs and the tax planning cases are analysed on the basis of 1999 data for all countries considered.

It is worth mentioning that France introduced a tax reform in 2000 aiming at abolishing the surcharges on corporation tax by the year 2003. Due to the particular structure of these surcharges, which are determined partly by the amount of wages and salaries, and the period over which the changes will be implemented, this reform has not been modelled. Section 10 of this part of the Study presents an updated computation of the effective tax rates on domestic investments for all Member States, taking into account the tax regimes of 2001. This permits an analysis of the impact of national reforms of the corporate tax regimes on the effective tax burdens.

### THE TAXATION OF DOMESTIC INVESTMENTS

This section considers the influence of domestic tax regimes on the organisation of companies' investments and the way in which national tax codes can affect the international competitiveness of resident companies and, under certain assumptions, the location choice of multinationals.

In the analysis, the case where all personal taxes are set to zero is first considered. In this case, any variation in effective tax rates is purely due to differences in corporate taxation. Then personal taxes on dividends, capital gains on the increase in the value of the shares and taxes on interest are added, on the assumption that companies act in the interest of their shareholders, to maximise the shareholders' wealth.

The economic rationale for including (or not) personal taxation and the difficulties arising in seeking to take into account personal taxes in the analysis are the subject of some controversy. There are good reasons both for including or excluding personal taxation (see Box 5). The current analysis presents separate computations of effective company tax rates which respectively take into account only corporate taxation and corporate taxation plus some elements of personal taxation.
**Box 5: The role of personal taxation**

The influence of personal taxation on company investment behaviour depends on the functioning of international capital markets and, in particular on the extent to which international portfolio capital is mobile. If companies can only raise money domestically, then changes in the personal tax treatment of investment income will alter company behaviour. Instead, if companies are able to finance their investments on the international capital markets, the influence of personal taxation on investment income varies according to the degree of integration of capital markets.

If this market is so integrated that the world interest rate is unaffected by the domestic amount of saving, personal taxes do not and should not affect the investment behaviour of companies. In fact, a personal tax on all forms of interest income will result in a lower post-tax return to savers; consequently they will save less. But assuming that domestic saving is small relative to the world supply of saving, the world interest rate will be unaffected, and so the investment decisions of the domestic corporate sector will be unaffected. In contrast, taxes on corporate income generated in a particular country will affect corporate behaviour, regardless of how the project is financed. In such a case, due to capital mobility, personal taxes in small open economies like the individual EU Member States do not affect investment decisions of companies. From this point of view the taxation of shareholders or more generally, the taxation of suppliers of finance, would not be relevant for a comparison of business tax burdens.

This conclusion, however, depends on the assumption that internationally mobile portfolio capital always exists. But this assumption could be questioned on the grounds that all companies raise at least some money domestically and small and medium sized companies may even have no access to international capital markets. The literature is not unanimous on whether the assumption of perfect international capital market mobility is pertinent for all type of economic agents.

Moreover, structural differences between national tax systems are mainly caused by the differing corporation tax systems and the different ways in which the corporation tax and income tax interact. For this reason, the level of taxation not only for retained, but also for distributed profits differs among countries.

A practical difficulty also arises in seeking to take into account personal taxes. That is, the company may have many shareholders, facing different rates of tax from each other. Which set of personal taxes should a company take account of in these circumstances? Economic theory suggests that a company should act in the interest of the "marginal" shareholder that is, the shareholder who is just indifferent between owning and not owning the company's share. Unfortunately, in practice, it could be impossible to identify "the" marginal shareholder.

In order to consider all these arguments, the present study shows a separate analysis of the impact of personal tax in the domestic case. The central case analysed takes into account only corporate taxes on the hypothesis that the company does not know the identity of the marginal shareholder. Then, in order to provide a comprehensive analysis of the impact of Member States' national tax systems on investment and financing decisions, personal taxes are added. However, as far as the effective average tax rate is concerned, since its main focus in this analysis is on the choice of location, an implicit underlying assumption for this case is that economies are open to flows of mobile capital. In this situation it is very difficult for firms to allow for the tax positions of their shareholders. Nevertheless in the framework of the "Tax Analyser" model, personal taxation is considered and average effective tax rates including the effects of personal taxation are separately presented.
The influence of domestic tax regimes on the organisation of companies' investment by assets and sources of finance

Domestic tax regimes can influence the organisation of companies' domestic investments by creating incentives both as to how to finance the investment and the overall mix of assets. In fact, different forms of investment or different sources of financing may face very different tax treatments. Such variations constitute a potential source of distortion in the allocation of resources and may therefore impact overall efficiency. If the impact of differences in tax treatment favours one particular form of investment or financing, then the economic activity may not be organised in the most efficient economic way. Although these differences may be secondary to the main focus of this section, which is the impact of taxation on the incentives to locate investments, it is useful to have an indication of the effects of tax regimes on the organisation of investments in the EU as a starting point.

Relevant economic measures: cost of capital, EMTR and EATR averaged across the EU

The first case analysed is the simplest case in which there are no personal taxes. Separate investments in five different assets are considered: intangibles (e.g. purchase of a patent), industrial buildings, machinery, financial assets and inventories. In presenting averages over different forms of investment, these assets are weighted equally. Three sources of finance for investment in each asset are separately considered: retained earnings, new equity and debt. The weights used are taken from OECD (1991): retained earnings 55%, new equity 10% and debt 35%. Thus, calculations are made for 15 different types of investments.

Tables 1 and 2 present the cost of capital, the effective marginal tax rate and the effective average tax rate for each type of investment averaged across the 15 Member States. This is an unweighted average. That is, it does not take into account differences in the size of each country (or any other factor). As such, it gives an indication of the average effect of tax regimes in the EU and it is not an attempt to measure the "average" taxes in Europe, where the size of countries and hence the numbers of investments facing each specific tax regime would need to be taken into account.

Tables 1 and 2 capture the extent to which corporate taxation in the EU affects the incentives to undertake particular kinds of investments by responding to the following questions, respectively for Table 1 and Table 2.

"Given a real interest rate of 5% in each country and assuming that the investments will not raise extra-profits, what is the required pre-tax rate of return (the cost of capital) for different types of investment financed by different methods, and what is the percentage difference between the pre-and post-tax rates of return (the effective marginal tax rate)?" or, alternatively, "Given a real interest rate of 5% and an assumed pre-tax rate of return of the investment of 20% in each country, which is the proportion of total income taken in tax in each type of investment financed by different methods (the average effective tax rate)?"

As pointed out above, in the first case it is assumed that the investors undertake all investment projects which earn, at least, the required rate of return before tax. For a given required post-tax rate of return, the more severe the tax system, the higher is the cost of capital, and hence the less likely that any project will be undertaken. In the second case it is assumed that companies may choose between mutually exclusive investments and that they will choose the project whose proportion of total income taken by tax is lower.
A) The case of a marginal investment

<table>
<thead>
<tr>
<th>Cost of Capital (upper line)</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMTR (lower line) %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>6.6</td>
<td>8.0</td>
<td>6.7</td>
<td>8.6</td>
<td>7.9</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>20.0</td>
<td>35.2</td>
<td>23.3</td>
<td>39.9</td>
<td>35.5</td>
<td>32.6</td>
</tr>
<tr>
<td>New Equity</td>
<td>6.4</td>
<td>7.8</td>
<td>6.6</td>
<td>8.4</td>
<td>7.8</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>18.5</td>
<td>34.2</td>
<td>22.0</td>
<td>39.3</td>
<td>34.6</td>
<td>31.6</td>
</tr>
<tr>
<td>Debt</td>
<td>3.3</td>
<td>4.4</td>
<td>3.5</td>
<td>4.9</td>
<td>4.3</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>-67.3</td>
<td>-22.2</td>
<td>-50.9</td>
<td>-3.8</td>
<td>-16.8</td>
<td>-24.6</td>
</tr>
<tr>
<td>Mean</td>
<td>5.4</td>
<td>6.7</td>
<td>5.6</td>
<td>7.3</td>
<td>6.7</td>
<td>6.3</td>
</tr>
<tr>
<td></td>
<td>3.6</td>
<td>23.3</td>
<td>8.3</td>
<td>29.8</td>
<td>24.1</td>
<td>20.2</td>
</tr>
</tbody>
</table>

Note. Each number in the Table is an unweighted average over the equivalent number for each member state. This is true for both the cost of capital and the EMTR. For a specific investment in a specific country, the EMTR is the percentage difference between the equivalent cost of capital and the post-tax required rate of return of 5%. For example, a cost of capital of 7.5% generates an EMTR of (7.5-5)/7.5=33.3%. However, taking an average of the costs of capital, and a separate average of the EMTRs implies that the average EMTRs presented in the table are not precisely the percentage difference between the average cost of capital and 5%.

Generally, according to Table 1, there is considerable variation in the tax treatment of different forms of investment within the EU and, therefore, the EU tax regimes effectively seem to create incentives as to how to organise investment in the EU. Annex C (country tables) shows that there is a remarkably similarity between countries in the pattern of tax incentives for domestic investments even if the range of values across countries gives an indication of differences between EU Member States in their treatment of specific forms of investment (see sections 4.2 and 4.3).

As far as the source of finance is concerned, first, as shown by many other studies, corporate tax regimes tend to give a strong advantage to investment financed by debt. For debt-financed projects the EU cost of capital is always lower than 5%, and, consequently, the EMTR is negative in all cases. This means that at the margin corporation tax regimes subsidise the financing of investments by debt. This advantage arises because nominal interest payments on debt are deductible from corporation tax, and there is usually no comparable corporation tax relief for investment financed by new equity. Thus, from the point of view of the company, financing through new equity and retained earnings is disadvantageous, as no deduction from the taxable base for the corresponding payment is allowed.
Second, in the absence of personal taxation, there is almost no difference in the cost of financing the investment by giving up one unit of dividend income as opposed to contributing one extra unit of new equity\textsuperscript{37}.

When considering the assets, considerable variation in the average treatment can be observed too.

Financial assets are the most heavily taxed. In fact, financial assets are assumed not to depreciate and hence not to benefit from any allowance. Any income generated from the asset is generally taxed at the full statutory tax rate. Moreover, this rate is applied to the nominal return defined as the real interest rate plus inflation rate (set at 2\% for each country in this analysis), rather than to the real return, and for this reason the effective marginal tax rate exceeds the statutory tax rate. Hence, the higher the inflation rate, the higher the EMTR. In the case of financial assets financed by debt, the fact that nominal interest payments are deductible from tax generally compensates for the fact that the nominal interest receipt is taxable\textsuperscript{38}. In such a situation, the value of both tax and economic parameters plays no role.

In general, the cost of the other assets can be offset against taxable profit over a period of time. Typically, the rate at which the cost can be offset is related to the economic depreciation rate of the assets. For a given true economic depreciation rate, the more quickly the cost can be set against tax, the more valuable the allowance and hence the lower the effective marginal tax rate. The EMTR thus reflects the difference between the true economic rate of depreciation and the rate of allowance permitted in the tax code.

Differences between the remaining four assets therefore reflect not only the generosity of the tax systems with respect to the allowance rates for the four assets, but also the assumptions made about the true rate of economic depreciation. However, even allowing for this dependence, significant differences seem to persist within the EU. In general, industrial buildings and inventories have the highest cost of capital and effective marginal tax rate, while intangibles and machinery are rather lower.

\textsuperscript{37} The slight differences of data in table 1 for retained earnings and new equity are only due to the German regime which in 1999 had a split rate system which taxes distributions at a lower rate than retained earnings. In this case if the company reduces its dividend payment by one unit, the tax saving which would otherwise have been gained from paying the dividend is lost. In effect, the net income of the shareholder falls by more than one unit and this increases the cost of financing the investment by retained earnings.

\textsuperscript{38} Exceptions to this arise because of special provisions in the tax regimes in Germany and Italy, which have a slightly higher cost of capital, and in Greece which taxes investment income at only 15\% and hence has a significantly lower cost of capital.
B) The case of a profitable (infra-marginal) investment

Table 2 presents estimates of the effective average tax rates for each of the same 15 investments analysed above under the assumption that the pre-tax real rate of return is 20%.

Table 2: Effective Average Tax Rate
- average across all the 15 member states
- only corporation taxes

<table>
<thead>
<tr>
<th>EATR %</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ret Earnings</td>
<td>30.6</td>
<td>35.1</td>
<td>31.0</td>
<td>35.6</td>
<td>34.9</td>
<td>33.5</td>
</tr>
<tr>
<td>New Equity</td>
<td>30.2</td>
<td>34.7</td>
<td>30.7</td>
<td>35.2</td>
<td>34.5</td>
<td>33.1</td>
</tr>
<tr>
<td>Debt</td>
<td>20.0</td>
<td>23.8</td>
<td>20.7</td>
<td>23.6</td>
<td>23.5</td>
<td>22.3</td>
</tr>
<tr>
<td>Mean</td>
<td>26.8</td>
<td>31.1</td>
<td>27.4</td>
<td>31.4</td>
<td>30.9</td>
<td>29.5</td>
</tr>
</tbody>
</table>

In this case, it is important to remember that, as explained in Box 3, the EATR varies according to the expected level of profitability of the investments. In particular, in the absence of personal taxes, the EATR is identical to the EMTR for marginal investments, and it rises when the profitability rises because allowances against the cost of the investment become relatively less important when the cost of the investment becomes smaller relative to the returns.

Since the assumed real rate of return of 20% is not high enough to mean that allowances and deductions are too small to have much impact, the pattern of the EATR in Table 2 bears some resemblance to that of the EMTR in Table 1.

Some differences may however be underlined. Concerning the source of finance, it is now worth noting that the relative advantage of debt is lower than in the case of marginal investment, reflecting the lower value of the interest deductibility relative to the return generated. Therefore, this advantage tends to diminish when the profitability of the investment rises.

The relative ranking of the treatment of the 5 assets is also the same as in Table 1, but the introduction of extra-profits results in a narrowing of the differences between them. Once again, however, these averages hide a considerable dispersion between countries. This is explored in sections 4.2 and 4.3.

The introduction of personal taxation

In principle, if companies act in the interest of their shareholders and the international capital market is not perfectly mobile, they should take account of their tax liabilities. If a different choice of source of finance, for example, results in a higher post-tax income for the shareholders, then this is advantageous. As discussed in Box 5, this situation is more likely to be relevant when the shareholders are domestic residents, and hence face the domestic tax system. Of course, even in this case there may be considerable
variation in the tax position of different shareholders, which may make it impossible for a company to maximise the post-tax earnings of all shareholders. Table 3 presents the cost of capital and the effective marginal tax rates, averaged across the 15 EU Member States, for the 15 hypothetical investments in the case where companies aim to maximise the wealth of top-rated qualified shareholders, taking into account their personal tax liabilities on the hypothesis that these are known by the company. A qualified shareholder is a shareholder who holds a substantial part of the shares of the company. Three personal taxes are introduced in this section: on interest received, on dividend income and on capital gains.

This table, therefore, captures the extent to which corporate taxation and these three forms of personal taxation affect the incentives to undertake the particular forms of investment considered in this study, assuming that the investments will not raise extra-profits.

For the theoretical reasons explained in Box 5 the analysis of the impact of personal taxation is restricted here to the case of a marginal investment.

<table>
<thead>
<tr>
<th>Cost of capital (upper line)</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained Earnings</td>
<td>4.1</td>
<td>5.2</td>
<td>4.3</td>
<td>5.6</td>
<td>4.9</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>51.0</td>
<td>61.4</td>
<td>53.3</td>
<td>63.4</td>
<td>60.3</td>
<td>59.3</td>
</tr>
<tr>
<td>New Equity</td>
<td>4.7</td>
<td>5.9</td>
<td>4.9</td>
<td>6.3</td>
<td>5.6</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>56.7</td>
<td>64.5</td>
<td>58.8</td>
<td>68.1</td>
<td>65.5</td>
<td>64.0</td>
</tr>
<tr>
<td>Debt</td>
<td>3.5</td>
<td>4.6</td>
<td>3.8</td>
<td>4.9</td>
<td>4.3</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>30.9</td>
<td>44.6</td>
<td>34.9</td>
<td>52.4</td>
<td>47.5</td>
<td>44.7</td>
</tr>
<tr>
<td>Mean</td>
<td>3.9</td>
<td>5.1</td>
<td>4.2</td>
<td>5.4</td>
<td>4.8</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>48.0</td>
<td>58.2</td>
<td>50.5</td>
<td>61.8</td>
<td>58.4</td>
<td>56.9</td>
</tr>
</tbody>
</table>

Note. In the case of Spain, the cost of capital for several types of investment is close to zero. This implies that the EMTR can reach extremely large values. This table therefore presents an average of the costs of capital across all 15 EU Member States. However, the results for the EMTR are an average only over the 14 EU Member States excluding Spain.

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39 Companies should aim to maximise the wealth of other kind of shareholders. If they would act in the interest of the zero-rated shareholders, then in most countries there will be no effect on the cost of capital and the EMTR compared with the case of only considering taxes on corporations. This is obviously because considering such shareholders does not introduce any new form of taxation. However, in certain countries this is not the case. Instead, Finland, France, Germany and Spain all permit a zero-rated shareholder to claim a rebate equal to the tax credit associated with the payment of a dividend. This has a significant impact on the cost of capital and hence the EMTR in the case of new equity finance, where the return subsequently distributed as a dividend. In this case the effective tax burden is considerably lower. If the shareholder taken into consideration would be a top-rate, non-qualified shareholder, then the only countries presenting significantly different situations compared to the case of a qualified shareholder will be Italy and the Netherlands. This is due to the different tax rates on dividend applied to non-qualified shareholders. In Italy the tax rate is higher for qualified participation and in the Netherlands it is lower. The other countries apply the same rates to both kinds of shareholders.
Table 3, shows, that when personal taxation is taken into account, the differences observed in Table 1 still exist, even if a different treatment of the sources of finance can be observed. But the most striking feature of this table is that the taxation of the investment backflows in the hand of the shareholders considerably reduces the EU average cost of capital and increases by more than twice the effective marginal tax rates.

The most important reason for the decrease of the cost of capital is the impact of the personal tax on interest. In fact, the post-tax rate of return required by the shareholder depends on the post-tax rate of return of an alternative financial investment. Assuming the alternative to be lending, then any tax on interest -the return on lending- reduces the post-tax return to lending. Consequently a lower post-tax rate of return is required from equity investment. In fact, on average, investment financed by retained earnings and debt have a cost of capital less than the real interest rate of 5%. Of the five assets, only industrial buildings and financial assets have an average cost of capital above 5%.

Personal taxes do not generally affect the cost of capital for investments financed by retained earnings. This is because they affect the net cost of the investment in the exactly same way as the net return to the investment. Suppose, for example, that the tax rate on a dividend payment is 30%. And suppose that a company finances the purchase of an asset costing 100 euros by reducing dividends. The net cost to the shareholder is therefore 70 euros. Suppose also that the investment generates a gross rate of return of 10%, being worth 110 euros after one period (ignoring taxes). When this amount is distributed as a dividend, it generates post-tax income of 77 for the shareholder. But this represents a post-tax rate of return to the shareholder of 10% -the same as the pre-tax rate of return. The impact of the dividend tax is negated by the fact that it affects both the net cost of the investment and the net return. There are much smaller effects on the cost of capital for investment financed by debt.

The underlying reason why the average EMTRs in Table 3 are considerably higher than those in table 1 is that the alternative opportunity open to each individual is to lend an equivalent sum. Therefore the EMTR compares the cost of capital with the post-tax rate of return on lending rather than to the real interest rate. Since this post-tax rate of return is lower as a result of taxes on interest received, the effective marginal tax rates are higher.

**Differences across the EU**

This section begins to address the question of the differences between Member States in their treatment of the specific forms of investment considered in this analysis.

It is useful to remember that in this section only domestic investment is considered, and therefore the analysis of the differences in Member States' tax treatment relates to the case of a domestic company resident in the same Member State.

Within such a framework, differences between Member States may affect the international competitiveness of resident companies and, under certain assumptions, the location choice of multinationals.

In fact, first, when companies operate mainly in their domestic country, but export their output to other countries, where they compete with each other, a lower tax burden in one country may generate a competitive advantage for companies resident in that country.

Second, in certain specific cases, differences in the effective tax burden between countries could also affect the location choice of individual companies. This would be the case for multinational companies
that ignore personal taxes (perhaps because they do not know the identity of their marginal investor) and that are able to leave effective tax rates close to those of the host country, due to the provisions of international tax codes or to the tax planning activity of the company.

This section considers these questions by looking at the EU range of values for the 15 types of hypothetical investment considered earlier.

With regard to the location of investment, it should be noted again that the data arising from the application of the theories underlying this analysis give summary measures of the incentives (or disincentives) to undertake different types of investments and do not provide evidence of the impact of taxation on actual economic decisions. Box 6 presents a short survey of the empirical studies which have attempted to measure the impact of tax differentials on actual location choice in recent years.

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**Box 6:**

**Links between business taxation and companies' location decisions**

The mandate given to the Commission by Member States requests an assessment of the effects of differences in the EU Member States' effective tax burdens on the location of economic activity and investments. The methodologies applied in the current study assess the relative incentives (or disincentives) provided by each country's tax law to undertake various types of investment at home or in the other EU countries. To what extent taxation has an impact on actual investment decisions depends, however on the extent to which tax incentives lead to changes in actual behaviour.

If taxation were the only element influencing location decisions, that is, ceteris paribus, differences in the effective tax burdens between countries would be the only factor determining location decisions, investment should be located in countries where taxation is lower. But taxation is only one of the elements affecting location decisions. Several differences arising from the macro and micro economic framework of each country contribute to determine the actual behaviour of companies.

The fact that differences in the effective tax burdens between countries persist, shows that the arbitrages are not perfect and that taxation is not the only element affecting location decisions.

Therefore, when assessing the impact of taxation on location decisions it is necessary to isolate the effects of taxation among the other factors in order to study the correlation between taxation and location decisions.

While there has been a fair amount of empirical studies of this issue in the US, the empirical literature in Europe is rather scant. Three major issues have been explored:

(A) The convergence of tax rates

(B) The incidence of international tax differentials on the flows of foreign direct investment

(C) The relationship between taxation and location in the context of tax competition amongst local governments,
(A) According to many authors, one implication of the hypothesis of tax competition amongst governments to attract business should logically be the convergence of the observed tax rates. Empirical evidence of such convergence is, however, not very strong.

Moreover, the relative convergence of statutory tax rates on companies' profit and on individual investors' income and capital gains that has been observed in the European Union does not, in itself, give much indication of the extent to which tax competition and effective differences amongst Member States in the treatment of such income remain.

In fact, the effect of differences in taxation on economic decisions depends on their marginal impact on the rates of return to investment, which, in turn, depends not only on apparent tax rates, but also on rules determining the tax base. So, the convergence of effective marginal tax rates should be evident over a period of time.

Unfortunately, it is not possible to study this possible convergence due to the lack of appropriate data based on forward-looking methods covering a long enough period of time.

(B) One obvious direction for testing the consequences of differentials in national business taxation on location decisions is foreign direct investment, where, by definition, capital is internationally mobile.

The empirical relevance of tax considerations in investment decisions has been mostly studied by looking at the investment location decisions in multinational corporations. A number of empirical studies show that tax considerations are relevant in investment decisions. Nevertheless, the size of the correlations varies according to the specific methodology applied.

Devereux and Griffith (1998), using individual firm activity data of US multinationals investing in Europe (restricted to the UK, France and Germany) show that the choice of the location, conditional on the decision to produce abroad rather than to export, is driven by taxation and other cost-related factors.

Friedman, Gerlowsky and Silberman (1992) consider the establishment of new manufacturing plants of European and Japanese firms at the state level in the USA. They find that per capita state and local taxes are strong determinants for location.

Hines (1996), on the basis of models of the investment process, reported positive correlation between investment levels and after-tax returns to foreign direct investment.

A recently published study - Fontagné, Benassy-Quéré and Larêche-Révil (2000)- has attempted to implement a direct econometric test of the hypothesis by confronting net bilateral foreign direct investment flows with indicators of business tax differentials; their results support the hypothesis.

Most of these studies investigating the empirical relations between tax differentials and investment location suffer from particular difficulties. A difficulty encountered by all empirical investigations looking at international investment flows is the potential interference of many other elements of national tax and social protection systems in the decision of a multinational corporation to locate investment in one country rather than another. This points to the need for further research on the interaction between several tax instruments with different bases.

The studies using foreign direct investment data all have to face the weaknesses of existing data, with, in particular, the difficulty of distinguishing between financial transactions and "real" foreign direct investment. Certain studies use inappropriate indicators of tax pressure based on apparent average tax rates on corporate profits, which can widely differ from the relevant indicators as expressed by effective tax rates.
Therefore, the fact that the existing literature has been rather deceptive in furnishing coherent results on the size of the impact of taxation on capital flows or location decisions seems mainly due to sample biases or data shortcomings. A way to properly deal with the difficult issue of the interaction between taxes on various factors would be to use a general-equilibrium framework allowing for imperfect competition on some markets. An alternative way of proceeding would be to confront net bilateral foreign direct investment flows with series indicators of average effective tax burden.

(C) A number of studies based on European data have focused on the hypothesis of tax competition amongst local governments within national economies. This restricted field has the advantage of more closely resembling the US context in which the original empirical work was initiated. In addition it also restricts the number of differences potentially interfering with business tax differentials in the firms' location decisions: for instance, within the national economy, social contributions are uniform. However, even in this environment of restricted differentiation amongst jurisdictions, they are potentially many factors influencing the location of firms, and taxation is only one of these.

Conventional wisdom currently rests on the apparently sound hypothesis that firms' location decisions, be it when a firm relocates or when it decides to open a new plant or office, are made according to many factors, that are treated in a hierarchical way. A firm first chooses the region -the so-called "macro location" decision- based on such factors as market for product, labour market conditions and labour costs, etc. Only then, in the so-called "micro- location" decision - i.e. when choosing the precise locality in which to settle- will local tax differentials influence the firm's choice (Jayet, 1993; Jayet and Wins, 1993; Conseil national des impôts (F), 1997, Madiès, 1997a and b; Houdebine and Schneider, 1997; Paty, 2000).

To conclude, the empirical studies show, to different degrees, that there is a negative correlation between the size of taxation and location decisions. Nevertheless, most of the empirical studies suffer methodological weaknesses or are tailored to study just the effect of local business taxation. It is therefore difficult to have "the" quantitative measure of this impact even if the existence of such a relation is generally undisputed.

Because of the weaknesses of the existing methodologies and the severe limitation due to lack of available data, it is considered that none of the existing approach could be usefully adopted in the current analysis, without considerably extending the range of the work. Taxation has certainly an influence on the location of economic activity but it is very difficult to correctly isolate this influence.
Relevant economic measures: range of the cost of capital and EATR values across the EU

As in the previous analysis on the influence of domestic tax regimes on the organisation of companies' investments, the first case analysed in this section is the simplest case in which there are no personal taxes. The calculations are made for the same 15 different types of investment.

Tables 4 and 5 capture the range of values across EU Member States and therefore present the highest and lowest values observed when analysing separately individual EU Member States, respectively in the case of marginal investments and in the case of investments whose assumed rate of return is 20%. These ranges give some indication of the differences between EU Member States in their treatment of specific forms of investment. The individual situation of each EU Member State is presented in section 4.3.40.

A) The case of a marginal investment

### TABLE 4 Cost of Capital
- maximum and minimum across the EU
- only corporation taxes

<table>
<thead>
<tr>
<th>Maximum Minimum</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained Earnings</td>
<td>8.4 10.1 9.8 12.6 10.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.4 5.1 4.3 5.8 5.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Equity</td>
<td>8.4 10.1 9.8 10.4 9.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.4 5.1 4.3 5.8 5.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt</td>
<td>4.8 6.3 5.7 5.7 5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.6 2.2 2.2 3.0 3.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table provides evidence of considerable variation across Member States in the cost of capital for each investment. A range of 5 percentage points or more is common. For example, the cost of capital on investment in machines financed by retained earnings and new equity ranges from 4.3% to 9.8%. This would suggest that companies located in the lowest value country have a significant advantage over firms located in the highest value country in selling their output in the European, and possibly world, markets. Moreover, this would imply that, under the conditions mentioned above, multinational companies resident in the EU have a significant incentive to locate investments in the lowest value country.

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40 The lowest and highest values presented in Tables 4,5 and 6 cannot be compared with the lowest and highest values of country data presented in section 3.3. In this section the hypothesis is that each asset is entirely financed by each source of finance. Appendix C (country tables) gives detailed results for each EU Member State. In section 3.3, where the situation for each country is presented, data related to each asset are averaged across the sources of finance.
B) The case of a highly profitable (infra-marginal) investment

<table>
<thead>
<tr>
<th>Maximum Minimum</th>
<th>Intangibles</th>
<th>Industrial Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained Earnings</td>
<td>40.6</td>
<td>46.3</td>
<td>44.3</td>
<td>54.3</td>
</tr>
<tr>
<td></td>
<td>10.1</td>
<td>17.0</td>
<td>9.4</td>
<td>11.0</td>
</tr>
<tr>
<td>New Equity</td>
<td>40.2</td>
<td>45.4</td>
<td>44.3</td>
<td>47.9</td>
</tr>
<tr>
<td></td>
<td>10.1</td>
<td>17.0</td>
<td>9.4</td>
<td>11.0</td>
</tr>
<tr>
<td>Debt</td>
<td>26.9</td>
<td>31.5</td>
<td>32.2</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td>6.6</td>
<td>13.5</td>
<td>6.0</td>
<td>2.5</td>
</tr>
</tbody>
</table>

This table shows that there is even greater variation in the effective average tax rates across Member States than there is in the cost of capital. To take one example, the EATR on investment in machines financed by retained earnings and new equity ranges from 9.4 to 44.3%.

In contrast to the case of a marginal investment, differences in the EATR are less likely to generate a competitive advantage (or disadvantage). In fact, the EATR is based on the assumption that the investment will generate a rate of return in excess of the minimum required. If a company in this situation (resident in one country) finds itself undercut by its competitors, then there is nothing to prevent it from responding by reducing its prices, and lowering its pre-tax rate of return.

As far as location is concerned, the difference with the marginal case is that an infra-marginal project which is not located in more than one place is now analysed. The large variation in the EATR between possible sites for location of investment may therefore indicate considerable distortions to location choices.
The introduction of personal taxation

When personal taxation is introduced into the analysis of tax differentials in the domestic case, it is worth noting that differentials in Member States’ effective tax burden are still relevant in affecting the relative competitiveness of domestic operators, as was the case for the analysis of the cost of capital, but they are no longer relevant for the choice of location. In fact, in this case the objective of companies is to maximise the wealth of their domestic shareholders. This could be incompatible with the hypothesis that the company aims at leaving effective tax rates close to those of the host country by means of tax planning.

Table 6 shows the range of values of the cost of capital across the 15 EU Member States, using as an example a qualified shareholder taxed at the highest personal tax rate. Once again, the impact of personal taxation is restricted to the case of a marginal investment.

<table>
<thead>
<tr>
<th>Maximum Minimum</th>
<th>Intangibles Buildings</th>
<th>Industrial Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained Earnings</td>
<td>6.5 7.1 6.4 9.6 7.1</td>
<td>0.0 0.1 -0.3 0.2 -0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Equity</td>
<td>8.9 8.9 8.8 10.0 8.8</td>
<td>0.2 0.4 0.0 0.5 -0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt</td>
<td>4.8 6.4 6.2 5.7 5.0</td>
<td>2.0 2.5 2.6 3.0 3.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The differences shown in this table are even more striking than in the case of Table 4. These results imply that the differences in the tax systems may give some companies a considerable competitive advantage over others.

Summing up the results of Tables 4, 5 and 6 it is possible to assert that, in the EU, the competitiveness of domestic companies and, under the conditions described above, the location choice of multinationals can be affected in a significant way by differences in the effective domestic tax burden.

The next section examines the dispersion of the effective tax burden across the EU more closely by presenting the situation of each Member State.
The position of the EU Member States

One of the main purposes of this section is to analyse the differences in the effective tax burden borne by EU companies located in different Member States and thus appreciate the possible effects of such differentials on competitiveness and investment decisions. Under the hypothesis and assumptions already mentioned, Tables 7 and 8 present country data where only corporate taxation is taken into account: this includes the statutory tax rates, the surcharges and the local taxes. (The list of such taxes for each Member State is given in Annex B). Section 4.3.2 will present data including the forms of personal taxation already considered above.

Relevant economic measures: cost of capital, EMTR and EATR by Member States

A) The case of a marginal investment

Table 7 shows the cost of capital and the EMTR for the level of corporation and examines more closely the dispersion across the EU and the relation between the effective tax burden and the national tax rate on profits.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>34.00</td>
<td>6.3</td>
<td>20.9</td>
<td>5.9</td>
<td>6.1</td>
<td>5.9</td>
<td>7.3</td>
<td>6.3</td>
<td>7.5</td>
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<td>4.0</td>
<td>33.3</td>
<td>33.3</td>
<td>-25.0</td>
</tr>
<tr>
<td>Belgium</td>
<td>40.17</td>
<td>6.4</td>
<td>22.4</td>
<td>5.2</td>
<td>7.0</td>
<td>5.3</td>
<td>8.0</td>
<td>6.7</td>
<td>8.0</td>
<td>8.0</td>
<td>3.5</td>
<td>37.5</td>
<td>37.5</td>
<td>-42.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>32.00</td>
<td>6.4</td>
<td>21.9</td>
<td>4.2</td>
<td>8.1</td>
<td>5.4</td>
<td>7.1</td>
<td>7.1</td>
<td>7.5</td>
<td>7.5</td>
<td>4.4</td>
<td>33.3</td>
<td>33.3</td>
<td>-13.6</td>
</tr>
<tr>
<td>Finland</td>
<td>28.00</td>
<td>6.2</td>
<td>19.9</td>
<td>6.1</td>
<td>6.1</td>
<td>5.6</td>
<td>6.8</td>
<td>6.8</td>
<td>7.2</td>
<td>7.2</td>
<td>4.5</td>
<td>30.5</td>
<td>30.5</td>
<td>-11.1</td>
</tr>
<tr>
<td>France</td>
<td>40.00</td>
<td>7.5</td>
<td>33.2</td>
<td>5.2</td>
<td>8.5</td>
<td>8.4</td>
<td>8.0</td>
<td>7.4</td>
<td>9.0</td>
<td>9.0</td>
<td>4.6</td>
<td>44.4</td>
<td>44.4</td>
<td>-8.7</td>
</tr>
<tr>
<td>Germany</td>
<td>52.35</td>
<td>7.3</td>
<td>31.0</td>
<td>5.4</td>
<td>7.2</td>
<td>5.8</td>
<td>10.0</td>
<td>7.9</td>
<td>9.7</td>
<td>7.6</td>
<td>3.2</td>
<td>48.4</td>
<td>35.5</td>
<td>-56.2</td>
</tr>
<tr>
<td>Greece</td>
<td>40.00</td>
<td>6.1</td>
<td>18.2</td>
<td>6.8</td>
<td>5.1</td>
<td>6.1</td>
<td>5.1</td>
<td>7.4</td>
<td>7.6</td>
<td>7.6</td>
<td>3.4</td>
<td>34.2</td>
<td>34.2</td>
<td>-47.1</td>
</tr>
<tr>
<td>Ireland</td>
<td>10.00</td>
<td>5.7</td>
<td>11.7</td>
<td>5.3</td>
<td>6.8</td>
<td>5.2</td>
<td>5.5</td>
<td>5.5</td>
<td>5.9</td>
<td>5.9</td>
<td>5.2</td>
<td>15.2</td>
<td>15.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Italy</td>
<td>41.25</td>
<td>4.8</td>
<td>-4.1</td>
<td>2.9</td>
<td>4.6</td>
<td>3.8</td>
<td>7.7</td>
<td>5.0</td>
<td>5.5</td>
<td>5.5</td>
<td>3.6</td>
<td>10.0</td>
<td>10.0</td>
<td>-38.9</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>37.45</td>
<td>6.3</td>
<td>20.7</td>
<td>5.2</td>
<td>6.8</td>
<td>5.3</td>
<td>7.7</td>
<td>6.5</td>
<td>7.7</td>
<td>7.7</td>
<td>3.7</td>
<td>35.1</td>
<td>35.1</td>
<td>-35.1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>35.00</td>
<td>6.5</td>
<td>22.6</td>
<td>5.1</td>
<td>6.9</td>
<td>5.9</td>
<td>7.4</td>
<td>6.9</td>
<td>7.7</td>
<td>7.7</td>
<td>4.1</td>
<td>35.1</td>
<td>35.1</td>
<td>-21.9</td>
</tr>
<tr>
<td>Portugal</td>
<td>37.40</td>
<td>6.5</td>
<td>22.5</td>
<td>6.7</td>
<td>6.2</td>
<td>5.2</td>
<td>7.7</td>
<td>6.5</td>
<td>7.9</td>
<td>7.9</td>
<td>3.9</td>
<td>36.7</td>
<td>36.7</td>
<td>-28.2</td>
</tr>
<tr>
<td>Spain</td>
<td>35.00</td>
<td>6.5</td>
<td>22.8</td>
<td>6.5</td>
<td>6.7</td>
<td>5.4</td>
<td>7.4</td>
<td>6.4</td>
<td>7.7</td>
<td>7.7</td>
<td>4.1</td>
<td>35.1</td>
<td>35.1</td>
<td>-21.9</td>
</tr>
<tr>
<td>Sweden</td>
<td>28.00</td>
<td>5.8</td>
<td>14.3</td>
<td>5.0</td>
<td>6.0</td>
<td>5.0</td>
<td>6.6</td>
<td>6.6</td>
<td>6.7</td>
<td>6.7</td>
<td>4.3</td>
<td>25.4</td>
<td>25.4</td>
<td>-39.5</td>
</tr>
<tr>
<td>UK</td>
<td>30.00</td>
<td>6.6</td>
<td>24.7</td>
<td>5.5</td>
<td>8.2</td>
<td>5.6</td>
<td>6.9</td>
<td>6.9</td>
<td>7.7</td>
<td>7.7</td>
<td>4.8</td>
<td>35.1</td>
<td>35.1</td>
<td>-25.0</td>
</tr>
</tbody>
</table>
Note. Each asset column represents an average across all three types of finance, with weights of 55% retained earnings, 10% new equity and 35% debt. Each finance column represents an unweighted average across all 5 assets. The overall average is an average across all 15 types of investment, with the same weights.

(1) including surcharges and local taxes
Table 7 shows that there is considerable dispersion across the EU. Focussing first on the overall average, it is notable that 7 Member States have an average cost of capital between 6.3% and 6.5%. Three others (Greece and Finland and the UK) are very close to this range, leaving five significantly outside: France and Germany have an average of 7.5% and 7.3% respectively, and Sweden, Ireland and Italy have an average of 5.8%, 5.7% and 4.8% respectively.

This EU wide spread cannot be explained by one feature of the national tax systems alone, but it can be observed that Germany had in 1999 the highest statutory tax rate on profit, and France by far the highest non-profit taxes (local taxes on corporations). On the other hand, statutory tax rates in Sweden, in Ireland and for certain categories of income (see below) in Italy, are by comparison the lowest. Even Finland, which has one of the lowest statutory tax rates, shows a relatively low cost of capital.

All the EU Member States, except Ireland, have an EMTR lower than the overall corporate tax rate.

The fact that Ireland has an EMTR higher than the corporate tax rate is fundamentally due to the relatively high (relative to the corporate tax rate of 10% applying to the manufacturing sector) real estate tax rate (1.58%) applicable to industrial buildings (see Table 3 of Appendix B). The influence of the real estate tax in the EMTR for Ireland is shown in Table 7, where the cost of capital for industrial buildings is 6.8 and therefore the related EMTR is 26.8%. This influences the overall mean.

In order to appreciate the dispersion across Member States and the relation between overall nominal profit rates and EMTR it is useful to look at the situation of the specific types of investment both by type of assets and by source of finance.

Table 7 clearly confirms that, from the point of view of the corporation, the most tax-efficient way of financing is debt. The major reason is that deduction of nominal interest payments from the corporation tax base significantly reduces the effective tax burden on investments financed by debt. The effect of interest deduction is high in countries where the corporation tax rates are higher. Furthermore, in certain countries, debt-financed investments are subsidised if, relative to other countries, assets receive "accelerated" depreciation as is the case for example in Belgium, Greece, Italy and Sweden.

Financing through new equity and retained earnings is disadvantageous, as no deduction from the taxable base for the corresponding payments (dividends) is allowed. The national effective tax burden for both forms of financing almost equal the tax rate on profit. Given the close relation of the effective tax burden on new equity and retained earnings to the tax rates on profits in most of the EU Member States, it can be inferred that "normal" accounting rules for profit computation, in so far as they are considered in the model, in general do not have a great impact on the effective tax burden and on the ranking of the countries, as they only result in "timing differences". Rather, it is likely that the different tax rates on profit explain most of the differences in EMTR between countries.

The Italian case is worth noting. Table 7 shows an advantage of the Italian tax regime. This advantage can be largely traced to the Italian "dual income" tax system, which splits the tax base for profits into two components, taxed at different rates. Very broadly, the "ordinary return", calculated as the interest rate multiplied by equity invested into the company, is taxed at 19%, while the residual profit is taxed at 37%. In this way, the system "encourages" self-financing through retention of profits and the issue of new share capital. This results in a more homogeneous treatment between debt and equity financing. Since in this section only marginal investments are considered, which, by definition do not earn any residual profit, then the return on such investment is essentially taxed at the lower rate.

The French case is also worth noting. Table 7 shows that France has marginal effective tax rates for retained earnings and new equity far above the overall nominal tax rate on profit. This is due to the fact that France imposes high non-profit taxes.
With regard to assets, in general, intangibles and machinery are taxed quite generously. The only exception is Greece, where buildings are depreciated for tax purposes over a period of ten years and where financial assets benefit from a very favourable tax rate. Reasons for the general disadvantageous treatment of buildings include the comparatively long lifetimes for tax purposes and the obligation to use straight line depreciation (except in Finland and Sweden).

As far as non depreciable assets are concerned, inventories are, in general, more heavily taxed. It is very difficult to draw general conclusions concerning the relative treatment of depreciable and non depreciable assets. In fact, as already pointed out when analysing Table 1, estimates of the effective tax burden could be sensitive to the assumptions made for true economic depreciation. Section 5 of this section examines the sensitivity of the results commented on in this section to the assumptions made.
B) The case of a profitable (infra-marginal) investment

Table 8 presents a summary of the effective average tax rates for each Member States for investments whose pre-tax real rate of return is 20%.

**Table 8**

Effective Average Tax Rate by country
- by asset, source of finance and overall
- only corporation taxes

<table>
<thead>
<tr>
<th>Country</th>
<th>Corporate tax rates (1)</th>
<th>Overall Mean</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Retained earnings</th>
<th>New equity</th>
<th>Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>34.00</td>
<td>29.8</td>
<td>28.6</td>
<td>29.2</td>
<td>28.4</td>
<td>33.2</td>
<td>29.9</td>
<td>33.9</td>
<td>33.9</td>
<td>22.3</td>
</tr>
<tr>
<td>Belgium</td>
<td>40.17</td>
<td>34.5</td>
<td>30.7</td>
<td>36.1</td>
<td>31.0</td>
<td>39.2</td>
<td>35.3</td>
<td>39.1</td>
<td>39.1</td>
<td>25.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>32.00</td>
<td>28.8</td>
<td>21.3</td>
<td>34.7</td>
<td>25.3</td>
<td>31.2</td>
<td>31.2</td>
<td>32.3</td>
<td>32.3</td>
<td>22.1</td>
</tr>
<tr>
<td>Finland</td>
<td>28.00</td>
<td>25.5</td>
<td>24.8</td>
<td>24.8</td>
<td>23.1</td>
<td>27.3</td>
<td>27.3</td>
<td>28.8</td>
<td>28.8</td>
<td>19.3</td>
</tr>
<tr>
<td>France</td>
<td>40.00</td>
<td>37.5</td>
<td>30.6</td>
<td>40.6</td>
<td>40.1</td>
<td>39.0</td>
<td>37.1</td>
<td>42.1</td>
<td>42.1</td>
<td>28.8</td>
</tr>
<tr>
<td>Germany</td>
<td>52.35</td>
<td>39.1</td>
<td>33.9</td>
<td>39.0</td>
<td>34.9</td>
<td>46.8</td>
<td>40.8</td>
<td>46.1</td>
<td>40.1</td>
<td>27.7</td>
</tr>
<tr>
<td>Greece</td>
<td>40.00</td>
<td>29.6</td>
<td>35.5</td>
<td>30.4</td>
<td>33.4</td>
<td>11.6</td>
<td>37.1</td>
<td>34.4</td>
<td>34.4</td>
<td>20.8</td>
</tr>
<tr>
<td>Ireland</td>
<td>10.00</td>
<td>10.5</td>
<td>8.9</td>
<td>15.8</td>
<td>8.2</td>
<td>9.8</td>
<td>9.8</td>
<td>11.7</td>
<td>11.7</td>
<td>8.2</td>
</tr>
<tr>
<td>Italy</td>
<td>41.25</td>
<td>29.8</td>
<td>24.9</td>
<td>29.8</td>
<td>27.4</td>
<td>36.1</td>
<td>31.1</td>
<td>31.8</td>
<td>31.8</td>
<td>26.1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>37.45</td>
<td>32.2</td>
<td>28.6</td>
<td>33.7</td>
<td>29.2</td>
<td>36.6</td>
<td>32.9</td>
<td>36.6</td>
<td>36.6</td>
<td>24.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>35.00</td>
<td>31.0</td>
<td>26.7</td>
<td>32.4</td>
<td>29.2</td>
<td>34.2</td>
<td>32.5</td>
<td>35.1</td>
<td>35.1</td>
<td>23.3</td>
</tr>
<tr>
<td>Portugal</td>
<td>37.40</td>
<td>32.6</td>
<td>33.2</td>
<td>31.8</td>
<td>28.6</td>
<td>36.5</td>
<td>32.8</td>
<td>37.0</td>
<td>37.0</td>
<td>24.5</td>
</tr>
<tr>
<td>Spain</td>
<td>35.00</td>
<td>31.0</td>
<td>31.1</td>
<td>31.8</td>
<td>27.4</td>
<td>34.2</td>
<td>30.7</td>
<td>35.2</td>
<td>35.2</td>
<td>23.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>28.00</td>
<td>22.9</td>
<td>19.6</td>
<td>23.4</td>
<td>19.7</td>
<td>25.7</td>
<td>25.7</td>
<td>26.0</td>
<td>26.0</td>
<td>17.1</td>
</tr>
<tr>
<td>UK</td>
<td>30.00</td>
<td>28.2</td>
<td>24.2</td>
<td>33.7</td>
<td>24.7</td>
<td>29.3</td>
<td>29.3</td>
<td>31.8</td>
<td>31.8</td>
<td>21.6</td>
</tr>
</tbody>
</table>

Note. Each asset column represents an average across all three types of finance, with weights of 55% retained earnings, 10% new equity and 35% debt. Each finance column represents an unweighted average across all 5 assets. The overall average is an average across all 15 types of investment, with the same weights.

(1) Including surcharges and local taxes
For all countries bar one (see below), the EATRs are higher than the effective marginal tax rates but still lower than the overall nominal profit tax rate. The effective tax burden rises when the profitability rises because allowances against the cost of the investments become relatively less important when the cost of the investment becomes smaller relative to the returns.

It is worth noting that the only country which has an EATR lower than the EMTR is Ireland. For this country the average tax burden of the investment decreases when profitability rises and marginal investments are relatively more highly taxed than profitable investments. In fact, as was shown when analysing Table 7, for Ireland the marginal tax rate is higher than the national profit tax rate because of the relatively high real estate tax rate applicable to industrial buildings. When profit rises, the weight of this tax becomes relatively less important because the tax is levied not on profit but on the value of the industrial buildings. As a result, when profit rises, the effective tax burden for industrial building diminishes.

Table 8 shows that, when profitability is set at 20% the EATR for industrial buildings is 15.8%. This is lower than the EMTR for industrial buildings (26.8%) but still higher than the corporate profit tax rate. This influences the overall mean.

There appears to be rather more dispersion in the overall average EATR for each Member State than there is in the equivalent EMTR. The Irish average rate is only 10.5%. Other rates range from 22.9% in Sweden to 39.1% in Germany.

The other main conclusions of the previous section are equally applicable in the case of a profitable investment. The link between effective tax burden and national profit tax rate is now even stronger and it is noteworthy that the ranking of Member States is almost the same when considering the EATR and national profit rates. The only exceptions are Italy and Greece. For Italy, again, the existence of "dual income" tax system tends to reduce its EATR in comparison to the national profit rate when the profitability is set at 20%. At the same time, this system plays now a less important role than in the case of a marginal investment. Italy has the lowest average cost of capital, but only the seventh lowest EATR. For Greece, the higher difference between its national corporate rate and average effective tax burden seems to depend on the generous capital allowances granted for depreciable assets and on the very favourable treatment of financial assets, which benefit from reduced rates.
Box 1 Tax Analyser:
Effective Average Tax Rates (corporation level) across 5 EU Member States and the USA.

This box gives measures of the effective tax burden of companies as computed by the application of the model "Tax Analyser", which was described in section 3. (The hypothesis and restrictions of this model are given in Annex H).

For the sake of international comparability and in order to isolate the effects of taxation, the comparisons of the effective average tax rates are made under the assumption that the weights of assets and liabilities of the model firms are identical in all countries. The Tax Analyser model refers, as a base case, to a typical medium-sized German manufacturing company with data taken from published German statistics. (Annex H explains the structure of the balance sheet of the model firm).

The effective average tax rates for the scenario in which only taxes at the level of the corporation are taken into account, over a calculation period of ten years, are shown in the following table.

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>D</th>
<th>IRL</th>
<th>NL</th>
<th>UK</th>
<th>EU-5 Average</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>EATR - (corporation)</td>
<td>39.7</td>
<td>32.8</td>
<td>8.3</td>
<td>24.0</td>
<td>21.0</td>
<td>25.2</td>
<td>29.7</td>
</tr>
<tr>
<td>relative in %</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Corporation tax and surcharges</td>
<td>54.3</td>
<td>77.0</td>
<td>77.2</td>
<td>98.5</td>
<td>88.6</td>
<td>79.1</td>
<td>80.1</td>
</tr>
<tr>
<td>Trade tax / franchise tax on income</td>
<td>-</td>
<td>22.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.5</td>
<td>12.7</td>
</tr>
<tr>
<td>Trade tax on capital / taxe professionelle</td>
<td>32.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6.5</td>
<td>-</td>
</tr>
<tr>
<td>Employer’s contribution</td>
<td>10.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.1</td>
<td>-</td>
</tr>
<tr>
<td>Property tax</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7.2</td>
</tr>
<tr>
<td>Real property tax</td>
<td>2.6</td>
<td>0.7</td>
<td>22.8</td>
<td>1.5</td>
<td>11.4</td>
<td>7.8</td>
<td>-</td>
</tr>
</tbody>
</table>
As was the case for the analysis of a hypothetical investment, this table shows that there is considerable variation in the EATR, with a range of 31.4 percentage points between the highest and lowest rate. In the case of a hypothetical investment the range was 28.6 percentage point. Therefore, the application of the Tax Analyser model confirms the magnitude of the variation inside the EU.

If we compare the results of Table 8 with the results of Table A, the most striking result is that, with the exception of France and Germany, the ranking of the countries from the highest to the lowest EATR is the same for each model and this ranking closely follows the country ranking according to statutory tax rates. The difference in the relative position of France, which is the highest EATR country here and the second in the ranking in Table 8 can be explained by the fact that, in contrast to the hypothetical investment case, a higher portion of non-profit taxes is included in the Tax Analyser model. That is, the three "employer taxes" and the personal expenses forming part of the base of the "taxe professionnelle" are included in the Tax Analyser model.

The differences between EU countries' EATR are self-evidently due to different national tax systems, tax bases and tax rates. But, it is important to stress that the Tax Analyser model takes into account almost all the elements that affect the tax base. Only special incentives are excluded.

The results of Table A reveal that there is considerable variation in the structure of the national tax systems. In all countries, profit taxes have the highest impact on the EATR. By contrast, the impact of non-profit taxes on the EATR is low on average. The only exception is France where the weight of non-profit taxes is 45.7%.

When the corporation tax bases are compared for a typical medium sized company, Figure A below reveals a large variation between the countries. This considerable range is mainly caused by the low tax base in France, as notably a consequence of the relatively high social contributions, and, to a lesser extent in Germany. These differences are, however, smaller than would be expected from the findings in many qualitative analyses of these tax bases.

**FIGURE A  Comparison of overall corporation tax bases of 5 EU Member States and the USA**

*(Typical medium-sized company)*
The analysis of the tax bases shows that all tax regimes are designed as more or less integrated systems. This means that there is a particular relationship between the tax rate and the tax base. High rate countries tend to compensate it through a reduced tax base and vice versa. Nevertheless, the cases of France and Germany, which have the highest EATR, and the highest overall corporation rates, clearly illustrate that higher tax rates more than compensate for reduced tax bases. On the other hand, despite having the highest corporation tax base, Ireland benefits greatly from its comparatively very low rate, which results in by far the lowest effective corporation tax burden. In general, tax rate differentials more than compensate for differences in the tax base.

Therefore, the effects of the different tax bases, even if these differences partly compensate tax rate differential, have therefore only a comparatively minor impact on EATR.

The introduction of personal taxation

The introduction of personal taxation in the case of a marginal investment increases the effective tax burden significantly. This is caused by the taxation of the investment backflows in the hand of the shareholders. But personal taxes do more than simply increase the wedge driven between the initial return on the investment and the return finally received by the financier. They alter the whole structure of incentives to use one form of finance rather than another.

Table 9 shows the range of values of the cost of capital and the EMTR in each Member State for a qualified shareholder taxed at the highest personal tax rate.
### Table 9  
Cost of Capital and EMTR by country  
- by asset, source of finance and overall  
- top personal tax rate, qualified shareholder

<table>
<thead>
<tr>
<th>Country</th>
<th>Cost of Capital</th>
<th>EMTR</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Retained earnings</th>
<th>New equity</th>
<th>Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>5.8</td>
<td>43.5</td>
<td>5.4</td>
<td>5.6</td>
<td>5.4</td>
<td>6.7</td>
<td>5.7</td>
<td>6.5</td>
<td>7.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Belgium</td>
<td>5.7</td>
<td>30.2</td>
<td>4.6</td>
<td>6.3</td>
<td>4.7</td>
<td>7.1</td>
<td>5.8</td>
<td>6.5</td>
<td>8.1</td>
<td>3.7</td>
</tr>
<tr>
<td>Denmark</td>
<td>4.1</td>
<td>78.4</td>
<td>2.4</td>
<td>5.9</td>
<td>3.3</td>
<td>4.5</td>
<td>4.5</td>
<td>3.8</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Finland</td>
<td>5.4</td>
<td>60.2</td>
<td>5.2</td>
<td>5.3</td>
<td>4.8</td>
<td>5.9</td>
<td>5.9</td>
<td>6.1</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>France</td>
<td>5.3</td>
<td>72.5</td>
<td>3.5</td>
<td>6.4</td>
<td>6.6</td>
<td>5.4</td>
<td>4.7</td>
<td>5.1</td>
<td>7.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Germany</td>
<td>5.4</td>
<td>79.5</td>
<td>4.0</td>
<td>5.3</td>
<td>4.3</td>
<td>7.7</td>
<td>5.6</td>
<td>6.8</td>
<td>4.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Greece</td>
<td>5.0</td>
<td>27.8</td>
<td>5.6</td>
<td>4.1</td>
<td>5.0</td>
<td>4.1</td>
<td>6.0</td>
<td>5.9</td>
<td>5.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Ireland</td>
<td>4.1</td>
<td>56.4</td>
<td>3.8</td>
<td>5.3</td>
<td>3.7</td>
<td>3.9</td>
<td>3.9</td>
<td>3.1</td>
<td>6.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Italy</td>
<td>5.1</td>
<td>18.8</td>
<td>3.1</td>
<td>4.9</td>
<td>4.0</td>
<td>8.0</td>
<td>5.4</td>
<td>6.0</td>
<td>5.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>4.1</td>
<td>70.3</td>
<td>3.4</td>
<td>4.5</td>
<td>3.5</td>
<td>5.1</td>
<td>4.0</td>
<td>4.1</td>
<td>4.7</td>
<td>4.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.8</td>
<td>95.7</td>
<td>2.3</td>
<td>3.1</td>
<td>2.6</td>
<td>3.4</td>
<td>2.9</td>
<td>2.0</td>
<td>2.2</td>
<td>4.4</td>
</tr>
<tr>
<td>Portugal</td>
<td>5.4</td>
<td>33.8</td>
<td>5.6</td>
<td>5.3</td>
<td>4.4</td>
<td>6.6</td>
<td>5.4</td>
<td>5.8</td>
<td>8.7</td>
<td>3.9</td>
</tr>
<tr>
<td>Spain</td>
<td>1.5</td>
<td>156.3</td>
<td>1.6</td>
<td>1.8</td>
<td>1.3</td>
<td>1.9</td>
<td>0.9</td>
<td>-0.2</td>
<td>0.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>5.3</td>
<td>73.2</td>
<td>4.5</td>
<td>5.4</td>
<td>4.5</td>
<td>6.0</td>
<td>6.0</td>
<td>5.6</td>
<td>6.7</td>
<td>4.3</td>
</tr>
<tr>
<td>UK</td>
<td>5.1</td>
<td>56.9</td>
<td>4.1</td>
<td>6.7</td>
<td>4.3</td>
<td>5.3</td>
<td>5.3</td>
<td>5.2</td>
<td>5.8</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Note. Each asset column represents an average across all three types of finance, with weights of 55% retained earnings, 10% new equity and 35% debt. Each finance column represents an unweighted average across all 5 assets. The overall average is an average across all 15 types of investment, with the same weights.

As explained in section 4.1.2 the introduction of personal taxation implies a decrease in the cost of capital and a considerable rise in the effective marginal tax rates.

As in Table 7, over half the countries have an average cost of capital within a very narrow range: in this case between 5.0% and 5.4%. The only two significant outliers are the Netherlands with an average cost of capital of 2.8% and Spain with only 1.5%. Neither of these countries had a low cost of capital when
personal taxes were not taken into account. In both cases the low cost of capital can be traced to the
difference in the tax treatment between dividends and interest received by the shareholders. In the
Netherlands, for example, qualified shareholders can pay tax on interest at a rate of 60% on nominal
interest receipts, but pay tax on dividend income at a rate of only 25%. The high tax rate on interest
income means that the shareholder demands a much lower rate of return on their investment in equity,
which is reflected in the cost of capital.

However, the ranking of countries by the EMTR is very different. This is because the EMTR is defined
as the percentage difference between the pre-tax rate of return earned on the investment and the post tax
rate of return earned by the shareholder- that is, the difference expressed as a proportion of the cost of
capital. Given a very low cost of capital in Spain, it is quite likely that the EMTR will appear very high.
This is compounded in the case of Spain by the fact that the high tax rate on interest income implies that
the shareholder is willing to accept a very low post tax rate of return on equity investment; in this case
actually less than zero. This results in an EMTR over 100%. The fact that countries with the same cost of
capital nevertheless have a different EMTR is because the post-tax rate of return differs between
countries.

As far as the whole structure of incentives to use one form of finance over another is concerned, it is no
longer true that debt is always the form of finance which minimises the effective tax rate. For a majority
of Member States debt is still the most favoured form of finance and new equity the less efficient form,
with retained earnings in between. The reasons for the different relative treatment of finance are the
different corporation tax systems, the taxation of capital gains from the disposal of shares from the
shareholders and, in certain relatively generous cases, final withholding taxes on interest income. These
three tax-drivers have an interactive impact on the relative position of the forms of finance.

For example, the reason for the lower tax burden on retained earnings when personal taxation is
considered, is simply that capital gains are either not taxed at the personal level, (whereas debt or
dividends are) or else that capital gains are not taxed on accrual but only on realisation, whereas with
dividends and debt any tax due cannot be postponed in this way.
Box 2 Tax Analyser:
Effective Average Tax Rates (overall level: corporation and shareholders) across 5 EU Member States and the USA

Compared to the tax burden at the level of the corporation (see Box 1 Tax Analyser), the overall tax burden including personal taxes is higher, with no changes in the country ranking.

**TABLE B  Effective Average Tax Rate across 5 EU Member States and the USA**
- Corporate and personal taxes

<table>
<thead>
<tr>
<th>EATR - (corporation and shareholder)</th>
<th>F</th>
<th>D</th>
<th>IRL</th>
<th>NL</th>
<th>UK</th>
<th>EU-5 Average</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48.8</td>
<td>37.4</td>
<td>17.2</td>
<td>32.0</td>
<td>25.6</td>
<td>32.2</td>
<td>32.0</td>
</tr>
</tbody>
</table>

The range of the EATR is also higher. This suggests that there is even more variation in personal taxes than in corporate taxes.

Besides corporate taxes, these differences at the overall level come from the interaction of corporate and personal income taxes, the individual income tax rates including surcharges and capital taxes at the shareholder level.
The impact of the German tax reform

The analysis so far has been based on the tax regimes which were in place in 1999. For the purpose of comparison across countries it is important to choose a particular time at which to make a comparison. Clearly, tax reforms in the EU can and do occur almost continuously, and so it is impossible for any set of results to reflect the long-term position. However, the German tax reform, which came into effect on January 1, 2001, is such a substantial and important reform affecting at the same time the system, the taxable base and the rate, that it is useful to investigate how the main conclusions of the analysis are affected by it. Therefore, this section investigates the impact of the German tax reform on the main results of the previous analysis.

Box 7:
Description of the major tax changes in Germany

With effect from January 1, 2001, the German tax reform has changed the corporation tax system, reduced corporation and personal income tax rates and broadened the tax base.

- Corporation tax system: The full imputation system that has been in force since 1977 has been abolished and instead a shareholder relief system has been introduced. Under the new system (which is similar to the system in Luxembourg), only one half of the dividends received by a private shareholder are subject to personal income tax. At the same time, all deductions connected with dividend income from the income tax base are halved. However, other elements of private capital income such as interest receipts are still taxed at the full rate. The abolition of the (full) imputation system follows an international trend. After the German tax reform only five EU Member States remain that apply an imputation system: Finland, France, Italy, Portugal and Spain. The vast majority of the Member States now utilise shareholder relief systems.

- Corporation tax rates: The changes in the corporation tax rate cover both the structure and the level of the tax rate. The split-rate that distinguished between retained (40%) and distributed profits (30%) has been abolished and a single uniform tax rate of 25% has been introduced. Although the 25% corporation tax rate is the second lowest of the countries considered in this report (and within the EU), the solidarity levy of 5.5% and the trade tax with an average rate of 17.56% remain. This has reduced the national tax rate on retained earnings from 52.35% to 39.3%. Although this is a significant reduction, the statutory tax rate is still high by EU standards. Only France, at 40%, has a higher tax rate.

- Income tax rates: The top marginal personal income tax rate is being lowered from 53% (55.92% including the solidarity levy of 5.5%) in three successive steps leading to a rate of 42% (44.31% including the solidarity levy) in 2005. The top marginal tax rate begins at a taxable income of Euro 52.152. For the year 2001 the top marginal rate has been set at 48.5%, and it will be 47% in 2003. For the purposes of the following calculations only the situation applying from the year 2005 is considered.

- Corporation tax base: There has been a broadening of the tax base by cutting back the depreciation rules both for tangible fixed assets and for buildings. The maximum declining balance rate for tangible fixed assets has been reduced from 30% to 20%. For buildings, the straight-line depreciation has been reduced from 4% to 3%.
Relevant economic measures: cost of capital and EATR before and after the reform

The effects of the reform both on the cost of capital and the EATR for domestic investments in the case in which there are no personal taxes are summarised in Tables 10 and 11.

A) The case of a marginal investment

Table 10 presents the cost of capital for domestic investment in Germany both before the reform (based on the 1999 tax regime) and after the reform has been implemented. For each of the 15 types of investment, the upper number represents the case before the reform, and the number below represents the cost of capital after the reform.

<table>
<thead>
<tr>
<th>Before reform (upper line)</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>After reform (lower line)</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>7.8</td>
<td>9.8</td>
<td>8.0</td>
<td>12.6</td>
<td>10.5</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>6.6</td>
<td>8.4</td>
<td>7.4</td>
<td>9.5</td>
<td>8.2</td>
<td>8.0</td>
</tr>
<tr>
<td>New Equity</td>
<td>5.8</td>
<td>7.6</td>
<td>6.1</td>
<td>10.4</td>
<td>8.2</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>6.6</td>
<td>8.4</td>
<td>7.4</td>
<td>9.5</td>
<td>8.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Debt</td>
<td>1.6</td>
<td>3.0</td>
<td>2.2</td>
<td>5.7</td>
<td>3.6</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>3.2</td>
<td>4.7</td>
<td>3.9</td>
<td>5.7</td>
<td>4.5</td>
<td>4.4</td>
</tr>
<tr>
<td>Mean</td>
<td>5.4</td>
<td>7.2</td>
<td>5.8</td>
<td>10.0</td>
<td>7.9</td>
<td>7.3</td>
</tr>
<tr>
<td></td>
<td>5.4</td>
<td>7.1</td>
<td>6.1</td>
<td>8.2</td>
<td>6.9</td>
<td>6.8</td>
</tr>
</tbody>
</table>

The lower rate on retained earnings reduces the cost of capital for investment financed by retained earnings. Further, since the split rate system is abolished, and in the absence of personal taxes, the cost of capital for retained earnings equals that of new equity. The cost of capital for new equity rises, partly because of the broadening of the tax base, and partly because the effective subsidy to paying dividends is removed. The cost of capital for debt finance also rises -and rather more substantially. This is due to the fall in the tax rate, which means the value of interest deductibility will fall.
With respect to the taxation of different types of assets, investment in all types of assets benefits from the tax rate reduction. However, only investment in buildings and in machinery suffers from the reduction in depreciation allowances. Overall, given the assumptions made here, the average cost of capital across assets is generally reduced; however, it rises for investment in machinery.

It is worth comparing the relative position of Germany after the tax reform with its position before the tax reform. The overall average cost of capital for Germany before the reform was 7.3%. This is the second highest in the EU after France. After the reform the overall average cost of capital for Germany falls to 6.8%. Given the economic assumptions used in the computation, then, the average cost of capital for domestic investment in Germany does fall, but not by enough to change its ranking in the EU. The reason could be the overall national tax rate, which at 39.3% is still the second highest in the EU.

B) The case of a highly profitable (infra marginal) investment

Table 11 presents the impact of the tax reform on the EATR for domestic investment in the absence of personal taxes. As noted elsewhere, the EATR depends more closely on the statutory tax rate than does the cost of capital. As a result, the EATR on retained earnings falls substantially - on average across the 5 assets from 46.1% to 38.7%. The EATR on investment financed by new equity also falls - unlike the cost of capital for such investment- reflecting the lower statutory corporation taxation tax rate for distributions. Finally, on average the EATR for investment financed by debt is almost unaffected, although there are differences across assets.
Table 11  Germany EATR before and after reform  
- only domestic investment  
- only corporation taxes

<table>
<thead>
<tr>
<th>Before reform (upper line)</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>After reform (lower line)</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>40.6</td>
<td>46.3</td>
<td>41.2</td>
<td>54.3</td>
<td>48.2</td>
<td>46.1</td>
</tr>
<tr>
<td></td>
<td>34.4</td>
<td>39.9</td>
<td>36.6</td>
<td>43.2</td>
<td>39.3</td>
<td>38.7</td>
</tr>
<tr>
<td>New Equity</td>
<td>34.9</td>
<td>40.1</td>
<td>35.8</td>
<td>47.9</td>
<td>41.9</td>
<td>40.1</td>
</tr>
<tr>
<td></td>
<td>34.4</td>
<td>39.9</td>
<td>36.6</td>
<td>43.2</td>
<td>39.3</td>
<td>38.7</td>
</tr>
<tr>
<td>Debt</td>
<td>23.1</td>
<td>27.2</td>
<td>24.8</td>
<td>34.8</td>
<td>28.8</td>
<td>27.7</td>
</tr>
<tr>
<td></td>
<td>23.9</td>
<td>28.6</td>
<td>26.1</td>
<td>31.7</td>
<td>27.9</td>
<td>27.6</td>
</tr>
<tr>
<td>Mean</td>
<td>33.9</td>
<td>39.0</td>
<td>34.9</td>
<td>46.8</td>
<td>40.8</td>
<td>39.1</td>
</tr>
<tr>
<td></td>
<td>30.8</td>
<td>35.9</td>
<td>32.9</td>
<td>39.2</td>
<td>35.3</td>
<td>34.8</td>
</tr>
</tbody>
</table>

The overall average impact of the German tax reform on EATR is to reduce it from 39.1% to 34.8%. Comparing Germany to other Member States (shown in Table 8), pre-reform, Germany had the highest EATR, ahead of France, (37.5%) and Belgium (34.5%). The effect of the reform is to shift Germany's ranking in terms of the EATR from the highest to the second. As with the cost of capital, the reform appears to have some impact on the effective tax rates faced by domestic German companies, but it has little effect on Germany's overall position relative to other EU Member States.
The introduction of personal taxation

Table 12 presents the cost of capital when the firm is owned by a qualified shareholder taxed at the highest personal tax rate. The addition of personal taxes has several effects. First, the reduction in the tax rate on interest income raises the post-tax return available on lending by the shareholder, which in turn raises the post-tax required return on equity. This tends to raise the cost of capital. Second, the abolition of the imputation system tends to raise the cost of capital for investment financed by new equity. However, this is offset by the reduction in the personal tax rate on dividend income. Third, the reduction in the effective capital gains tax rate tends to reduce the cost of capital, especially for equity financed investment. These effects are reflected in the results in Table 12.

Table 12  Germany Cost of Capital before and after reform
- only domestic investment
- top personal tax rate, qualified shareholder

<table>
<thead>
<tr>
<th>Before reform</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>(upper line)</td>
<td>5.4</td>
<td>6.8</td>
<td>5.6</td>
<td>9.3</td>
<td>7.1</td>
<td>6.8</td>
</tr>
<tr>
<td>After reform</td>
<td>3.6</td>
<td>4.7</td>
<td>4.1</td>
<td>5.6</td>
<td>4.4</td>
<td>4.5</td>
</tr>
<tr>
<td>(lower line)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained</td>
<td>2.8</td>
<td>3.9</td>
<td>3.2</td>
<td>6.4</td>
<td>4.2</td>
<td>4.1</td>
</tr>
<tr>
<td>Earnings</td>
<td>4.2</td>
<td>5.3</td>
<td>4.7</td>
<td>6.2</td>
<td>5.0</td>
<td>5.1</td>
</tr>
<tr>
<td>New Equity</td>
<td>2.3</td>
<td>3.5</td>
<td>2.6</td>
<td>5.7</td>
<td>3.6</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>3.7</td>
<td>4.8</td>
<td>4.2</td>
<td>5.7</td>
<td>4.5</td>
<td>4.6</td>
</tr>
<tr>
<td>Debt</td>
<td>4.0</td>
<td>5.3</td>
<td>4.3</td>
<td>7.7</td>
<td>5.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Mean</td>
<td>3.7</td>
<td>4.8</td>
<td>4.2</td>
<td>5.7</td>
<td>4.5</td>
<td>4.6</td>
</tr>
</tbody>
</table>

The changes in the cost of capital are similar to those in Table 10 - on average the cost of capital rises for investment financed by new equity and debt, and falls for investment for investment financed by retained earnings. However, the rise in the cost of capital for investment financed by new equity is more substantial than in Table 10 reflecting the replacement of the imputation system.
This Box highlights the impact of the German tax reform on the EATR both at the level of the corporation and overall (corporation and shareholder) based on the behaviour of a typical medium-sized German corporation in the manufacturing sector over the calculation period of ten years.

A) Corporation level

The following table compares the tax burdens for the base case corporation in the manufacturing sector in 1999 and after the tax reform (denoted as 2001).

### TABLE C Effective Average Tax Rate in Germany before and after the reform
- only corporation taxes

<table>
<thead>
<tr>
<th></th>
<th>GER 1999</th>
<th>GER 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>EATR (corporation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- effective in %</td>
<td>32.8</td>
<td>30.1</td>
</tr>
<tr>
<td>Relative in %</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Corporation tax incl. Surcharges</td>
<td>77.0</td>
<td>65.6</td>
</tr>
<tr>
<td>Trade tax</td>
<td>22.3</td>
<td>33.4</td>
</tr>
<tr>
<td>Real property tax</td>
<td>0.7</td>
<td>1.0</td>
</tr>
</tbody>
</table>

The tax reform reduces the EATR of the typical German corporation from the manufacturing sector over the calculation period of 10 years by 2.7 points. Regarding the weight of the different taxes in the EATR, the results from Table C show that a decrease in the corporation tax is mechanically associated with an increase of the shares of the trade tax and of the real property tax in the total EATR. Since both local taxes are deductible as business expenses from the base of the corporation tax, and the corporation tax rate is reduced, the (corporation) tax savings due to the deduction of these taxes will also be lower. Moreover, the change in the depreciation rules immediately affects the trade tax since it is based on the same taxable profits as the corporation tax.

An analysis of the impact of the different elements of the reform (see Table D) reveals that the decrease in the effective tax burden that can be attributed to the reduction of the corporation tax rate is outweighed (by more than 50%) by the changes in the depreciation rules and the corporation tax system. The reduction in the effective tax burden which is solely attributable to the lower corporation tax rate is 23.4%. The new depreciation rules for buildings and tangible fixed assets increase the effective tax burden by 5.5% (buildings 1.3% and tangible fixed assets 4.2%). The EATR increase due to the change in the corporation tax system is 11%. This requires some explanation. It is assumed here that the amount of dividends distributed to the shareholders after the reform is the same as before the reform. Since the
dividends are no longer accompanied by a tax credit, the corporation must increase its cash distribution in order to pay the same amount of dividends to the shareholders as before the reform.

TABLE D  
**German Tax Reform**  
- increases and decreases attributed to different changes in taxation  
- only corporation taxes

<table>
<thead>
<tr>
<th>Change in Taxation</th>
<th>Reduction/Increase in % of 1999 EATR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction of corporation tax rate to 25%</td>
<td>-23.4</td>
</tr>
<tr>
<td>Reduction of straight-line depreciation for buildings</td>
<td>1.3</td>
</tr>
<tr>
<td>Reduction of declining balance depreciation</td>
<td>4.2</td>
</tr>
<tr>
<td>Abolition of full imputation system</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Altogether, the EATR reduction is too low to improve the relative position of Germany in the country ranking. Before the reform, German corporations’ EATR (32.8%) was the second highest after France (39.7%). After the reform, Germany is still second highest (30.1%) now closely followed by the USA (29.7%). There is still a considerable gap to the Netherlands (24%) in fourth position.

B) Overall (corporation and shareholder) level

If we consider the overall level including personal taxes of the shareholders, the German tax reform reduces the effective tax burden significantly. In addition to the reduction of the marginal (and average) income tax rate, which affects both the dividend and interest income, this result can be attributed to the introduction of the new corporation tax system. According to the German method of shareholder relief only one half of the dividends is subject to personal income tax. The results in Table E, which combine corporate and personal taxes, show that the overall EATR falls from 37.4% in 1999 to 30.1% in 2005. As a result Germany improves two positions in the country ranking to third lowest place behind Ireland (17.2%) and the UK (25.6%).

TABLE E  
**Effective Average Tax Rate in Germany before and after the reform**  
- Corporate and personal taxes

<table>
<thead>
<tr>
<th>Tax Rate</th>
<th>1999</th>
<th>2001 / 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>EATR (corporation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- effective in %</td>
<td>32.8</td>
<td>30.1</td>
</tr>
<tr>
<td>EATR (corporation and shareholder)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- effective in % (1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) The fact that the effective tax rates at the corporation and shareholder level are identical is only valid for the individual case. It cannot be concluded that the effect of the German tax reform is to equate these rates. It will depend on the income of the shareholder whether the rates are higher, lower or by chance the same.
As a result, overall it seems reasonable to conclude that a typical medium-sized corporation with a low number of shareholders benefits from the German tax reform.

The results presented in this box are in line with the results presented in section 4.4. Despite the considerable reduction of the EATR, the German tax reform has only minor effects on the relative position of Germany in the country ranking.

Neutrality and distortion effects: concluding remarks from the domestic analysis

The analysis of the domestic case shows that European tax codes have an influence on the incentives to investment and the choice of the way of financing the investment. The analysis suggests that, in practically every situation analysed, on the one hand, tax systems tend to favour investment in intangibles and machinery and, on the other, debt is, by far, the most convenient source of financing. Moreover, the data tend to show that financing by retained earnings implies a lower cost than financing by new equity when personal taxation is taken into account. Thus, tax regimes as such are clearly not neutral to the extent that they tend to distort investment and financing decisions compared to a situation without taxation. From a purely economic point of view this has an impact on the efficiency of the allocation of resources within Member States and within the EU as a whole.

The previous analysis also suggests that there is considerable variation in the effective tax burden faced by investors resident in the different EU Member States. However, the Member States' tax codes tend to favour the same forms of investment by assets and sources of finance. Differences between the effective tax burden in the EU Member States can affect the competitiveness of companies competing in the same external markets and may affect, under certain conditions, the location choice of multinationals.

The wide spread within the EU cannot be explained by one feature of the national tax systems alone. However, the analysis presented above tends to show that the different overall nominal tax rates on profits (statutory tax rates, surcharges and local rates) can explain most of the differences of EMTR between countries. Therefore, although tax regimes are designed as more or less integrated systems (in general high tax rates on profit correlate with lower taxable bases and vice versa) tax rate differentials more than compensate for differences in the tax base. These conclusions are to be considered when discussing the compensatory effects of a broad tax base compared to a relatively low tax rate on the effective tax burden. The relative weight of rates in determining the effective tax burden of companies rises when the profitability of the investment rises. The policy simulations presented in section 7 will allow a better appreciation of the influence of particular features of taxation on the effective tax burden differentials between Member States.

When considering the effect of the German reform the analysis suggests that, although this reform appears to have some impact on the effective tax rates faced by domestic German companies, the reform has little effect on Germany's position relative to other EU Member States. This is because the overall national corporate tax rate in Germany remains high by the standards of the EU.

How far governments should be concerned about non-neutralities and differentials depends on the different legitimate goals of tax policy. For instance, a desire to "fine tune" depreciation allowances in order to approximate true economic depreciation would have to be traded off against the desire for administrative simplicity. Also, when personal taxation is taken into account, solutions which would ensure that one form of financing is not favoured over another, could be incompatible with the traditional goal of progressive taxation of comprehensive income. With a progressive personal income
tax, it is more difficult to achieve a neutral corporate tax system. More generally, a non-neutral tax regime may be justified from the point of view of economic efficiency in order to encourage or discourage certain activities insofar the activities in question render positive or negative side-effects.

On the other hand, concerns related to the non-neutrality of tax systems derive from the fact that taxation is one instrument for the creation of an appropriate business environment, and that its various other goals can often be furthered more effectively by other policy means. In this case the taxation system must not act as an obstacle to market efficiency. Moreover, a system characterised by large differences may often offer unintended opportunities for tax avoidance.
TESTING THE ASSUMPTIONS OF THE MODEL

Various assumptions have been made to generate the results given so far. This section examines the effects of altering these assumptions, thereby illustrating the sensitivity of the results to the assumptions made. In fact, the previous analysis is based on a set of very specific hypothetical investments under specific economic conditions. Therefore, the data presented in the previous sections should not be regarded as the universally valid values for the effective tax burden in different countries. It is therefore legitimate to ask to what extent the general results shown above depend on the assumptions and, in particular if changes in the parameters defining the investments or in the economic variables alter the general conclusions of the previous sections. In fact, even if there are no universally valid values, it is important to check whether it is possible to make generally valid statements regarding differences in the effective tax burden. In order to answer this question, this section conducts a sensitivity analysis which recalculates the cost of capital and each effective tax rate several times, each time varying the main parameters of the model. This is done for the average values across the EU and for the different countries separately. For the purposes of this exercise, only corporate taxes are considered.

Sensitivity of the average EU cost of capital and EATR to the changes in the economic model or level of taxes

Tables 13 and 14 present an average across all Member States of the cost of capital and EATR for the different forms of investment, corresponding to the tables in the previous sections. The first row in each of these tables summarises the position in the base case, that is the averages shown respectively in Tables 1 and 2. The other rows consider separately the effects on the overall average of changing one parameter or set of parameters at a time. These changes involve the economic variables (real interest rate, rate of inflation and level of profitability of the investment), the weights assigned to the assets and the impact of local taxes and special investment incentives. There is no row numbered 4 in Table 13 (cost of capital), since that would refer to the change in profitability which is relevant only for the EATR.
Table 13  Cost of Capital  
- average across all the 15 EU Member States  
- only corporation taxes

<table>
<thead>
<tr>
<th>Cost of capital (%)</th>
<th>Overall mean</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Retained earnings</th>
<th>New equity</th>
<th>Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Base case</td>
<td>6.3</td>
<td>5.4</td>
<td>6.7</td>
<td>5.6</td>
<td>7.3</td>
<td>6.7</td>
<td>7.6</td>
<td>7.4</td>
<td>4.1</td>
</tr>
<tr>
<td>2 Real interest rate: 10%</td>
<td>12.5</td>
<td>11.0</td>
<td>13.1</td>
<td>11.2</td>
<td>13.9</td>
<td>13.4</td>
<td>14.6</td>
<td>14.4</td>
<td>8.6</td>
</tr>
<tr>
<td>3 Rate of inflation: 10%</td>
<td>6.7</td>
<td>5.4</td>
<td>6.1</td>
<td>5.7</td>
<td>9.6</td>
<td>6.5</td>
<td>9.2</td>
<td>8.9</td>
<td>2.1</td>
</tr>
<tr>
<td>5 OECD/Ruding weighs</td>
<td>6.1</td>
<td>-</td>
<td>6.7</td>
<td>5.6</td>
<td>-</td>
<td>6.7</td>
<td>7.3</td>
<td>7.2</td>
<td>3.9</td>
</tr>
<tr>
<td>6 BACH average weights</td>
<td>6.0</td>
<td>4.7</td>
<td>6.0</td>
<td>4.9</td>
<td>6.5</td>
<td>5.9</td>
<td>8.0</td>
<td>7.8</td>
<td>4.4</td>
</tr>
<tr>
<td>7 Service sector weights</td>
<td>6.1</td>
<td>4.6</td>
<td>5.8</td>
<td>4.8</td>
<td>6.4</td>
<td>5.8</td>
<td>8.3</td>
<td>8.1</td>
<td>4.6</td>
</tr>
<tr>
<td>8 Equal weights</td>
<td>6.4</td>
<td>5.4</td>
<td>6.7</td>
<td>5.6</td>
<td>7.3</td>
<td>6.7</td>
<td>7.6</td>
<td>7.4</td>
<td>4.1</td>
</tr>
<tr>
<td>9 High level of local taxes</td>
<td>6.5</td>
<td>5.4</td>
<td>7.3</td>
<td>5.7</td>
<td>7.4</td>
<td>6.7</td>
<td>7.8</td>
<td>7.6</td>
<td>4.2</td>
</tr>
<tr>
<td>10 Low level of local taxes</td>
<td>6.2</td>
<td>5.4</td>
<td>6.2</td>
<td>5.5</td>
<td>7.2</td>
<td>6.6</td>
<td>7.4</td>
<td>7.2</td>
<td>4.0</td>
</tr>
<tr>
<td>11 Tax incentives for new investments</td>
<td>5.1</td>
<td>4.1</td>
<td>5.7</td>
<td>2.2</td>
<td>7.1</td>
<td>6.5</td>
<td>6.3</td>
<td>6.1</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note. Each asset column represents an average across all three types of finance, with weights of 55% retained earnings, 10% new equity and 35% debt. Each finance column represents an unweighted average across all 5 assets. The overall average is an average across all 15 types of investment, with the same weights. Note also that the OECD report and the Ruding report considered only three assets: industrial buildings, machinery and inventories.
### Table 14 Effective Average Tax Rates

- average across all the 15 EU Member States
- only corporation taxes

<table>
<thead>
<tr>
<th>EATR (%)</th>
<th>Overall mean</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial Assets</th>
<th>Inventories</th>
<th>Retained earnings</th>
<th>New equity</th>
<th>Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Base case</td>
<td>29.5</td>
<td>26.8</td>
<td>31.1</td>
<td>27.4</td>
<td>31.4</td>
<td>30.9</td>
<td>33.5</td>
<td>33.1</td>
<td>22.3</td>
</tr>
<tr>
<td>2 Real interest rate: 10%</td>
<td>24.9</td>
<td>20.3</td>
<td>27.0</td>
<td>20.7</td>
<td>28.6</td>
<td>28.0</td>
<td>31.7</td>
<td>31.0</td>
<td>12.5</td>
</tr>
<tr>
<td>3 Rate of inflation: 10%</td>
<td>30.7</td>
<td>27.0</td>
<td>29.4</td>
<td>27.6</td>
<td>38.9</td>
<td>30.6</td>
<td>38.7</td>
<td>37.9</td>
<td>16.1</td>
</tr>
<tr>
<td>4 Level of Profitability: 40%</td>
<td>31.6</td>
<td>30.4</td>
<td>32.6</td>
<td>30.7</td>
<td>31.7</td>
<td>32.5</td>
<td>33.5</td>
<td>33.3</td>
<td>28.0</td>
</tr>
<tr>
<td>5 OECD/Ruding weights</td>
<td>29.2</td>
<td>-</td>
<td>31.1</td>
<td>27.4</td>
<td>-</td>
<td>30.9</td>
<td>33.0</td>
<td>32.7</td>
<td>22.2</td>
</tr>
<tr>
<td>6 BACH average weights</td>
<td>28.0</td>
<td>24.7</td>
<td>28.9</td>
<td>25.3</td>
<td>29.0</td>
<td>28.6</td>
<td>34.4</td>
<td>34.0</td>
<td>23.0</td>
</tr>
<tr>
<td>7 Service sector weights</td>
<td>28.9</td>
<td>25.3</td>
<td>29.2</td>
<td>25.8</td>
<td>29.5</td>
<td>29.2</td>
<td>36.1</td>
<td>35.7</td>
<td>24.0</td>
</tr>
<tr>
<td>8 Equal weights</td>
<td>29.6</td>
<td>26.9</td>
<td>31.2</td>
<td>27.5</td>
<td>31.5</td>
<td>31.0</td>
<td>33.5</td>
<td>33.1</td>
<td>22.3</td>
</tr>
<tr>
<td>9 High level of local taxes</td>
<td>30.5</td>
<td>27.3</td>
<td>33.6</td>
<td>28.2</td>
<td>31.9</td>
<td>31.4</td>
<td>34.4</td>
<td>34.0</td>
<td>23.3</td>
</tr>
<tr>
<td>10 Low level of local taxes</td>
<td>28.6</td>
<td>26.3</td>
<td>28.9</td>
<td>26.5</td>
<td>30.8</td>
<td>30.3</td>
<td>32.5</td>
<td>32.1</td>
<td>21.4</td>
</tr>
<tr>
<td>11 Tax incentives for new investments</td>
<td>25.7</td>
<td>22.8</td>
<td>28.0</td>
<td>17.0</td>
<td>30.5</td>
<td>30.3</td>
<td>29.4</td>
<td>29.0</td>
<td>19.0</td>
</tr>
</tbody>
</table>

As far as the economic parameters are concerned the tables show that, when the real interest rate is doubled from 5% to 10%, ceteris paribus, the cost of capital roughly doubles in all cases and the EATR tends to fall. This reflects the fact that, in the case of the cost of capital, taxes tend to have a multiplier effect: very roughly, the cost of capital is the real post-tax required rate of return multiplied by a factor reflecting the tax system. The EATR falls because the pre-tax rate of return is still fixed at 20% and so investments are rather less profitable. Given the relationship between the EATR and profitability demonstrated in Figure 1, one would expect the EATR to be lower. Although the values of the cost of capital are higher and those of the EATR slightly lower, the relative pattern across types of investments is not affected.

By contrast, introducing a higher rate of inflation, from 2% to 10% exacerbates the differences between debt and equity finance. This is due to the fact that nominal interest rates are assumed to rise in line with inflation; since these are deductible in the case of debt financing, both the average cost of capital and the average EATR fall for debt finance.
The rise of the profitability of the investment from 20% to 40% increases the value of the EATR. This is in line with the analysis in Box 1. The higher the profitability of the investment, the closer is the EATR to the statutory profit tax rates. In general, this tends to reduce differences both between types of investments and types of financing and between countries. Figure 2 illustrates that for a level of profitability of 40% the individual countries EATR have already moved much closer to the national nominal profit tax rates. Italy and Greece show wider differences for the reasons explained in section 4.3 (commentary on Table 8). Annex D shows the distribution of the EATR in each EU Member State. It therefore presents the range of values of the EATR for all possible levels of profitability.
Figure 2 Statutory Profit Tax Rates and Effective Average Tax Rates by Member States

Corporate Tax Rates 1999 - Effective Average at pre-tax returns of 20% & 40% and Statutory
Changing the weights of assets (rows 5 to 8) has almost no effect on the average cost of capital or the average EATR. This suggests that the weights of the assets are not likely to be very sensitive for the purpose of the overall analysis.

Row 5 considers only the 3 assets and the respective weights considered by the OECD/Ruding studies: industrial buildings: 28%, machinery: 50% and inventories: 22%. The weight of the sources of finance is held constant at the levels of the base case scenario. These weights are taken from the OECD (1991) and Ruding (1992): retained earnings: 55%, new equity: 10% and debt: 35%.

Rows 6 and 7 use weights generated from accounting data (the BACH database). This approach uses accounting data for a large number of companies from different Member States. The numbers in the table below reflect the relative importance of each of the 5 assets, and each of the 3 sources of finance.

<table>
<thead>
<tr>
<th>BACH weight (%)</th>
<th>Intangibles</th>
<th>Industrial Buildings</th>
<th>Machinery</th>
<th>Financial assets</th>
<th>Inventories</th>
<th>Retained Earnings</th>
<th>New Equity</th>
<th>Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>2.9</td>
<td>14.3</td>
<td>19.3</td>
<td>45.6</td>
<td>17.9</td>
<td>24.7</td>
<td>20.5</td>
<td>54.8</td>
</tr>
<tr>
<td>Services</td>
<td>3.2</td>
<td>12.3</td>
<td>11.9</td>
<td>54.2</td>
<td>8.4</td>
<td>21.6</td>
<td>19.4</td>
<td>59.0</td>
</tr>
</tbody>
</table>

The high weight in the BACH database attached to debt for both the manufacturing and services sector implies that the average cost of capital and EATR is lower for the 5 assets. The overall averages are lower mainly as a result of the high weight for debt.

Considering that the purpose of the quantitative analysis in this study is to "isolate" the impact of taxation on the same identical investment in each EU country, indicators based on the weight of each individual Member State have not been computed.

Rows 9 and 10 in each of the Tables relate to local taxes. In the analysis in the base case, "typical" values of local taxes were used: these are detailed in Appendix B. However, by their very nature, local taxes vary within a country. Hence two more extreme cases are considered - where local taxes are 50% higher than those in the base case and where they are half those in the base case⁴¹- to discover whether these taxes play an important role in determining the cost of capital and the EATR. In fact, local taxes seem to play a relatively small role in determining these measures. The results are very close to the base case, with the exception of investments in industrial buildings. This reflects the fact that most real estate taxes are local taxes, which apply to buildings but not to other assets.

The final row considers the impact of special investment incentives. There are a large number of such incentives within the EU, which takes a variety of forms. The exercise here is intended only as a part of a sensitivity exercise, to get an impression of the likely effect of such incentives, rather than to document them fully. Specifically, the last row of each Table gives the average cost of capital and average EATR where each country operates a single investment incentive. The incentives considered represent country-typical incentives extracted from a questionnaire. They reflect significant or common incentives.

⁴¹ Note that this is simply intended to investigate the relative importance of local taxes. In practice, under existing law, local governments may not have the right to vary local taxes by these amounts. This is the case in France and Italy for example.
Depending on the country, the incentives considered might be extraordinary depreciation, special tax credits or special tax incentives. The precise incentive for each country is given in TABLE 12 of Appendix B.

Not surprisingly, such incentives do reduce the average cost of capital and the average tax burden without altering the relative position of the source of finance.

All in all, the previous analysis demonstrates that in most cases the parameters used in the model tend to have a little effect on the overall EU values of the cost of capital and the EATR. More importantly, changing the parameters does not alter the nature and the broad size of differences observed in section 4 as far as the overall EU values are concerned.

**Impact of the sensitivity analysis on the relative position of Member States**

The exact values of the effective tax burden of each Member State can, however, vary according to the definition of the investment and, as mentioned above, there is no universally valid value in one country. The purpose of this section is therefore to test if the ranking of Member States according to their average cost of capital and the average EATR arising from Tables 7 and 8, would be affected by changes in the assumptions used in the base case. The analysis is made for the 1999 situation.

Tables 15 and 16 show the ranking of Member States from 1 to 15, with the country with the highest cost of capital or EATR having the rank 1, and the lowest having the rank 15. Each of the cases presented in Tables 13 and 14 are presented; these are numbered 1 to 11 with 1 corresponding to the ranking relative to the base scenario. The column numbered 4 is blank in Table 15 (cost of capital), since that refers to the change in profitability which is relevant only for the EATR. The first column presents the average ranking over columns 1 to 11 and therefore gives the position of each Member State when all the different sensitivity analyses are taken into account.
### Table 15 Ranking of Member States by Average Cost of Capital
- highest=1, lowest=15
- only corporation taxes

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank (Average)</th>
<th>Sensitivity Analysis No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4  5  6  7  8  9  10  11</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>9   9   8   9   ./.</td>
<td>8   10  10  9   10   7   6</td>
</tr>
<tr>
<td>Belgium</td>
<td>5   7   5   10  ./.</td>
<td>7   6   3   5   5   8   4</td>
</tr>
<tr>
<td>Denmark</td>
<td>4   8   11  4   ./.</td>
<td>4   4   4   8   4   10  1</td>
</tr>
<tr>
<td>Finland</td>
<td>11  11  12  6   ./.</td>
<td>10  11  12  11  11   9   3</td>
</tr>
<tr>
<td>France</td>
<td>2   1   2   1   ./.</td>
<td>1   1   2   1   1   1   13</td>
</tr>
<tr>
<td>Germany</td>
<td>1   2   1   2   ./.</td>
<td>3   2   1   2   2   2   2  5</td>
</tr>
<tr>
<td>Greece</td>
<td>12  12  10  12  ./.</td>
<td>6   15  15  12  12  11   14</td>
</tr>
<tr>
<td>Ireland</td>
<td>14  14  14  14  ./.</td>
<td>13  13  11  14  13  14   10</td>
</tr>
<tr>
<td>Italy</td>
<td>15  15  15  15  ./.</td>
<td>15  14  14  15  15  15   15</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>10  10  9   11  ./.</td>
<td>9   7   7   10  6   12  12</td>
</tr>
<tr>
<td>Netherlands</td>
<td>6   5   6   5   ./.</td>
<td>5   5   6   7   9   4   9</td>
</tr>
<tr>
<td>Portugal</td>
<td>7   6   3   8   ./.</td>
<td>12  9   8   6   8   5   2</td>
</tr>
<tr>
<td>Spain</td>
<td>8   4   4   7   ./.</td>
<td>11  8   9   4   7   3   11</td>
</tr>
<tr>
<td>Sweden</td>
<td>13  13  13  13  ./.</td>
<td>14  12  13  13  14  13   8</td>
</tr>
<tr>
<td>UK</td>
<td>3   3   7   3   ./.</td>
<td>2   3   5   3   3   6   7</td>
</tr>
</tbody>
</table>

Looking across the columns in Table 15, many of the rankings are largely unaffected by the sensitivity analysis. For example, apart from the last column (investigating special investment incentives), France has always the highest cost of capital, and is never lower than second. Italy usually has the lowest, and is never higher than 14th. However, while these more extreme cases tend to be fairly stable, there is rather more movement in the rankings for countries in the middle of the distribution. This is not surprising: as noted in the discussion above, a number of countries have average costs of capital very similar to each other. The ranking of these countries is likely to change more easily than the rankings of the countries outside the band. Despite this, the most notable feature of the Table is the consistency of the ranking of each country across the different elements of the sensitivity analysis. Comparing, for example the ranking based on the base case (column 1) with the average rank in the first column, most of the countries have the same rank in the two columns. This suggests that the base case does give a reasonable indication of the relative positions of each Member State.
Table 16  Ranking of Member States by Average EATR  
- highest=1, lowest=15  
- only corporation taxes

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank (Average)</th>
<th>Sensitivity Analysis No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Austria</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Belgium</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Denmark</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Finland</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>France</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Germany</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Greece</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Ireland</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Italy</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Portugal</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Spain</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Sweden</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>UK</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 16 repeats the exercise for the EATR. Once again, there is considerable stability in the rankings of countries across the different elements of the sensitivity analysis. Thus, for example, Germany has the highest ranking in the base case (column 1). Only in two cases does the ranking fall, and then only to 2nd. Ireland has the lowest ranking on all but one case -for the service sector- where it rises to 12th. This rise in the Irish case is because the 10% corporation tax rate applies only to manufacturing and some other special sectors of industry, and the rate applied in general for the service sector is 28%. In the absence of personal taxes, the ranking of countries according to the EATR is broadly similar to that of the cost of capital. As was the case for the cost of capital, this table suggests that the base case does give a reasonable indication of the relative position of each Member State.
**Box 4 Tax Analyser:**

*Testing the importance of the assumptions*

In order to test the robustness of the results presented in the previous boxes "Tax Analyser" the effects of alternative assumptions of the input data on the EATR are tested by means of sensitivity analysis covering data both at the level of the corporation and the level of the shareholder.

1) Level of the corporation

The impact of changing assumptions is investigated by varying on the one hand the tangible fixed assets to total balance sheet ratio of the model firm and on the other, the weighting of the sources of finance.

a) Investment policy

This variation takes into account a change in the model firm's capital intensity. The quantity of tangible assets as a percentage of total assets is raised or reduced first by 10% and then by 20% in comparison with the base case. The ratio in the base case is 22.9%.

The results in figure B show that, with the exception of Germany and the Netherlands, the EATR increases with the capital intensity.

**FIGURE B**  
*Effective Average Tax Rate across 5 EU Member States and the USA*  
- variation of tangible fixed assets to total balance sheet ratio  
- only corporation taxes
In Germany and the Netherlands the EATR decreases due to a shift from less generous rules for non-depreciable assets (i.e. financial assets) to a more generous capital allowances practice for depreciable assets. In the case of Ireland, the UK and the USA, it is above all the higher level of real property tax in the overall tax burden that overcompensates for the effects of the capital allowances and is therefore decisive in causing the increase. The EATR increase in France is noticeable. This can attributed to the structure of the French "taxe professionnelle". In fact, the basis of this tax includes tangible fixed assets but exempts intangibles and financial assets.

Although there is no change in the country ranking, it is worth noting that France and Germany have very similar EATR in the case of low capital intensity.

b) Structure of finance

In order to investigate the impact of changing assumptions regarding corporate financing on the EATR, the weighting of the sources of financing is gradually changed by increasing the equity to total capital ratio from 25% to 100%. This increase is accompanied by a reduction of the interest expenses for long term debt.

**FIGURE C** Effective Average Tax Rate across 5 EU Member States and the USA

- variation of equity to total capital ratio
- only corporation taxes

Figure C shows that the EATR increases with the equity to total capital ratio in all countries. Therefore, as already underlined for the analysis of a hypothetical investment, national tax systems are not neutral towards the source of company finance.
This discrimination against equity financing at the level of the corporation is more evident in Germany and in the USA. Besides the high level of the corporation tax rate, this result is caused by the levying of other taxes that do not treat the payments for debt and equity capital equally. By contrast, the increase in the EATR is lower by far in Ireland and the UK. Since both countries apply the lowest corporation tax rate and levy no other taxes that discriminate against a particular source of finance, the reduction or saving of taxes due to the deductibility of interest is also the lowest.

Since the discrimination against equity financing in contrast to debt financing is common in all the tax systems that are under review, the EATRs neither cross nor converge. Therefore, differing assumptions about the debt to equity ratio do not change the country ranking of the base case. The level of variation within the sources of finance depends to a great extent on the level of the statutory corporation tax rate. Low tax rates tend to reduce such variations.

2) Overall level (corporation and domestic shareholder)

Just as at the corporation level, the tax burden at the overall level, that is including personal taxation, is influenced by the assumptions about the economic data. Among the variables which have a large impact on the overall EATR, the distribution policy of the company and the sources of company financing provided by the shareholders are the most relevant.

a) Dividend policy

In order to work out the impact of changing distribution policy assumptions on the overall EATR, the corporation's distribution rate is gradually increased from zero (full retention of profits) to 100% (full distribution of profits).

Figure D below shows that if the profits are fully retained in the corporation the overall EATR is above all influenced by taxes at the level of the corporation. Due to the differences in the tax burden of the corporation, already explained in previous sections, the overall EATR is the highest in France and the lowest in Ireland.

**FIGURE D** Effective Average Tax Rate across 5 EU Member States and the USA
- variation of rate of distribution
- corporate and personal taxes
The overall EATR increases with the rate of distribution in all countries. However Germany improves its relative position while the position of France, Ireland and the USA deteriorate. Ireland and the USA even lose one place in the ranking. This result can be attributed to a great extent to the different corporation tax systems and the degree of progression of income tax rates.

It is interesting to note that the EATRs converge with an increased rate of distribution. The combination of different levels of corporate and personal taxes and the interactions of these taxes with the different corporate tax systems thus reduces the dispersion of the EATR at the level of the shareholders to a great extent.

b) Equity to total capital ratio

In order to investigate the impact of changing assumptions about the financing of the corporation on the EATR at the shareholder level, it is assumed that the corporation is entirely financed by its shareholders with debt or equity capital (i.e. the corporation does not raise any funds from third parties). In the case of debt financing, the shareholders receive interest income from the loan granted to the corporation at a fixed rate. Whereas, in the case of equity financing, the profits are fully distributed to the shareholders. The weighting of the sources of finance are gradually changed by increasing the equity to total capital ratio from 25% to 100%. Figure E shows the results.

**FIGURE E**  
Effective Average Tax Rate across 5 EU Member States and the USA  
- variation of equity to total capital ratio  
- corporate and personal taxes

Altogether, the results show that taxation is not entirely neutral towards the financing of a corporation in any of the countries covered by the computation. Moreover, no common pattern exists as to a preferential taxation of debt or equity financing. Since there are countries that either favour debt financing (Germany and, in particular, the UK and the USA) or equity financing (France and the Netherlands) or that tax the source of finance almost equally, both the level of the EATR and the ranking
of the countries at the overall level depends on the assumptions regarding the equity to total capital ratio. In general, such dispersions are lowest in countries that either apply a full imputation system (e.g. Germany in 1999) or irrespective of the corporation tax system-apply a low corporation tax rate (e.g. Ireland). In addition another prerequisite for neutrality towards company financing is an equal treatment of the dividends and interest payments with respect to income tax (and of shares and loans with respect to private property tax).

THE TAXATION OF TRANSNATIONAL INVESTMENTS

Section 4 examined the impact of taxation on the incentives to invest domestically. This section uses the same approach to consider the impact of taxation on the incentives to undertake transnational investments, i.e. to invest across country borders.

It describes how the framework used to analyse the domestic corporate tax systems of the EU Member States can be extended to cover investments located in one country by companies residents in another. The purpose of this section is to analyse whether there is an incentive for EU companies to choose specific forms of investment and the tax-favoured locations for their investments (which may not be the most favourable locations in the absence of taxes). To the extent that companies respond to such incentives, the tax system may create a global misallocation of resources as activities may be financed or undertaken in high cost locations because they are tax-favoured.

In order to understand the effects of the different Member States’ tax systems on investment coming from two of the main EU economic partners in the transnational case, the analysis also considers inward investment into each Member State from the USA and from Canada, which respectively have a credit system and an exemption system.

As was the case for the analysis of domestic investments, this section gives summary measures of the potential distortions by tax systems of transnational investments and does not provide a measurement of the impact of these potential distortions on international investment patterns. (Box 6 in section 4 presented a short survey of the empirical studies which have attempted to measure this impact). The fact that companies may use more complex financial arrangements and group structures in order to minimise tax burdens indicates that the potential distortions reported in this section can be sufficiently large to alter company behaviour from that which would otherwise prevail. It should also be recalled that there are costs associated with these complex financial arrangements. Moreover, to the extent that these arrangements can imply tax evasion, this may create new distortions.

The tax treatment of transnational investments

Investing across borders results in a substantially more complex tax position than investment in one country. Purely domestic investment is determined by one tax system. Transnational investment involves not only dealing with two (or more) tax systems, but also dealing with the interactions of these systems.

Throughout section 6, attention is focused on a parent company that invests in a foreign country by means of a wholly-owned subsidiary. As well as taking account of the domestic tax system, charges on the payments of interest between the subsidiary and the parent and any further taxes levied by the country of residence of the parent company are also incorporated. (The details of the tax regimes modelled are given in Annex B). The other assumptions are the same as those made in the domestic case. With these assumptions, the effects of the tax systems on transnational investments can be isolated from the effects of prevailing economic conditions.
The position of the subsidiary is essentially the same as the independent firm analysed in the domestic case. It may invest in one of the five assets, and it is financed in one of the three ways: retained earnings, new equity and debt. The parent company also raises finance in one of these three ways.

As in the analysis of domestic investments, primarily corporate taxes are considered. Given that it is assumed here that cross border flows of capital are possible, it seems reasonable also to suppose that parent companies can be financed on the international market. But in this case, for the reasons explained in Box 5, it is less plausible that personal taxation affects investment decisions and that the identity of the shareholder is known. Most of the analysis in this section is therefore based on the comparison of taxes paid by the corporation only.

Nevertheless, section 6.5 discusses the role of personal taxes, especially in the context of whether tax credits associated with a dividend payment by the parent to the domestic shareholder are available if the underlying source of income is from abroad.

It is worth noting that the introduction of transnational investments considerably increases the number of cases to be dealt with\(^\text{42}\). Therefore, this section summarises these cases (by calculating simple averages) and highlights only the main issues arising from the transnational investment additional to those already discussed in the context of the domestic investment.

**Transnational effective tax rates: detailed positions (cost of capital and EATR) of the EU Member States**

The tables in this section summarise the effective tax burden of each possible transnational investment, averaged across the five different assets and the three sources of finance of the parent company. A separate table is used for each of the three different ways in which the subsidiary can be financed.

These tables address the question of differences in the effective tax burdens across possible locations of the investment for a given State of residence of the parent company or, alternatively across possible States of residence of the parent, for an investment in a given location. Moreover, they identify differences in taxation which arise solely because of the way the investment is financed.

A) The case of a marginal investment

Three fundamental matrices of transnational rates are given in Tables 17, 18 and 19. These give the required pre-tax rates of return, - the cost of capital - necessary when there is a 5% post-tax rate of return from investing cross-border. The parent country (home country) is given down the side of each matrix and the subsidiary country (host country) is given along the top of the matrix. Table 17 gives the cost of capital when the subsidiary is financed by retained earnings, table 18 when the finance is through new equity from the parent, and table 19 when the parent lends funds to the subsidiary. In all three cases the reported figures represent the averages of the five types of assets and the weighted averages of the three sources of finance of the parent, using the weights of the domestic case.

The results can be interpreted in the following ways. When an Austrian parent company decides to expand the operations of its Belgium subsidiary by retaining funds in the subsidiary then, on average, it must earn a pre-tax rate of return in Belgium of 8.0% in order to be able to give its investors a post-tax

\(^\text{42}\) In the previous section attention was focussed on 15 possible investments in a domestic context, although considered in several different scenarios. Transnational investments from each of the 15 Member States to the other 14, plus inward investment to each Member State from 2 further countries creates 240 (15x14 + 2x15) different cross border flows. For each of these there are 9 possible sources of finance and 5 possible assets.
rate of return of 5% (see Table 17); whereas if the Belgium subsidiary were financed by funds lent by the parent, the subsidiary would need to earn 6.0% (see Table 19).

Table 17 presents the cost of capital for investment financed by retained earnings in the subsidiary. As was the case for a domestic investment discussed in section 4.1, the cost of capital in this case is not influenced by the taxation of dividends paid by the subsidiary to the parent. In fact, since the parent forgoes dividends to finance the investments and receives higher dividends as the return from the investment, the tax rate on such dividend flows nets out of the analysis.

Given the assumption of no personal taxes, there is in general also no differences between investments financed by the parent from retained earnings and new equity. Within the different sources of finance used by the parent, then, only debt financing introduces any element of the parent (home) country tax regime.

This implies that within each column in Table 17 - i.e. considering a single subsidiary (host) country - differences in the cost of capital across different home countries arise only in the different treatment of debt in the parent company. Some countries, Austria, Denmark, Netherlands, Spain and Canada do not permit interest paid on loans used for outbound investments to be deductible; these countries have a higher cost of capital. Other countries do permit this. In their case the tax rate determines how valuable this deduction is, and hence how low the average cost of capital is. It is worth noting that the higher the tax rate, the more valuable the deduction.

By contrast, the differences within each row reflect primarily the host country tax system. These differences are likely to affect the location choice of the parent companies. The relative ranking of host countries in Table 17 is very close to that shown in the case of domestic investments. Thus, on average, Italy is the most attractive host location and France and Germany are the least attractive host locations.

Summing up the results of table 17, it can be observed that when the subsidiary is financed by retained earnings, the differences in the cost of capital of subsidiaries located in the same country largely depend on the treatment of debt financing of the parent and on the tax rates applied in the home countries. On the other hand, the incentives to locate faced by the parent company largely depend on the domestic tax systems of the possible host countries.

These results are therefore largely in line with the results obtained in the case of domestic investments, notably the considerable variation in the effective tax burdens and the inherent misallocation problems.
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Table 18  
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- only corporation taxes;  
weighted average of parent finance

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Table 18 considers the case in which the subsidiary is financed by new equity from the parent. Since the return from this investment is assumed to be paid to the parent as a dividend, this adds another ingredient to the cost of capital calculation: the taxation of such dividend flows. The differences between Tables 17 and 18 therefore reflect the taxation of the dividend receipts in the hand of the parent (and the German split rate system when Germany is the host country).

A number of (home) countries exempt such income in the hands of the parent: Austria, Belgium, Denmark, Finland, Luxembourg, the Netherlands, Sweden and Canada. For parent companies in these countries, in the absence of personal taxes the cost of capital when funding the foreign subsidiary through new equity is the same as when the subsidiary retain earnings.

Other countries operate a limited credit system: essentially credit is given for the foreign tax paid (in the host country); the home country levies further tax only if the home country tax exceeds that of the host country. In many cases, then, financing the foreign subsidiary by new equity and paying tax on the dividend receipts generates a higher cost of capital of the transnational investments. As a result the average cost of capital for inward investments (the average of each column) is higher in Table 18 than in Table 17.

Table 19 presents the case in which the parent lends to the subsidiary and subsequently receives an interest payment (and the return of capital). All the host countries permit the interest paid to be deductible from corporation tax, although some charge a withholding tax as interest is paid; all home countries tax the interest income, with a credit for any foreign tax levied.

Relative to the case of financing by retained earnings, there are two main differences. First, the income of a marginal investment is primarily taxed in the home country rather than the host country; this can increase or reduce the cost of capital depending on which country has the higher rate. Second, however, it is generally the case that the parent is able to claim interest deductibility on its own borrowing if that borrowing is used to finance lending to the subsidiary; this gives an advantage over providing equity finance to the subsidiary for those countries where interest deductibility is not permitted if the loan is used to support equity investment in the subsidiary. In general these factors tend to reduce the dispersion of costs of capital across different possible locations of investments.

The figures shown in Tables 17, 18 and 19 illustrate a large variation in the way that each country treats other countries. Thus the return required by a subsidiary of a parent country in one country depends crucially on where that subsidiary is located. This suggests that there are considerable incentives for companies to choose tax-favoured locations for their investments which may not otherwise be the most favourable location. Similarly, subsidiaries operating in a given country face different required rates of return depending on where their parent company is located. Moreover, these figures show that, in line with the analysis of domestic investments, there are differences in taxation which arise solely because of the way which the investment is financed.

B) The case of a highly profitable (infra-marginal) investment

The three following tables present EATR for transnational investments as defined above, whose profitability is now fixed at 20%. Table 20 shows the EATR when the investment is financed by retained earnings, Table 21 in the case of financing by new equity and Table 22 when the subsidiary is financed by borrowing from the parent.

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43 The taxation of dividends may in principle also reflect the withholding taxes charged by the host country; however, these have now been eliminated within the EU by the parent subsidiary directive, (COM(90)/435/EEC).
Table 20  
EATR when the subsidiary is financed with retained earnings.  
- only corporation taxes;  
- weighted average of parent finance

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Table 21  EATR when the subsidiary is financed with new equity
- only corporation taxes;  weighted average of parent finance

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Table 22  EATR when the subsidiary is financed with debt

- only corporation taxes; weighted average of parent finance
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Much of the discussion above regarding the cost of capital remains relevant for the case of the EATR. However, some additional factors are also now present.

In measuring the EATR it is assumed the investment is more profitable that is, extra-profit is generated by the subsidiary. This is paid to the parent in the form of dividend. Any tax liability associated with such a payment reduces its value to the parent and hence increases the EATR. In this case, the taxation of the dividend payments from the subsidiary to the parent does affect the EATR even when the subsidiary is financed by retained earnings. Further, since this tax rate varies according to the home country, the EATR on an investment in a specific host country may vary according to the home country of the parent, even when the subsidiary is financed by retained earnings. Of course, this is also true when the subsidiary is financed by new equity and debt.

Consequently, there is even more variation within each column in Table 20 than there is in the comparable Table 17 showing the cost of capital. When personal taxes are excluded, the main effect of the home country tax is through the tax rate; where the home country has a limited credit system, there is a positive tax on the dividend payment to the parent only if the home country tax exceeds the host country tax.

The variation within the rows of Table 20 also reflects home and host country taxation. Yet, the same host countries turn out to have high EATR as had high cost of capital: Germany has an average EATR of 43.0%, and France has an average EATR of 38.4%. At the other extreme, Sweden has an average of 22.9% and Italy an average of 28.0%. These would appear to be significant differences in the EATR facing companies in other countries choosing where to locate.

A similar pattern arises in Table 21, where the subsidiary is financed by new equity.

When the subsidiary is financed by debt, these differences are still considerable even if they are smaller. EATR ranges from 25.5% for Sweden as a host country to 36.0% for France as host country.

If the position of USA and Canadian investors is taken into account, the data tend to show that investments from these two countries - and from Canada in particular - into the EU are relatively more highly taxed than intra-EU investments. The worst situation for Canadian inbound investments is largely due to the weight of withholding taxes on dividends. Moreover, since the USA applies a foreign tax credit system, and Canada an exemption system, investments from the latter country retain the benefit of lower than Canadian rates in the host country. In general investments from countries which operate an exemption system benefit from a lower tax rate in the host country. Data (EMTR and EATR) related to foreign investment in Ireland from the USA and Canada clearly illustrates this.

In order to draw more general conclusions and notably to identify the impact of international tax regimes on the incentive to undertake transnational, as opposed to domestic, investments, it is useful to summarise the data and compare it with the data for domestic investments. This is done in the next section.
Allocation effects of international taxation

As shown in the previous section, issues of international taxation are very complex to deal with since they involve the interaction between national tax systems. One commonly used criteria to assess the allocation effects of international taxation is to capture the extent to which the tax treatment of transnational investments gives an incentive to undertake transnational, as opposed to domestic, investments. This is done by evaluating the tax treatment of cross-border investment flows against the criteria of capital import and capital export neutrality.

Capital export and capital import neutrality

Capital export neutrality (CEN) occurs when the tax system is neutral towards the export of capital since the investors face the same effective tax burden on income from similar investments, whether they invest in the domestic economy or abroad. In such situations the tax systems provide no incentives to invest at home rather than abroad, and vice versa. A regime of capital export neutrality therefore tends to ensure an efficient allocation of resources across countries.

CEN is achieved when investors are taxed on accrued worldwide income and receive full credit against domestic tax liabilities for all taxes paid abroad. A pure credit system with no limitation on the foreign tax credit and no deferral of domestic taxes on profits retained abroad would ensure capital export neutrality. Under such a regime, the free mobility of capital would tend to equate the effective tax burden across borders, because each investor would then also obtain the same after-tax rate of return on domestic and foreign investments. A cross-country equalisation of the rates of return before tax implies that no output gain can be made by reallocating capital from one country to another. It is worth noting that a pure credit system does not exist in any EU tax regime.

The importance of attaining capital export neutrality is well assessed in terms of economic welfare. It seems clear that if taxation distorts the location of productive activity, then goods may be produced at higher cost, which is likely ultimately to be borne by the consumer in terms of higher price. Thus the absence of capital export neutrality creates an economic loss to the extent that differences in the cost of capital and effective tax rates result in changes in behaviour. Moreover, capital export neutrality maximises the volume of output obtainable from any given global stock of capital.

Capital import neutrality (CIN) prevails when domestic and foreign suppliers of capital to any given national market obtain the same after-tax rate of return on similar investments in that market. A regime of capital import neutrality ensures that imported and domestic capital in each jurisdiction will compete on equal terms. Therefore, a regime of capital import neutrality would tend to guarantee an efficient international allocation of savings flows.

Provided that source countries do not practice tax discrimination between domestic and foreign investors operating in their jurisdiction, capital import neutrality will be attained if residence countries exempt all income from foreign source from domestic tax.

The importance of capital import neutrality has to be underlined in the context of the EU Internal Market. In fact, this concept is important when analysing the competition conditions faced by economic agents. CIN (as reflected in the exemption method) can ensure a level playing field for non resident companies and local companies operating in the same market. Moreover, an exemption system is simpler to administrate and implies less compliance costs than a pure credit system.

When capital income tax rates differ across countries, achievement of CEN implies different net returns to saving in different countries and will therefore tend to distort the international allocation of savings. By contrast, achievement of CIN would guarantee roughly identical after-tax rates of return to savings
for savers in different countries, but would distort the pattern of international investment by causing the
cost of capital to deviate from one country to another. Consequently the effect on welfare of attaining
one neutrality or the other, depends on the relative sensitivity of investment demand to the cost of capital
and of savings to the after-tax rate of return.

It is worth noting that capital export and import neutrality could be achieved simultaneously only in the
hypothesis that the effective tax burden on profit is identical across all countries, that is in presence of a
far-reaching tax harmonisation. This is clearly not the case today.

These concepts are both useful benchmarks by which to judge the efficiency effects of international tax
arrangements and a useful starting point to analyse international tax arrangements. The use of these
criteria may encourage policy makers to take a more global view of the benefits and costs of existing
international tax arrangements and proposed changes thereto.

Relevant economic measures: average cost of capital and EATR by country

A) The case of a marginal investment

Tables 23 summarises the cost of capital shown in Tables 17 to 19 and compares these costs with those
for domestic investments, in order to identify the impact of international tax regime on the incentive to
undertake transnational, as opposed to domestic, investments.
### Table 23: Average Cost of Capital by Country
- domestic, average inbound and outbound
- only corporation taxes
- average over sources of finance of subsidiary

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<td>Germany</td>
<td>7.3</td>
<td>7.0</td>
</tr>
<tr>
<td>Greece</td>
<td>6.1</td>
<td>6.4</td>
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<tr>
<td>Ireland</td>
<td>5.7</td>
<td>5.9</td>
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<tr>
<td>Italy</td>
<td>4.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>6.3</td>
<td>6.5</td>
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<tr>
<td>Netherlands</td>
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<tr>
<td>Portugal</td>
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<tr>
<td>Spain</td>
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<tr>
<td>Sweden</td>
<td>5.8</td>
<td>6.0</td>
</tr>
<tr>
<td>United Kingdom</td>
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<td>6.8</td>
</tr>
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<td>6.5</td>
</tr>
<tr>
<td>EU Standard Deviation</td>
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<td>0.6</td>
</tr>
<tr>
<td>Canada</td>
<td>./.</td>
<td>./.</td>
</tr>
<tr>
<td>USA</td>
<td>./.</td>
<td>./.</td>
</tr>
</tbody>
</table>

Note. These are averages across either host (for outbound) or home (for inbound) countries of an overall average cost of capital for each pair of home and host countries. This overall cost of capital is found by taking an unweighted average of each element of Tables 17, 18 and 19.

The first column presents the average cost of capital for domestic investments in each Member State, averaged over the 15 types of investments, using the base case weights. The second column presents the average cost of capital for inbound investments and the third column the average cost of capital for
outbound investments. The fourth and fifth columns present the dispersions respectively for inbound and outbound investment\textsuperscript{44}.

A comparison of the figures in the first three columns gives some indication of the effects of the tax systems on investment flows. Many factors will, of course, determine investment flows. Insofar as tax is of any importance, then if the required cost of capital when investing domestically is lower than when investing abroad, companies will prefer domestic operations (assuming, of course, that there are equal investment possibilities in each country). Whether this results in a net inflow of capital, depends on whether investment in that country is more attractive to foreign owned companies than investment in their own domestic economies or into other countries.

By computing the average required rate of return when investing in or from each country a lot of the information contained in Tables 17 to 19 is lost, in particular the variation between countries and source of finance. (Annex C presents detailed country tables showing the outbound and inbound cost of capital and EATR for the 15 investments analysed in this study). To compensate, the standard deviations (fourth and fifth columns) give some indication of the degree to which the international tax regime results in subsidiaries which operate in the same country face different effective tax rates according to the residence of the their parent company and the source of finance, and the extent to which the location of a subsidiary for a parent company and the source of finance may affect the effective tax rate. A low figure in the last column, for example, suggests that there is only a small dispersion across countries in the effective tax rate faced by a company when considering in which country to undertake an investment.

If the third column (outbound) were identical to the first column (domestic) and the fifth column (standard deviation of outbound) were full of zeros, this would imply that any company resident in a EU Member State would face (on average) the same cost of capital whether it invested at home or in any other Member State. If that applied generally in the EU, then location decisions of companies would not be affected by taxation. This situation represents capital export neutrality.

If the second column (inbound) were identical to the first column (domestic) and the fourth column (standard deviation of inbound) were full of zeros, this would imply that any company resident in a EU Member State or Canada or the USA would face (on average) the same cost of capital if it invested in a specific EU host country. This implies that companies choosing to locate in a specific location all face the same cost of capital, and hence, none has the benefit of a tax-induced competitive advantage over others. This situation represents capital import neutrality.

Table 23 clearly shows that neither capital export neutrality nor capital import neutrality are respected in the EU. On average outbound and inbound investments are somewhat more heavily taxed than domestic investments and, therefore, the additional components of the transnational system add somewhat to the marginal effective tax rate on investment.

However, these averages hide significant variations between Member States. The tables presented in section 6.2 showed ranges of variation of more than 30 percentage points. Moreover, the fact that the standard deviations are not zero indicates variations across potential host/home countries.

\textsuperscript{44} The average cost of capital for inbound investments is formed by first taking an unweighted overall average cost of capital for each pair of countries (home/host) in Tables 17, 18 and 19. That is, each type of finance of the subsidiary is given an equal weight. An unweighted average is then taken across the 14 (EU Member States only, i.e. excluding Canada and the USA) potential home countries for each host country. The standard deviation of this distribution of 14 elements is presented in the fourth column. The third and fifth column are equivalent, but treating each country listed as a home country rather than a host country.
As far as the case of outbound investments is concerned, the companies located in countries that have the highest domestic cost of capital and apply an exemption system are less heavily taxed when investing abroad and, in particular can benefit from a lower effective tax burden if they invest in a foreign subsidiary either through new equity or profit retention (see Tables 17 to 19). Thus, from the point of view of high tax countries, investments in low tax countries are more advantageous than domestic investment, and debt financing is the least attractive way to finance the subsidiary.

On the other hand, if the investor is located in countries which have the lowest costs of capital, on average, domestic investment is more attractive than transnational investment. It is worth noting that, when different sources of finance are considered, it is not always true that high tax countries are always unattractive and that it depends on the source of finance of the subsidiary. If the subsidiary is financed by debt, as a consequence of interest deductions the foreign profits are taxed at the lower domestic and not the foreign corporate profit rate (see Tables 20 to 22). This could imply a lower effective tax burden.

When inbound investments are taken into account, all countries, except Germany, have average cost of capital for inbound investments higher than that of domestic investment. Therefore, domestic companies have on average a competitive advantage over subsidiaries located in their country.
B) The case of a highly profitable (infra-marginal) investment

As with the cost of capital, it is useful to summarise the information in Tables 20 to 22 in order to assess how far away the EU tax regimes are from either capital export neutrality or capital import neutrality. Table 24 presents results for the EATR comparable to that in Table 23 for the cost of capital.

**Table 24 Effective Average Tax Rate by Country**
- domestic, average inbound and outbound
- only corporation taxes

<table>
<thead>
<tr>
<th>EATR</th>
<th>EU Average</th>
<th>EU Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Inbound</td>
</tr>
<tr>
<td>Austria</td>
<td>29.8</td>
<td>30.3</td>
</tr>
<tr>
<td>Belgium</td>
<td>34.5</td>
<td>34.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>28.8</td>
<td>29.5</td>
</tr>
<tr>
<td>Finland</td>
<td>25.5</td>
<td>26.5</td>
</tr>
<tr>
<td>France</td>
<td>37.5</td>
<td>37.8</td>
</tr>
<tr>
<td>Germany</td>
<td>39.1</td>
<td>38.5</td>
</tr>
<tr>
<td>Greece</td>
<td>29.6</td>
<td>30.6</td>
</tr>
<tr>
<td>Ireland</td>
<td>10.5</td>
<td>13.5</td>
</tr>
<tr>
<td>Italy</td>
<td>29.8</td>
<td>30.0</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>32.2</td>
<td>32.5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>31.0</td>
<td>31.4</td>
</tr>
<tr>
<td>Portugal</td>
<td>32.6</td>
<td>33.0</td>
</tr>
<tr>
<td>Spain</td>
<td>31.0</td>
<td>31.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>22.9</td>
<td>24.1</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>28.2</td>
<td>29.1</td>
</tr>
<tr>
<td>EU Mean</td>
<td>29.5</td>
<td>30.2</td>
</tr>
<tr>
<td>EU Standard Deviation</td>
<td>6.5</td>
<td>5.7</td>
</tr>
<tr>
<td>Canada</td>
<td>./.</td>
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</tr>
<tr>
<td>USA</td>
<td>./.</td>
<td>./.</td>
</tr>
</tbody>
</table>

Note. These are averages across either host (for outbound) or home (for inbound) countries of an overall average cost of capital. This overall cost of capital is found by taking an unweighted average of each element of Tables 20, 21 and 22.

This Table confirms the result of the previous section and in particular indicates that, on average, outbound investment is more heavily taxed than domestic investment. For Germany and France (and to a lesser extent Belgium), the EATR for outbound investment is substantially lower than for domestic investments. The standard deviation indicates that there are variations in potential host countries for each home country. As with the cost of capital, this indicates that the EU tax regime is some way from capital export neutrality.
The same is true for inbound investment, although in this case for every host country, except Germany, EATR on inbound investment is higher than that for domestic investments. Clearly, on average, on this measure the net impact of the taxation on international flows is to increase tax liabilities. There are again variations within each host country for the average EATR faced by companies resident in different home countries.

It is worth noting that the countries which show the highest differences between average domestic EATR and average outbound EATR are the countries which have the highest EATR and the highest profit tax rates on domestic investment (Germany, France, Belgium) and the countries which have the lowest EATR and the lowest profit tax rates on domestic investment (Ireland, Sweden and Finland). This seems to confirm that, even when the interactions of different tax regimes are taken into account, differences in national profit tax rates are of the utmost importance in determining the role of taxation in resource allocation.

The tax minimisation approach: "tax efficient" average cost of capital and EATR by country

The previous section showed that, on average, the interaction of the EU Member States taxation systems implies differences in the tax treatment of domestic investment compared with outbound or inbound investment and, therefore, that capital export or capital import neutrality is never attained. But, as already explained, a lot of specific information for each Member State is lost when computing overall averages.

In particular, considering the different treatment across Member States of different sources of finance, it is realistic to suppose that parent companies would try to minimise their tax burden by choosing the most convenient source of finance of the subsidiary. If one particular source of finance is tax disadvantaged, then it would not be used.

This section considers how the international tax regime affects the effective tax burden faced by a company willing to invest abroad when it chooses the most tax-efficient means of financing the subsidiary⁴⁵.

A) The case of a marginal investment

Table 25 shows the averages of the cost of capital across host countries and across home countries, based on the most efficient way to finance the subsidiary and it is comparable to Table 23.

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⁴⁵ The analysis does not take into account the “tax efficient” means of financing the parent company. This is partly to provide measures which are comparable to the analysis of domestic investments. But it is further based on the notion that there exist constraints on the use of different forms of finance by a parent firm. However, in financing a wholly-owned subsidiary, the position is quite different. The financing of a parent company is subject to the constraints imposed by third party financiers—both equity and debt providers. It is reasonable to suppose that the parent firm has considerably more discretion concerning the financing of a subsidiary because it can provide either equity or debt itself. Where debt financing is provided by third parties it is reasonable to assume that they also take into account the standing of the parent company. Accordingly a parent company is more able to take advantage of tax advantages associated with specific forms of finance. It has to be considered, however, that the use of specific forms of finance may be restricted by Member States’ legislation, such as thin-capitalisation rules for debt financing and CFC legislation for the use of equity financing. These restrictions are not taken into account here.
Table 25  "Tax Efficient" Average Cost of Capital by Country
- domestic, average inbound and outbound
- only corporation taxes
- only most favoured source of finance for the subsidiary

<table>
<thead>
<tr>
<th>Cost of Capital</th>
<th>EU Average</th>
<th>EU Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Inbound</td>
</tr>
<tr>
<td>Austria</td>
<td>6.3</td>
<td>6.0</td>
</tr>
<tr>
<td>Belgium</td>
<td>6.4</td>
<td>5.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>6.4</td>
<td>6.1</td>
</tr>
<tr>
<td>Finland</td>
<td>6.2</td>
<td>5.9</td>
</tr>
<tr>
<td>France</td>
<td>7.5</td>
<td>7.0</td>
</tr>
<tr>
<td>Germany</td>
<td>7.3</td>
<td>5.7</td>
</tr>
<tr>
<td>Greece</td>
<td>6.1</td>
<td>5.7</td>
</tr>
<tr>
<td>Ireland</td>
<td>5.7</td>
<td>5.0</td>
</tr>
<tr>
<td>Italy</td>
<td>4.8</td>
<td>4.3</td>
</tr>
<tr>
<td>Luxembourg</td>
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<td>5.9</td>
</tr>
<tr>
<td>Netherlands</td>
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<td>6.1</td>
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<tr>
<td>Portugal</td>
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<td>6.1</td>
</tr>
<tr>
<td>Spain</td>
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</tr>
<tr>
<td>Sweden</td>
<td>5.8</td>
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</tr>
<tr>
<td>United Kingdom</td>
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<td>6.3</td>
</tr>
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<td>EU Mean</td>
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</tr>
<tr>
<td>EU Standard Deviation</td>
<td>0.6</td>
<td>0.6</td>
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<tr>
<td>Canada</td>
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<tr>
<td>USA</td>
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</tr>
</tbody>
</table>

Note. These figures are based on the most tax-efficient means of financing the subsidiary - that is retained earnings, new equity or debt. This is found by taking the minimum cost of capital for each element in Tables 17, 18 and 19. Averages are then constructed across either host (for outbound) or home (for inbound) countries.

This approach generates a rather different picture, even if CEN and CIN are still not respected, compared to the situation illustrated in Table 23.

In general, domestic investments are more heavily taxed than outbound and inbound investments. This suggests that, to the extent that companies are free to choose the most tax-favoured form of investment, then - other things being equal- the international tax system works such that foreign multinationals operating in a host country are likely to face a lower cost of capital than domestic companies.
This suggests also that, as already commented on in section 6.2, from the point of view of a foreign investor, so-called high tax countries are not always unattractive as a business location and that companies resident in low tax countries may take advantage to invest abroad instead of at home.

It is worth noting that it has been assumed here that the company is able to use the most "tax efficient" way of financing only in the case of transnational investment. This hypothesis is realistic considering that a multinational company has, in general, greater flexibility when financing its subsidiary than a domestic company (see footnote 44).

The relevant component that results in distortions with respect to cross border location and financing decisions is, above all, the profit tax rate. In fact, if there were only minor differences between the tax rates, there would be less incentives to use either debt (e.g. for investors located in low tax countries) or equity (investors located in high tax countries) for the financing of foreign investment. However, the tax base can have a greater impact on the cost of capital in particular situations (e.g. favourable depreciation regimes) as is the case, for example, in Belgium, Greece, Italy and Sweden.

It should be noted that Table 25 shows "extreme" situations and that national tax regimes may impose restrictions on the use of particular sources of finance.

Moreover, Table 25 shows higher dispersions than Table 23. This means that the averages shown in Tables 25 hide even greater variations across countries.

B) The case of a highly profitable (infra-marginal) investment

Table 26 shows the averages of the EATR across host countries and across home countries based on the most efficient way to finance the subsidiary, and is thus comparable to Table 24.
Table 26  "Tax Efficient" Effective Average Tax Rate by Country  
- domestic, average inbound and outbound  
- only corporation taxes  
- only most favoured source of finance for the subsidiary

<table>
<thead>
<tr>
<th>EATR</th>
<th>EU Average</th>
<th>EU Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Inbound</td>
</tr>
<tr>
<td>Austria</td>
<td>29.8</td>
<td>28.7</td>
</tr>
<tr>
<td>Belgium</td>
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<tr>
<td>Denmark</td>
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<td>27.8</td>
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<tr>
<td>Germany</td>
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<td>34.9</td>
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<td>Greece</td>
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<td>28.4</td>
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<tr>
<td>Ireland</td>
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<tr>
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<td>Luxembourg</td>
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<td>Netherlands</td>
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</tr>
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</tr>
<tr>
<td>Spain</td>
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<td>29.8</td>
</tr>
<tr>
<td>Sweden</td>
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<td>22.3</td>
</tr>
<tr>
<td>United Kingdom</td>
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<td>27.4</td>
</tr>
<tr>
<td>EU Mean</td>
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<td>28.1</td>
</tr>
<tr>
<td>EU Standard Deviation</td>
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<td>5.9</td>
</tr>
<tr>
<td>Canada</td>
<td>./</td>
<td>./</td>
</tr>
<tr>
<td>USA</td>
<td>./</td>
<td>./</td>
</tr>
</tbody>
</table>

Note. These figures are based on the most tax-efficient means of financing the subsidiary - that is retained earnings, new equity or debt. This is found by taking the minimum cost of capital for each element in Tables 20, 21 and 22. Averages are then constructed across either host (for outbound) or home (for inbound) countries.

This Table indicates that, if the source of finance is chosen so as to minimise the EATR, then, on average in the EU the domestic EATR is very close to the outbound and inbound EATR. However, the fact that the standard deviations are not zero, and are even relatively high, indicates that international regimes are far from neutral and that CEN and CIN are not respected.

While a number of countries have EATRs broadly similar for domestic, outbound and inbound investments, for some other countries they are markedly different for domestic and outbound investments. This is the case in high profit rate countries and low profit rate countries (as was also the case in Table 24).
Restrictions on imputation systems for transnational investments

The previous analysis was based on the assumption that the parent company has sufficient undistributed domestic profit that any additional dividend which it wishes to pay as a result of the additional investment in the subsidiary can, for tax purposes, be deemed to be a payment from domestic income. In this section the situation is considered in which dividend payments are paid from the foreign source of income (the subsidiary) to the shareholders. In this way another element is introduced: the domestic treatment of foreign source income.

In Finland and France, dividend payments deemed to be paid from foreign source income are subject to an equalisation tax. In 1999 in Germany, such dividend payments did not qualify for the imputation tax credit. In all three cases, then, there can be in effect an additional tax on outbound investments. In fact, compared to the situation shown in Table 23, in Finland and France, the average cost of capital for outbound investment increases substantially - from 6.3% to 7.8% for Finland and from 6.2% to 8% for France. There is a smaller rise for Germany: from 6.3% to 7%.

As far as the EATR is concerned, the rise is even more spectacular. Compared with the situation shown in Table 24, there is a substantial rise in the average EATR for outbound investment from Finland and France - from 29.7% to 46.7% in Finland and from 29.4% to 48.9% in France. Again, the rise for outbound investments from Germany is smaller - from 22.2% to 33.2%. In the case of Finland, this exacerbates the average discrimination against outbound investments. In Germany it reduces the average discrimination in favour of outbound investment. And in France it turns the discrimination from being in favour of outbound investment to being in favour of domestic investment.

Effects of the German tax reform on international investments

The purpose of this section is to examine the impact of the German tax reform on international investment. First, the case of inbound investment to Germany and outbound investment from Germany are considered. Then, the impact of the German tax reform on the overall means and standard deviations in the EU is analysed.

A) The case of a marginal investment

Table 27 presents estimates of the average cost of capital for domestic investment, inbound investment to, and outbound investment from, Germany. It also presents the standard deviations for both inbound investment and outbound investment and the average position for the EU as a whole. It does so for the two cases in which the subsidiary is financed by an average of retained earnings, new equity and debt, and for the case in which the most tax efficient form of financing is chosen. The top half of the Table summarises the position before the reform. These are taken from Tables 23 and 25 above. The bottom half of the table summarises the position after the reform.

The domestic position is the same as shown in more detail in Section 4. The position for inbound investment into Germany is fairly similar to the position for domestic investment. That is investment financed by retained earnings in the subsidiary will tend to face a lower cost of capital due to the lower tax rate. But where the subsidiary is financed by debt the cost of capital tends to increase slightly, and when it is financed by debt, it tends to increase rather more substantially, due to the lower tax rate and hence higher cost of paying interest. The net impact is a very small reduction in the average cost of capital for inbound investment averaged across the three types of finance. However, the average cost of capital for domestic investment falls rather more, and so post-reform inbound investment will have a very slightly higher cost of capital than domestic investment (instead of a slightly lower cost of capital).
The average cost of capital for outbound investment, again averaged over the three sources of finance of the subsidiary, is virtually unchanged by the tax reform. This is partly because Germany largely exempts foreign source dividends. The lower tax rate on the receipt of interest from subsidiaries tends to reduce the cost of capital. However, this is offset by the reduction in the value of the deductibility of interest paid by the parent, and the abolition of the split rate system, which pre-reform gave an advantage to new equity financing of the parent.

However, this is only true on the assumption that all distributions are financed from the domestic income of the corporation. If we assume instead that distributions are financed from foreign source income, then the discrimination of foreign investment which was analysed in the section 6.3 above no longer exists - because under the reformed system, distributions are treated in the same way irrespective whether they are financed from domestic or foreign profits.
Table 27  Average Cost of Capital for Germany and EU average  
- domestic, average inbound and outbound  
- only corporation taxes

<table>
<thead>
<tr>
<th>Cost of Capital</th>
<th>EU Average</th>
<th>EU Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Inbound</td>
</tr>
<tr>
<td>BEFORE REFORM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average over sources of finance of subsidiary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>7.3</td>
<td>7.0</td>
</tr>
<tr>
<td>EU Mean</td>
<td>6.3</td>
<td>6.5</td>
</tr>
<tr>
<td>EU Standard Deviation</td>
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<td>0.6</td>
</tr>
<tr>
<td>Tax Efficient source of finance of subsidiary</td>
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<td></td>
</tr>
<tr>
<td>Germany</td>
<td>7.3</td>
<td>5.7</td>
</tr>
<tr>
<td>EU Mean</td>
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</tr>
<tr>
<td>EU Standard Deviation</td>
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<td>0.6</td>
</tr>
<tr>
<td>AFTER REFORM</td>
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<td></td>
</tr>
<tr>
<td>Average over sources of finance of subsidiary</td>
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<td></td>
</tr>
<tr>
<td>Germany</td>
<td>6.8</td>
<td>6.9</td>
</tr>
<tr>
<td>EU Mean</td>
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</tr>
<tr>
<td>EU Standard Deviation</td>
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</tr>
<tr>
<td>Tax Efficient source of finance of subsidiary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>6.8</td>
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<td>EU Mean</td>
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<td>EU Standard Deviation</td>
<td>0.6</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Note. These are averages across either host (for outbound) or home (for inbound) countries of an overall average cost of capital for each pair of home and host countries. This overall cost of capital is found by taking an unweighted average of each element of Tables 17, 18 and 19.

There is a greater effect on the tax efficient form of financing of the subsidiary. This is because of the reduction in the value of interest deductibility. Pre-reform, the most tax advantageous form of finance for a German subsidiary was debt. Reducing the tax rate reduces this advantage, so that the tax efficient cost
of capital rises, and the tax efficient form of finance may in any case also change. The average cost of capital for the tax efficient form of the outbound investment also rises.

However, these changes in Germany are not large on average. In no case does the average cost of capital change by more than one half of one percent. As a result, the position for the EU as a whole is virtually unchanged.
B) The case of a profitable (infra-marginal) investment

Table 28  Average EATR for Germany and EU average  
- domestic, average inbound and outbound 
- only corporation taxes

<table>
<thead>
<tr>
<th>EATR</th>
<th>EU Average</th>
<th>EU Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>Domestic</td>
<td>Inbound</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BEFORE REFORM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average over sources of finance of subsidiary</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>39.1</td>
<td>38.5</td>
</tr>
<tr>
<td>EU Mean</td>
<td>29.5</td>
<td>30.2</td>
</tr>
<tr>
<td>EU Standard Deviation</td>
<td>6.5</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Tax Efficient source of finance of subsidiary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>39.1</td>
<td>34.9</td>
</tr>
<tr>
<td>EU Mean</td>
<td>29.5</td>
<td>28.1</td>
</tr>
<tr>
<td>EU Standard Deviation</td>
<td>6.5</td>
<td>5.9</td>
</tr>
<tr>
<td><strong>AFTER REFORM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average over sources of finance of subsidiary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>34.8</td>
<td>35.6</td>
</tr>
<tr>
<td>EU Mean</td>
<td>29.2</td>
<td>30.6</td>
</tr>
<tr>
<td>EU Standard Deviation</td>
<td>6.1</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>Tax Efficient source of finance of subsidiary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>34.8</td>
<td>34.2</td>
</tr>
<tr>
<td>EU Mean</td>
<td>29.2</td>
<td>28.7</td>
</tr>
<tr>
<td>EU Standard Deviation</td>
<td>6.1</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Note. These are averages across either host (for outbound) or home (for inbound) countries of an overall average cost of capital for each pair of home and host countries. This overall cost of capital is found by taking an unweighted average of each element of Tables 17, 18 and 19.
Table 28 presents a similar analysis to the one in Table 27, this time for the EATR. For inbound investment the EATR tends to fall for investment financed by retained earnings and new equity, and to rise for investment financed by debt. Overall, the reduction in the tax rate causes the average EATR for inbound investment financed by an average of the three types of finance to fall, although by less than the fall in the average domestic cost of capital.

However, there is a significant rise in the EATR on outbound investment. Pre-reform the EATR on outbound investment was considerably lower than the EATR on domestic investment, thereby inducing German firms to invest abroad. This rise can be traced largely to the reduction in the value of the deductibility of interest paid by the parent and the abolition of the split rate system. However, as with the cost of capital, this is only true for the case in which dividends are paid from domestic source income.

A similar pattern is found for the tax efficient financing of the subsidiary, both for inbound and outbound investment. The larger changes in the EATR as a result of the reform create some impact on the overall EU averages, as shown in the Table.

**Neutralities and distortions in transnational investments: concluding remarks from the international analysis**

The results for the international case, show that the co-existence of the Member States tax regimes may have an influence on transnational investment patterns and financing decisions.

The data arising from the quantitative analysis, and notably from Tables 17 to 22, illustrate a variation in the way in which each country treats other countries. Thus, the effective tax burden of subsidiaries of a parent company in one country depends crucially on where that subsidiary is located. The range of variation in the effective tax burdens of subsidiaries located in different host countries can rise above 30 points regardless of the method of financing of the subsidiary. This provides an incentive for companies to choose the most tax-favoured location for their investment, which may not be the most favourable location in absence of taxes. Similarly, subsidiaries operating in a given country face different effective tax burdens depending on where their parent company is located. Even in this case the range of variation can reach more than 30 points.

As a result, capital export neutrality and capital import neutrality are never respected and the EU averages hide considerable variations across potential host/home countries. This implies that tax arbitrage may have an important impact for companies considering in which country to undertake an investment and that subsidiaries which operate in the same country face different effective tax rates according to the residence of their parent.

Moreover, to the extent that companies are free to choose the most tax-favoured form of investment, then the international tax system works such that foreign multinationals operating in a host country are likely to face a lower cost of capital than domestic companies.

The spread observed between domestic, outbound and inbound investments is the result of complex interactions between different national tax regimes and cannot be explained by just one feature of taxation. However, as was the case for domestic investment, the analysis presented above tends to show that the relevant component that is most likely to be responsible for distortions with respect to incentives for cross-border location and financing decisions is the national profit tax rate, although the tax base may have a greater impact in particular, specific situations.
As said already in commenting on the results of the domestic analysis, neutrality of taxation systems is one of the goals of taxation policy and this has to be balanced against other legitimate goals. However, to the extent that the absence of neutrality determines movements of capital which are not justified by economic efficiency and that involve welfare losses, the picture presented in this section deserves attention. To what extent differences of the considerable size observed in this quantitative analysis and the consequent possible losses in welfare can be justified by the need to maintain national autonomy in view of national goals attached to taxation policy is, ultimately, a matter of political choice.

THE IMPACT OF HYPOTHETICAL POLICY SCENARIOS IN THE EU

Purpose of the simulations

The previous sections have clearly shown that the actual tax treatment of investment strongly differs across countries in the EU. In particular, the effective tax burden for cross-border investments in the EU considerably differs according to the home country of the parent companies and the location of their foreign subsidiaries.

This situation is not optimal with regard to the proper functioning of the Internal Market. Indeed, the absence of capital export neutrality may lead to distortions in the international allocation of investment as, ceteris paribus, investments may take place not in the lowest cost locations but in the lowest tax locations. This in turn potentially limits growth in productivity and employment in the EU.

It is therefore particularly useful to consider how the measures of the cost of capital and effective tax rates presented above would be different in the event of various hypothetical tax policy scenarios.

In what follows, 15 hypothetical policy scenarios are considered. Each of the simulations is based on a particular element of the tax regimes being harmonised across the EU. This helps to identify the importance of specific features of tax regimes, notably for capital export and capital import neutrality. The simulations are divided into three groups (see Box 8). The first group of simulations examines the impact of elements of the "domestic" corporation tax regime, that is the statutory tax rate and the value of capital allowances. The second group turns to elements of the "international" corporation tax regime, such as the treatment of interest payments from one Member State to another, and the taxation of income received in the home country. The third group examines the relationship between corporation tax and personal taxes.

The impact of the hypothetical policy scenarios considered here of course depends on the tax treatment of domestic, inward and outward investment, and on the specific features of each of the tax systems that have been presented above. In this respect, it should be noted that, as before, the simulations are based on the tax regimes as they existed in 1999 and which generally are quite similar to the situation in 2001. However, for Germany, simulations explicitly take into account the situation for 2001, in order to fully incorporate the recent tax reform. Contrary to the limited changes in other EU countries, reforms in Germany are such that basing simulations on the pre-reform situation could modify somewhat the global results of hypothetical reforms.

An exhaustive analysis of every possible case is not provided here for the sake of conciseness. Instead, only the most striking results are presented in order to highlight some of the pros and cons of the various tax reforms envisaged in part IV. More detailed results can be found in Annex F.
### Box 8
**Definition of simulations**

**A. Domestic Elements of Corporation Tax**

1. **Common corporation tax rate**, incl. surcharges. Rate is EU average of 32.28%.
2. Common corporation tax rate, incl. surcharges and local taxes. Rate is EU average of 33.84%.
3. Common corporation tax rate, incl. surcharges and local taxes. Rate is 25%.
4. **Band of corporation tax rates**, incl. surcharges and local taxes. Rates permitted between 25% and 35%. Countries outside this band move to nearest limit.
5. **Harmonisation of capital allowances.** Common rules for depreciation, inventories and investment incentives.

**B. International Elements of Corporation Tax**

7. **Abolition of withholding taxes** on interest paid by subsidiary to parent within EU.
8. **Limited credit system** for foreign source dividends received by parent from EU subsidiary. No discrimination in imputation systems against foreign source income originating in the EU.
9. **Full credit system** for foreign source dividends and interest received by parent from EU subsidiary. No discrimination in imputation systems against foreign source income originating in the EU.
10. **Exemption for foreign source dividends** received by parent from EU subsidiary. No discrimination in imputation systems against foreign source income originating in the EU.
11. **Taxation according to parent country rules.** Subsidiary taxed using the tax base of the home country of the parent but the tax rate of the host country. No interest deductibility by the subsidiary. No taxation of foreign source income received by parent. No discrimination in imputation systems against foreign source income originating in the EU.

**C. Relationship of Personal and Corporate Taxes**

12. **Classical system.** Double taxation of dividends. Personal tax rates for taxpayers (not including zero-rated shareholders) set to highest income tax rate on labour income. Equalisation taxes abolished. Capital gains taxes and personal property tax rates unchanged from base case.
13. **Full imputation system** for dividends paid out of domestic and EU foreign source income. Tax credit set to parent’s corporation tax rate. Otherwise as 12.
14. **Shareholder relief system.** Personal tax rates for taxpayers (not including zero-rated shareholders) set to 50% of highest income tax rate on labour income. Otherwise as simulation 12.
15. **Comprehensive Business Income Tax.** Interest deductibility abolished. All personal tax rates set to zero. Exemption for dividends and interest paid by subsidiary to parent within EU.
Scenarios involving domestic elements of corporation tax

The Base Case

A number of simulations based on harmonization or approximation of the statutory corporate tax rate and the definition of the tax base are considered first. In the hypothetical policy scenarios listed in Part A of Box 6, the international elements of tax regimes - such as withholding taxes and the taxation of foreign source income - and the personal tax regimes are left unchanged.

The first row of Table 29 reproduces the average across the 15 EU Member States for the EATRs and the cost of capital as well as the standard deviation of the distribution across the 15 EU Member States in the current situation (including the German reform). The subsequent rows in the Table show how these summary measures change in the presence of various hypothetical policy scenarios.

As shown in section 6 above, the existing system (the “Base Case”) clearly does not exhibit either capital export neutrality or capital import neutrality. For the measures based on the average source of financing of the subsidiary for outbound and inbound investments, the average cost of capital is only slightly higher than the average domestic cost of capital. The same is true of the average EATR. However, these averages hide considerable variations across countries, which are summarised in the figures for the standard deviations for both inbound and outbound investment. As explained in more detail in section 6.3, the figure for standard deviation for outbound investment expresses the average deviation in the cost of capital or EATR for an investment made in 14 potential host countries by a parent company based on their territory. The standard deviation summarises the variability in the tax treatment of foreign investments across the EU. It is therefore the focus of the analysis of the impact of hypothetical reforms presented below.

Comparing inbound and outbound investment, it is clear that there is significantly more variation across potential host countries for a company based in a specific home country compared to the variation across potential home countries of an investment taking place in a specific host country, i.e. standard deviation for outbound investment is higher than that for inbound investment. The Base Case therefore suggests that the EU tax regime is closer to exhibiting capital import neutrality than capital export neutrality. As underlined in section 6.3, the absence of capital export neutrality can give rise to economic inefficiencies.

The following sections discuss in turn the hypothetical tax policy scenarios.
TABLE 29  Summary of Simulation Results: basic results for simulations of domestic elements of corporation tax
- cost of capital and EATR
- average and standard deviation across 15 EU Member States
- corporation taxes only; distributions by parent out of domestic earnings
- weighted average of parent finance; average and tax efficient subsidiary finance

<table>
<thead>
<tr>
<th>Mean Standard Deviation</th>
<th>Weighted Average over Sources of Finance of the Subsidiary</th>
<th>Most Tax Efficient Way of Financing the Subsidiary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost of Capital</td>
<td>EATR</td>
</tr>
<tr>
<td></td>
<td>Domestic</td>
<td>Inbound</td>
</tr>
<tr>
<td>Base Case</td>
<td>6.3</td>
<td>6.5</td>
</tr>
<tr>
<td>1 Common CT rate, excl Local taxes, at EU mean</td>
<td>6.4</td>
<td>6.6</td>
</tr>
<tr>
<td>2 Common CT rate at EU mean</td>
<td>6.4</td>
<td>6.6</td>
</tr>
<tr>
<td>3 Common CT rate of 25%</td>
<td>6.0</td>
<td>6.1</td>
</tr>
<tr>
<td>4 Band of CT rates Around EU mean</td>
<td>6.2</td>
<td>6.4</td>
</tr>
<tr>
<td>5 Common tax base</td>
<td>6.3</td>
<td>6.5</td>
</tr>
<tr>
<td>6 Common tax base, with Economic depreciation</td>
<td>6.9</td>
<td>7.0</td>
</tr>
</tbody>
</table>

1. The mean EU tax rates used in the simulations are: (1) 32.28% (2) 33.84% (3) rates between 25% and 35%.

2. The allowances rates and valuations in simulation 5 are: (a) machinery - declining balance at 2 times straight line over 7 years. (b) buildings – straight line at 4%. (c) intangibles – straight line at 7 year’s life. (d) Inventories – LIFO. The rates in simulation 6 are the assumptions regarding true economic depreciation rates set out in Appendix B.
Approximation or harmonisation of tax rates

The first four simulations consider cases of approximation or harmonisation of the statutory tax rates. At one extreme, a full harmonisation of the rates is considered (scenarios 2 and 3). This implies setting a common statutory rate, including surcharges and local taxes, at the same level in all the Member States. However, an approximation of tax rates could exclude local taxes. This case of partial harmonisation is considered in scenario 1. At the other extreme, a limited approximation of the rates via the setting of a band of permitted tax rates is considered (scenario 4).

Three main conclusions can be drawn from this set of simulations:

- First, unsurprisingly, an approximation of the statutory rates leads to a reduction in the dispersion of EATRs and the cost of capital across the Member States for all the types of investment considered in the four simulations. This result is mostly due to the fact that those countries with the more extreme average costs of capital move towards the middle of the distribution, with a consequent reduction in the standard deviation.

  As the various simulations show, the changes in the EATR dispersion tend to be greater than changes in the dispersion of the cost of capital. The scale of the differences in the impact on the cost of capital and the EATR reflect the differences in these two measures, discussed above. In particular, since the EATR measures the effect of tax on a more profitable investment, the importance of allowances is rather less than it is for the cost of capital, and so the impact of the statutory tax rate is correspondingly greater.

  This result is fundamental. Indeed, concretely it implies that a consequence of the approximation of the statutory rates in the EU is an increased capital import neutrality. In other words, there is less variation in the costs of capital and the EATRs faced by parents from alternative home countries choosing to locate a subsidiary in the same host country. Moreover, the differences between the potential locations faced by a parent in a specific country in simulations 1 to 4 are lower than under the current system, implying also a movement towards capital export neutrality.

  To illustrate why this happens suppose there is complete harmonisation of the tax rate in the EU. If all countries have the same statutory tax rate, then the distinction between, say, taxing foreign source dividend income with a limited credit system as opposed to an exemption system would disappear. In the absence of personal taxes, equalising statutory corporate tax rates is therefore close to introducing source country taxation for equity financed investment - with each source (ie. host) country having the same rate of tax. This clearly corresponds to a move towards capital import neutrality. It is worth noting, however, that home country taxation still matters in some cases. For example, several countries disallow interest payments made by the parent if the loan is used to finance outbound investment. Also, some countries impose local taxes on interest receipts from the subsidiary. Finally, some countries do not operate a pure exemption system.

  The above analysis is also true for debt financed investment: the rate at which the subsidiary receives relief for the payment of interest to the parent is the same as the rate at which the parent pays tax on the interest receipt. In this case, however, there may also be withholding taxes on interest, which may differ according to the home country.

- Second, the reduction in the dispersion of EATRs and the cost of capital is a function of the degree of approximation of the statutory tax rates across the Member States. A full harmonisation of the tax rates leads to a lower dispersion of EATRs and costs of capital than a partial harmonisation, and the latter has a larger impact than the setting of a tax rates band.
The comparison of scenario 1 with scenario 2 easily illustrates that result. Indeed, one can see that imposing identical local taxes in addition to a basic common corporate tax rate, moves the overall position within the EU still closer to source-based taxation, as there is then no difference in statutory tax rates between countries. As would be expected, the results are broadly similar in the two cases. However, the most striking difference between simulations 1 and 2 is that the standard deviation of EATRs across host countries for outbound investment falls further. This again reflects the greater dependence of the EATR on the statutory tax rate. While significant differences in the cost of capital across potential host locations is still strongly influenced by the definition of allowances (which are still allowed to differ between countries), allowances are rather less important for the EATR.

- Third, in the partial analytical framework of this study, driving down an already common tax rate would have little impact on economic efficiency. It is mostly by reducing the dispersion of effective tax rates that gains in economic efficiency can be realised.

This is illustrated by a comparison of scenarios 2 and 3. The only difference between the two simulations lies in the statutory rate which is imposed to Member States (25% instead of 33.84%). Unsurprisingly, choosing a lower rate reduces the average cost of capital and the average EATR for all forms of investment: domestic, inbound and outbound. For example, the average domestic cost of capital across all countries falls from 6.4 to 6.0, and the average domestic EATR falls from 30.0% to 22.4%. Similar falls occur for inbound and outbound investment. However, the dispersions of both measures is virtually unchanged from the previous case of a higher statutory tax rate. This is true of the dispersion of domestic measures across each countries, the dispersion across possible locations for outbound investment and the dispersion across possible home countries for inbound investment (although in this case there is a small reduction in the dispersion of the average EATR for the case of the average source of subsidiary financing).

Comparing simulation 3 with simulation 2 is nevertheless illuminating. Indeed, a large part of the discussion in this study is concerned with economic inefficiencies arising as a result of differences in taxation between types of investment, or between countries. A process of tax competition which simply drove down an already common tax rate (for example, comparing this simulation with the previous one) would have little impact on economic efficiency: it is only by reducing the dispersion of effective tax rates that gains in economic efficiency can be realised.

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**Box 9: The impact of the equalisation tax in Finland and France**

Finland and France impose an equalisation tax on distributions from foreign source income, to ensure that any tax credit available to the shareholder is matched by a tax payment to the home government. In the simulations it is generally assumed that parent companies resident in these countries can distribute dividends from domestic source income, in which case these special rules do not apply. Here we investigate what happens to the results in the case in which parent companies in Finland and France are required to make distributions from foreign source income. That is, we assume that the marginal dividend in each period is financed from foreign source earnings, and is therefore subject to the equalisation tax.

In examining the impact of the hypothetical policy scenarios under this alternative assumption, most of the preview conclusions continue to hold. The only significant difference in the pattern of results is that the average standard deviation of costs of capital and EATRs for inbound investment is higher both in the Base Case and in each of the simulations. Although the cost of capital and EATR on inbound investment from other countries may fall as a results of some of the reforms, it does not fall so sharply for investment from Finland and France. These features of the tax systems therefore move the overall EU tax regime further away from both capital export neutrality and capital import neutrality.
**Harmonisation of capital allowances**

A number of the remedies to tax obstacles suggest an approximation or even a harmonization of the tax bases across the Member States. This is in particular so in the case of comprehensive options, such as those presented in Part IV. It is therefore interesting to examine the impact of harmonising the main elements of the tax base taken into account in the model, namely the rules for depreciation of assets and for inventories (see Box 4 in section 3.2).

Simulation 5 presents the impact of a **harmonization of capital allowances**. Allowances are assumed to take the following values in every EU Member State:

- machinery - declining balance at 2 times straight line over 7 years
- buildings - straight line at 4%
- intangibles – straight line at 7 years life
- inventories – LIFO valuation allowed
- financial assets - zero.

All other aspects of EU tax regimes - including the statutory rate and other aspects of the tax base - are as in the existing systems discussed above. This falls well short of proposals to create a consolidated tax base throughout the EU, where any individual company would need to calculate its taxable profits only according to one set of rules.

The results of this simulation show that harmonising the capital allowances has almost no impact on the average cost of capital or the average EATR. The averages and standard deviations shown in Table 29 are almost identical to the Base Case. If anything there is a slightly greater dispersion of EATRs across both host and home countries. This may reflect that tax regimes are designed as a whole - a high tax rate tends to go with a more generous structure of allowances and vice versa, a conclusion already made in section 4. Harmonising only allowances may increase differences in effective tax rates between countries, unless such a reform is accompanied by an approximation in the tax rates. Furthermore, this reform has only small effects in any Member State. Part of the reason for this result is that allowance rates are already broadly similar throughout the EU.

Going one step further, simulation 6 also examines the impact of a partial harmonization of the base including, this time, depreciation rates set at the assumed rate of **true economic depreciation**. Such a simulation is interesting for two reasons. First, it enables a comparison of the depreciation assumptions underlying the tax systems with the assumed true economic depreciation. It then gives an indication of the tax incentives linked to depreciation for different types of assets. Second, it gives useful indications of the possibly distortive impact on the allocation of investments of the deprecation rules in the Member States.

Setting values for allowances in line with what is assumed to be true economic depreciation rates gives almost the same basic results as in simulation 5. However, a slight increase in the average costs of capital and EATRs compared to this simulation and to the Base Case can be observed. To the extent that the estimates of depreciation used for the allowances are closer to true values, this would suggest that, on

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46 In common with the rest of the report, the allowances are assumed to take the following values: machinery - declining balance at 17.5%; buildings - declining balance at 3.1%; intangibles - declining balance at 15.35%; inventories - LIFO valuation allowed; financial assets - zero.
average, EU tax regimes are relatively generous in their choice of capital allowances. The standard deviations also tend to be slightly higher. The conclusion from the previous simulation - no discernible gain in economic efficiency from harmonising the tax base - therefore would also apply even if capital allowances were set closer to true economic depreciation.

**Box 10: Domestic reforms with personal taxes**

Simulations 1 to 6 have also been considered in the presence of personal taxes (see appendix F). As earlier in the report, it has been assumed that the company maximises the wealth of a resident, possibly tax-paying, shareholder, taking into account personal taxes on dividends, interest and capital gains.

The actual results presented below are based on an unweighted average over three types of shareholder (a zero-rated shareholder, a non-qualified top-rate shareholder, and a qualified top-rate shareholder) for the two following cases: (a) the parent distributes all dividend payments out of domestic source income, and (b) at the margin the parent distributes dividend payments from foreign source income.

As explained in section 4, compared to the Base Case, the costs of capital are lower on average, and the EATRs slightly higher, when personal taxes are taken into account. There also tend to be higher standard deviations especially for inbound investment. This is true for both cases (a) and (b). In fact, for case (a), unlike the case in Table 29, the standard deviation across potential home countries for inbound investment is now generally higher than that across potential host countries for outbound investment.

In general though, personal taxes have little effect on the impact of hypothetical policy scenarios to corporation tax. The most striking difference from Table 29 when personal taxes are introduced is that the standard deviation for inbound investment does not generally fall when corporation tax rates are harmonised within the EU. The reason for this result is clear: there is still substantial variation due to personal taxes being different across home countries. In other words, tax systems have to be considered as a whole. Simply harmonising one element of the tax system, without taking into account its relationship with the other elements thereof, notably personal taxes, could lead to inconsistencies.

**Scenarios involving international elements of corporation tax**

Table 30 considers the international elements of corporation tax regimes. The abolition of withholding taxes on interest is examined first (simulation 7). Next, it examines three possible ways in which the treatment of foreign source dividend income (from an EU subsidiary) could in principle be harmonised within the EU: a limited credit system in all countries, a full credit system in all countries, and exemption in all countries (simulations 8-10). Lastly, simulation 11 assumes the application of parent country tax rules to the taxation of subsidiaries (see also part IV).

As with the investigation of hypothetical policy scenarios involving domestic elements of corporation tax, the main analysis here is presented in the absence of personal taxes. Again, this is consistent with the existence of an international capital market in which there is no reason to suppose that the shareholders of a parent company are domestic residents. If they are not, then the prospect of the parent company being able to identify - and act upon - their personal tax rates is remote.
<table>
<thead>
<tr>
<th>Mean Standard Deviation</th>
<th>Weighted Average over Sources of Finance of the Subsidiary</th>
<th>Most Tax Efficient Way of Financing the Subsidiary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost of Capital</td>
<td>EATR</td>
</tr>
<tr>
<td></td>
<td>Domestic</td>
<td>Inbound</td>
</tr>
<tr>
<td>Base Case</td>
<td>6.3</td>
<td>6.5</td>
</tr>
<tr>
<td>7 No withholding taxes</td>
<td>6.3</td>
<td>6.5</td>
</tr>
<tr>
<td>on interest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Limited credit system</td>
<td>6.3</td>
<td>6.6</td>
</tr>
<tr>
<td>for dividend income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Full credit system</td>
<td>6.3</td>
<td>6.4</td>
</tr>
<tr>
<td>for foreign income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Exemption system</td>
<td>6.3</td>
<td>6.5</td>
</tr>
<tr>
<td>for dividend income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Taxation according</td>
<td>6.3</td>
<td>6.9</td>
</tr>
<tr>
<td>to the parent country</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rules</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Abolition of withholding taxes on interest

Abolishing withholding taxes on the payment of interest from a subsidiary to its EU parent has almost no effect on any of the measures presented in this report. As can be seen from Table 30 (simulation 7), there is virtually no change in any of the averages or standard deviations in this simulation.

The reason for this lies in the tax treatment of the parent in the home country. All EU Member States tax interest receipts from EU subsidiaries in the hands of the parent. All Member States use a limited credit system, so that taxes paid in the host country are credited against home country taxation. However, all Member States also permit interest payments to be deductible from corporation tax. So the only tax which the interest payments may face in the host country is a withholding tax when the interest is paid to the parent. In Germany, however, half of interest payments are subject to trade tax. This clearly limits the advantages of debt financing of a German subsidiary. But in virtually all cases, the rate of withholding tax is lower than the home country tax rate. As a result, the withholding tax does not increase the overall tax liability; it merely shifts revenue from the home country to the host country. But the measures presented here are not affected by which revenue authority receives the tax payment. As such, they are almost completely unaffected by the abolition of withholding taxes on interest payments from subsidiaries to parents.

There is one exception to this within the EU. Ireland has a 10% corporation tax rate, and three countries levy a withholding tax on payments to an Irish parent at a higher rate than this: Belgium (15%), Greece (20%) and Portugal (15%). In these cases, Ireland does not offer a full credit for the withholding taxes paid, and so these withholding taxes do affect the overall tax liability of the Irish parent. Analysis of the impact of this scenario on individual countries confirms that only these four countries are affected by the reform. An implication is that the same effect on effective tax rates in the EU could be generated by simply reducing these three withholding tax rates to 10% or less.

Harmonising the treatment of foreign dividends

Currently, only 3 Member States tax dividends received by a parent from an EU subsidiary on the basis of a limited credit system (Greece, Ireland and the UK). The other 12 Member States all use some form of an exemption system. Simulations 8 to 10 show the impact of an identical system for the 15 Member States, that is, either a credit system or an exemption system.

Consider first a full credit system applied to the 15 Member States (simulation 9). Instead of limiting the credit given for foreign taxes to no greater than the underlying home country tax liability, a full credit system would reimburse any additional tax paid. This is automatically the case for interest income in all countries except Ireland, where the corporation tax rate may be lower than the withholding tax rate charged by the host country. If this system were introduced on an accruals basis, that is, if it applied to profits at the point at which they were earned, rather than when repatriated to the parent, then this system would effectively be taxation in the home country. As such there would be full capital export neutrality at the level of the parent firm, i.e. the parent firm would simply pay the home country tax wherever it chose to locate its investment.

However, consistent with the operation of most international taxation, dividends and interest are taxed only when repatriated to the parent. In this case, taxation in the host country is still important. Consider, for example, the cost of capital for an investment financed by retained earnings in the subsidiary. To finance such an investment, the shareholder gives up the post-tax value of the dividend which would otherwise have been paid by the subsidiary to the parent. When the eventual return on the investment is distributed by the subsidiary, the shareholder only receives the post-tax value. In this case, the cost of
capital is independent of the taxation of the dividend paid by the subsidiary – since the same tax rate is applied both to the cost and the return, it nets out of calculation.

This suggests that, for a marginal investment, reflected in the cost of capital, the international tax regime becomes a mixture of a residence-base and a source-base. Take the example of Ireland as a home country, for the average of possible sources of finance of the subsidiary. Where the subsidiary of an Irish parent is financed with retained earnings, the Irish tax rate is irrelevant, and so the cost of capital reflects only the host country tax system (which has not changed). But where the investment is financed by new equity provided by the parent, for example, the fact that there is a full credit system - and that the Irish tax rate is only 10% - implies that there is a significant reduction in the cost of capital.

These effects are partly reflected in results presented in Table 30. For outbound investment, there is a fall in the overall average cost of capital and of the average EATR across Member States in simulation 9 compared to the Base Case. At the same time a substantial fall in the standard deviation can be observed for the EATR. This is consistent with a move towards capital export neutrality. For inbound investment, the average cost of capital and EATR also diminish, but the standard deviation increases. Therefore, introducing a full credit system leads to less capital import neutrality.

**Box 11:**

Impact of a limited credit system (simulation 8)

Where the home country tax rate is lower (higher) than the host country tax rate, a limited credit system will not result in any further tax (reimbursement) in the home country. In this case, it therefore has the same impact as an exemption system. The main effects of the introduction of a limited credit system for the 15 Member States is therefore to increase the tax liability on the receipt of dividends from EU subsidiaries of parents in home countries with high statutory tax rates.

This scenario therefore pushes the overall system towards capital export neutrality, in that the gap in the impact of tax between domestic and outbound investment is narrowed. This does not show up clearly in the average results of Table 30, however. This is because cross-border investment (based on the average of the subsidiary sources of finance) already has, on average, a higher cost of capital and a higher EATR than domestic investment. Any increase in the average effective tax rate for cross border investment therefore increases this disparity.

Consider now a full exemption system for all the EU Member States (simulation 10). At first sight, this may seem to imply that, for equity-financed investments, the EU tax system should become entirely source-based, especially in the absence of home country personal taxes. However, some countries do not permit the deductibility of costs borne by the parent against the parent's tax liability where the cost supports outbound investment (see Annex B, table 13).

Overall, this policy scenario does move the EU tax system in the direction of capital import neutrality, especially as measured by the EATR - for which the average standard deviation for inbound investment for the average source of finance of the subsidiary falls from 1.8 to 0.9. There is a corresponding slight move away from capital export neutrality.

**Taxation according to the parent country rules**

This simulation is in many respects close to the concept of "Home State Taxation" explained in Part IV. Any parent company within the EU has to compute its EU taxable profit once only, applying the
definition of the home country tax base to its EU-wide profits. The tax base for each company would be allocated between different countries, which would apply their own tax rates to their allocated tax base.

In order to do this, it is necessary to make some assumptions about how the subsidiary is taxed. The first stage is that the profits of each subsidiary are consolidated in the whole groups' EU-wide profits. For this purpose, the relevant tax base rules are treated as those of the parent's home country. However, a further assumption is that there is no difficulty in allocating the EU-wide profit to individual countries. That is, it is assumed that the whole of the taxable profit earned by the subsidiary is allocated back to the host country, to be taxed at the host country corporation tax rate. There is then no further tax on repatriation of dividends or interest from subsidiary to parent; nor is there any further tax on the corporation on payment of dividends to the shareholders. Essentially, then, the host country tax rate is applied to the tax base as defined by the home country. Moreover, due to the consolidation process, interest payments from the subsidiary to the parent company are not deductible in the host country. This tends to increase the host country’s tax base.

It is worth noting that two advantages of Home State Taxation are that it permits loss consolidation and that any parent would have to calculate its EU-wide profits according to only one set of rules. However, these advantages are not captured by the model used in this report, since it makes no allowance for the compliance and administrative costs of implementing taxes and considers only profitable situations.

To understand the impact of Home State Taxation, it is useful to consider the position if the proposal were taken one step further. Suppose instead that the home country tax rate was applied to the EU-wide profit, rather than the host country tax rate. In this case, the tax regime in the host country would be irrelevant; in effect there would be residence taxation at the corporate level; hence there would be capital export neutrality.

As Table 30 (simulation 11) makes clear, however, applying the tax rate of the host country makes a substantial difference. Instead of achieving capital export neutrality, the resulting tax regime is actually further from capital export neutrality than the existing regime. That is, the average dispersion of effective tax rates facing parent companies on outbound investment within the EU is higher than in the Base Case. This is true on every measure. Thus, the standard deviation of the costs of capital is higher - both for the tax efficient and average form of financing of the subsidiary. And the average dispersion of the EATR is also higher in both cases.

This again suggests a connection between the tax base and tax rates in individual countries: if a high tax rate is applied to a low tax base, then the average cost of capital may not appear to be particularly high. For example, a parent company in a home country with, say, a low tax base may invest in another country which has a high tax base but a low tax rate. But, under the Home State Taxation proposal, the parent would apply the low tax rate in the host country to the low tax base in the home country. Overall, on outbound investment, the results suggest that differences in tax rates alone may create substantial differences across potential locations for investment in both the cost of capital and the EATR. As would be expected, taxation according to parent country rules also moves the EU tax regime further away from source-base taxation, and hence further away from capital import neutrality.
Scenarios involving the relationship between corporate and personal taxes

Much of the debate on the co-ordination of taxes on capital in the EU in the past has been concerned with the relationship between personal and corporate taxes. In a closed economy, this is a vital ingredient of the overall effective tax rate, since the overall level of saving and investment should depend on both forms of taxation.

But, as argued elsewhere in this study, the role of personal taxes for cross-border flows of capital is much less clear. Indeed
personal taxes levied on domestic shareholders may well affect the cost of capital and the EATR on domestic and outbound investment. But with an open capital market, there is no particular reason why the company may not be owned by foreign shareholders. Further, as already noted in Box 8, personal taxes in the home country do not play a very significant role in affecting the main conclusions of the analysis. This is mainly because personal taxes typically apply to all forms of profit, and hence do not discriminate between domestic and outbound investment.

This section nevertheless briefly reviews the impact on the measures described above of harmonising the relationship between corporate and personal taxes. Table 31 presents results for four hypothetical policy scenarios. It should be noted that the Base Case includes personal taxes, contrary to the Base Case in Tables 29 and 30.

The first hypothetical scenario is to introduce a classical relationship between the corporate and personal taxes (simulation 12). Under a pure classical system, company profits are taxed twice - once at the level of the firm, and once when distributed as dividends. Top-rated shareholders would pay the full top rate of income tax on dividend income. This is higher than the rate actually levied in several countries, since such countries reduce the double taxation of dividends by reducing the rate of personal income tax. However, it is assumed that zero-rated shareholders continue to pay no tax.

Given that many EU countries either allow a tax credit associated with a dividend payment, or levy a lower rate of income tax on dividends, harmonisation based on a classical system generally increases the size of the tax burden, unless tax rates are adjusted. This is reflected in the impact on the average EATRs shown in Table 31. Such a harmonisation tends to reduce the dispersion of the average EATRs across countries, and to reduce the average standard deviations for outbound and inbound investment. Thus, to the extent to which the overall tax systems become more similar to each other, there is a movement towards both capital import neutrality and capital export neutrality. Again, however, it should be noted that the importance of this result depends on the extent to which such personal tax rates are relevant in an international context.

However, it should be noted that with a classical system, the average costs of capital tend to be lower than in the Base Case. This is because it is assumed within the simulation that interest receipts are also taxed at the top personal tax rate. Where this raises the existing personal tax rate on interest income, then because the post-tax return to lending, i.e. the alternative use of funds, falls, the required post-tax return to investment in equity also falls, and hence the cost of capital tends to fall.

The next hypothetical scenario is to introduce a full imputation system in every country (simulation 13). This would offer a tax credit to all shareholders equal to the underlying rate of corporation tax in the home country. For domestic source income distributed to shareholders, the overall tax rate would then be simply the shareholder's personal tax rate. However, when the tax credit is also available for foreign source income distributed to shareholders, the overall tax rate on such income will also reflect the tax rate in the host country.
Table 31  Summary of Simulation Results: Interaction of Corporate and Personal Taxes

- cost of capital and EATR
- average and standard deviation across 15 EU member states
- top rate of personal tax; distributions by parent out of domestic earnings
- weighted average of parent finance; average and tax efficient subsidiary finance

<table>
<thead>
<tr>
<th>Mean Standard Deviation</th>
<th>Weighted Average over Sources of Finance of the Subsidiary</th>
<th>Most Tax Efficient Way of Financing the Subsidiary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weighted Average</td>
<td>EATR</td>
</tr>
<tr>
<td></td>
<td>Domestic</td>
<td>Inbound</td>
</tr>
<tr>
<td>Base Case</td>
<td>5.2</td>
<td>5.4</td>
</tr>
<tr>
<td>12 Classical system</td>
<td>4.7</td>
<td>4.9</td>
</tr>
<tr>
<td>13 Full imputation</td>
<td>4.4</td>
<td>4.6</td>
</tr>
<tr>
<td>system withholding taxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Shareholder relief</td>
<td>4.4</td>
<td>4.6</td>
</tr>
<tr>
<td>system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Comprehensive</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Business Income Tax</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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This scenario involves a reduction of the overall tax liabilities, as measured by the EATR. The cost of capital is also reduced, even though this reform only affects the cost of capital when the parent finances the investment by new equity. However, the dispersion in either measure in the standard deviations on inbound and outbound investment, is generally at least as high as in the Base Case. This should not be surprising. Consider, for example, the variation in the EATR faced on inbound investment into the same host country by different parents. With a full imputation system in the home country, the effective tax rate in the home country more closely reflects the personal tax rate than the corporate tax rate. Since these tend to vary more between countries, so the average standard deviation of the EATR on inbound investment tends to increase relative to the Base Case.

A similar position is true of the next hypothetical scenario: a classical relationship between the corporate tax and the personal tax, but a personal tax rate on dividend income set at only 50% of the shareholder's normal income tax rate (simulation 14). Following OECD (1991), this is known as a shareholder relief system. On average, this generates similar costs of capital and EATRs as the full imputation system. However, compared to the full imputation system the overall effective tax rate depends less on the personal tax rate of the shareholder and more on the corporation tax rate. As a result, the dispersion of the EATR for inbound investment into a particular host country by different parents is lower than in the case of the full imputation system.

The final hypothetical policy scenario is based on a proposal considered by the US Treasury in 1992. This proposal - the comprehensive business income tax - was to abolish interest deductibility, and hence put equity and debt finance on the same footing (simulation 15). The reform analysed here extends this basic version to eliminate personal taxes entirely. In effect there is therefore only corporate level taxation, levied on profit before interest payments. Further, source country taxation is imposed by making each country exempt dividends and interest receipts from a subsidiary in the EU. Hence the single level of tax applies essentially in the host country.

As might be expected in such a scenario, capital import neutrality is completely achieved. All subsidiaries in a given host country face the same tax regime, irrespective of the nationality of the parent companies. Further, on average, the cost of capital for domestic investment is the same as the cost of capital for cross-border investment, and the same is true for the EATR. However, the reform also moves the EU tax regime away from capital export neutrality. That is, the dispersion in effective tax rates across possible locations for investment available to a parent company is greater than in the Base Case.

Conclusions

This section of the report has examined the role of specific features of the tax regimes in the EU. It has done this by simulating the impact of hypothetical policy scenarios on the measure of effective tax rates set out earlier in the report. Of course, a vast range of different investments has been considered in this report; only a summary picture can be provided of the effect of any hypothetical scenario (more details are given in Annex F).

Nonetheless, the results of considering hypothetical policy scenarios are striking.

- Introducing a common statutory tax rate in the EU would have a significant impact by decreasing the dispersion of effective tax rates across Member States. There is a significant fall in the average dispersion of both the cost of capital and the EATR facing parent companies between alternative Member States. There is also a fall in the dispersion between subsidiaries located in a given Member State which are owned by parents located in other Member States. To the extent that taxation matters, such scenario would be likely to go some way in reducing locational inefficiencies within the EU.
• By contrast, no other scenario would have such a significant effect. For example, introducing a common tax base while leaving tax rates unchanged tends, if anything, to increase the dispersion in effective tax rates.

• Since withholding taxes on dividends between subsidiaries and their parents have been abolished within the EU, the international features of corporation taxes do not play a significant role in increasing distortions. Introducing a common means of taxing foreign source income, for example, has little impact on the dispersion of effective tax rates.

• Similarly, introducing a common form of integration of corporate and personal taxes in each Member State does not tend to reduce the dispersion of effective tax rates between Member States.

### Box 5  
**Tax Analyser: Impact of hypothetical tax policy scenarios in the EU**

As in the case of the hypothetical investment approach, the purpose of simulations is to identify the weight of the different tax drivers in the effective average tax burden, i.e. to compute the relative weight of the tax bases, the tax rates, the different types of taxes and the corporation tax system in the EATR separately. Therefore, the scenarios are divided into three categories: elements of the tax base, the corporation tax rate including local taxes and the corporation tax system. By setting just one element of the different tax regimes equal across countries, it is possible to identify the effect of this particular element on the level and also on the variation of the effective tax burdens and, hence on the possible distortion of competition within the countries under consideration.

Each simulation considers only the medium-sized company in the base case using typical data for the manufacturing sector. Except for Germany, the scenarios are based-as in the previous boxes Tax Analyser- on the tax regimes which were effective in the fiscal year 1999.

#### Classification of simulations

**A. Corporation tax base**

1. Common depreciation on intangibles. Straight-line over 5 years (20%).
2. Common depreciation on buildings. Straight-line over 25 years (4%).
3. Common straight-line depreciation on tangible fixed assets. Straight-line over the estimated periods of economic use (5 to 10 years depending on type of asset).
4. Common declining balance depreciation on tangible fixed assets. Declining balance at 3 times straight-line over the estimated periods of economic use, at a maximum of 30%.
8. Common book reserves for bad debts. Future guarantee payments within next 2 years, 2% of annual turnover.
9. Common overall tax base (IAS). Depreciation methods according to (1)-(3) above, depreciation periods are 5 years for intangibles, 40 and 50 years for buildings, 5 to 10 years for tangible fixed assets, valuation of inventories according to (5), allocation of pension costs according to (7), no provisions for bad debts.

B. Corporation tax rate and local taxes

10. Common corporation tax rate, including surcharges but excluding local taxes, at EU average of 32.28%.
11. Common corporation tax rate, including surcharges and local profit taxes, at EU average of 33.84%.
12. Common corporation tax rate of 25%, including surcharges and local profit taxes.
13. Common corporation tax rate of 25%, including surcharges and all (profit and non-profit) local taxes.

C. Corporation tax system


A) Scenario involving the corporation tax base

The following table presents simulations referring to the corporation tax base. The first 8 of these simulations consider only a single element of the tax base. By contrast simulation 9 analyses the effects of a uniform tax base based on the "International Accounting Standards". All other elements of the tax regimes are unchanged.
### TABLE F  
Results for simulations involving elements of the corporation tax base  
- effective average tax rates  
- only corporation taxes

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>D</th>
<th>IRL</th>
<th>NL</th>
<th>UK</th>
<th>EU-5 Average</th>
<th>EU-5 Stand. Dev.</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base case</strong></td>
<td>39.7</td>
<td>30.1</td>
<td>8.3</td>
<td>24.0</td>
<td>21.0</td>
<td>24.6</td>
<td>10.4</td>
<td>29.7</td>
</tr>
<tr>
<td>1. Common depreciation on intangibles</td>
<td>39.7</td>
<td>30.1</td>
<td>8.3</td>
<td>24.0</td>
<td>21.0</td>
<td>24.6</td>
<td>10.4</td>
<td>29.7</td>
</tr>
<tr>
<td>2. Common depreciation on buildings</td>
<td>40.2</td>
<td>29.3</td>
<td>8.3</td>
<td>23.6</td>
<td>21.0</td>
<td>24.5</td>
<td>10.4</td>
<td>28.8</td>
</tr>
<tr>
<td>3. Common straight-line depreciation on tangible fixed assets</td>
<td>44.1</td>
<td>30.6</td>
<td>8.4</td>
<td>24.5</td>
<td>21.4</td>
<td>25.8</td>
<td>11.7</td>
<td>32.3</td>
</tr>
<tr>
<td>4. Common declining balance depreciation on tangible fixed assets</td>
<td>41.0</td>
<td>28.4</td>
<td>7.9</td>
<td>22.3</td>
<td>19.7</td>
<td>23.9</td>
<td>10.9</td>
<td>29.8</td>
</tr>
<tr>
<td>5. Common valuation of inventories</td>
<td>38.0</td>
<td>29.7</td>
<td>7.9</td>
<td>21.8</td>
<td>19.2</td>
<td>23.3</td>
<td>10.1</td>
<td>27.5</td>
</tr>
<tr>
<td>6. Common pension scheme (book reserve)</td>
<td>44.5</td>
<td>30.1</td>
<td>9.2</td>
<td>27.1</td>
<td>24.0</td>
<td>27.0</td>
<td>11.3</td>
<td>34.1</td>
</tr>
<tr>
<td>7. Common pension scheme (pension fund)</td>
<td>39.7</td>
<td>26.2</td>
<td>8.3</td>
<td>24.0</td>
<td>21.0</td>
<td>23.8</td>
<td>10.1</td>
<td>29.7</td>
</tr>
<tr>
<td>9. Common overall tax base (IAS)</td>
<td>46.7</td>
<td>29.7</td>
<td>8.7</td>
<td>24.5</td>
<td>21.4</td>
<td>26.2</td>
<td>12.4</td>
<td>32.3</td>
</tr>
</tbody>
</table>

As far as the depreciation rules are considered, several conclusions can be drawn from the results. First, with respect to the changes in the national EATR, it is evident that depreciation practices on tangible fixed assets are still quite different throughout the EU-5 Member States. France seems to be in a relatively favourable position and Ireland in a relatively disadvantageous position. Second, with respect to the level of change in both the national EATR and the EU5 average EATR, the different depreciation rules on tangible fixed assets have a noticeable impact on the effective tax burdens. This can also be explained by the high weights of tangible fixed assets as a proportion of the total investment of the model firm. Third, with respect to the increases in the standard deviations, it is evident that common methods and allowance rates for tangible fixed assets would increase differences in the EATR between countries if all other elements of the tax regimes remained unchanged.

With respect to the valuation of inventories, it is assumed that production costs are valued at full cost and that LIFO is allowed as an allocation method in each country. This harmonisation scenario tends to decrease all national EATRs and the EU-5 average EATR (by 1.3 percentage points) as well as the
standard deviation (by 0.3). Full cost tends to increase the tax burden and LIFO tends to decrease the tax burden. Obviously, for the base case model firm, the increasing effect of applying full cost is more than compensated for by the decreasing effect of applying LIFO allocation. Moreover, the calculation of production costs on a full cost basis tends to smooth the differences between different capital allowances and other elements of the production costs (such as pension costs) if the finished goods are stored for a certain period of time. This explains the decrease in the standard deviation.

The harmonisation of occupational pension schemes’ allocation of pension costs considers two different scenarios: (6) a common regime for building up a pension reserve (book reserve) as in Germany and (7) a common regime for a funded system that allows the deduction of annual (periodical) payments to a pension fund as prevails in the Anglo-Saxon countries. In the case of book reserves, the national EATR, except in Germany, the EU-5 average EATR (by 2.4 percentage points) and the standard deviation (by 0.9) increase. The reason for this considerable increase is a broader tax base in each country except Germany and the high portion of pension costs in the total costs of the model firm. A common system for pension funds would only affect the position of Germany since it is already applied in the other countries. Therefore, the impact on both the EU-5 average EATR and the standard deviation is only minor.

It is always very arbitrary to specify conditions under which bad debts occur. Therefore, bad debts were not considered in the base case at all. The European Tax Analyzer model, however, can account for bad debts. To analyse the effect of such provisions on the tax burden, the build-up of a book reserve for bad debts is now allowed in all countries. In doing so it is assumed future warranties which amount to 2% of the annual turnover of the model firm have to be fulfilled within two years. Accounting for a book reserve for bad debts under these conditions decreases both the national EATR and the EU-5 average EATR (by 2.4 percentage points). The decrease is highest in France and Germany (3.5 percentage points) and lowest in Ireland (0.4 percentage points). This result clearly reflects the (corporation) tax savings due to the deduction of the annual contributions to the book reserve from the tax base. The amount of tax saving increases with the statutory tax rate on profits, which is highest in France (40%) and Germany (39.3%) and lowest in Ireland (10%). The asymmetric decrease of the national EATR is also reflected by the lower standard deviation (9.3 compared to 10.4 in the base case). As a general conclusion from this example, it seems likely that both the national EATR level as well as the dispersion of the EATR across countries are lower compared to the base case if book reserves for bad debts are taken into account. However, with respect to the extreme assumptions in our example – the bad debts amount to 2% of the annual turnover – a considerable variation of the EATR still remains.

In order to get a better idea about the impact of the corporation tax base on the EATR compared to other elements of a corporate tax regime that constitute the effective tax burden (i.e. tax rates, local taxes, corporation tax system), finally a harmonisation scenario with a uniform tax base in all countries is considered. In doing so, it is assumed that the provisions of the International Accounting Standards (IAS) form, without exception, the basis for the determination of taxable profits in the six countries. In particular, the following rules are considered simultaneously relevant:

− Depreciation of intangibles, buildings and tangible fixed assets only on a straight-line basis over the estimated periods of economic use – 5 years for intangibles, 40 and 50 years for buildings and 5 to 10 years for tangible fixed assets.
− Valuation of inventories is based on the full costs with FIFO as the allocation method.
− Costs for occupational pension schemes are deducted from the annual taxable profits according to a funded scheme as prevails in the Anglo-Saxon countries
− Provisions for bad debts are not permitted.
The results presented in Table F indicate that, with the exception of Germany, the national EATR would rise if the IAS were relevant for the determination of taxable profits. As a consequence, the EU-5 average EATR increases by 1.6 percentage points. Thus, by taking the IAS as a benchmark, we can conclude that the national accounting provisions are currently more generous. However, since the changes in the EATR in Germany, Ireland, the Netherlands and the UK are only minor, it is only France that seems to be in a relatively favourable position with respect to the tax base. Therefore, the change in the EU-5 average EATR can be above all attributed to the large change in France. As far as the Anglo-Saxon countries and the Netherlands are concerned, the minor changes of the EATR can be attributed to the fact that the tax bases in these countries already correspond to the IAS to a greater extent than the tax bases in European continental states (e.g. France), except in the USA. Germany’s result also suggests that the tax base corresponds with the IAS. Since the German EATR decreases, the national tax accounting rules are even a bit less generous. Although the broadening of the tax base according to international standards was one of the aims of the German tax reform, a lot of differences, which would compensate for each other considerably if the IAS became relevant still exist. However, with respect to these compensating effects, it is also clear that it is not sufficient just to compare the individual elements of the tax base (e.g. depreciation rules or provisions) when analysing the impact of the tax base on the effective tax burden.

The most striking result of this harmonisation scenario is, however, the increasing standard deviation (by 2.0) which is greater than in all previous simulations. This indicates that with a harmonised overall corporation tax base the differences between the national EATR would, ceteris paribus, not only remain, but that these differences would even increase since the variation in the EATR across countries increases. The remaining variations in the EATR can be attributed to the different statutory tax rates, local taxes and the corporation tax systems. In the case of a uniform tax base, the real effects resulting solely from these differences are clearly demonstrated. As pointed out earlier, higher tax rates tend to be combined with lower tax bases and vice versa (see the first box Tax Analyser). This correlation might explain the increasing dispersion of the EATR when tax bases are harmonised: in such instances the compensating element (i.e. a more generous tax base) disappears.

B) Scenarios involving the corporation tax rates and local taxes

In order to separately identify the impact of the relevant provisions on the EATR, single elements of the tax rates as well as combinations of the corporation tax rate and local taxes are considered. The results of each simulation are listed in Table G and compared with the results obtained from the existing tax regimes (base case).
TABLE G Results for simulations involving tax rates and local taxes
- effective average tax rates
- only corporation taxes

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>D</th>
<th>IRL</th>
<th>NL</th>
<th>UK</th>
<th>EU-5 Average</th>
<th>EU-5 Stand. Dev.</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base case</td>
<td>39.7</td>
<td>30.1</td>
<td>8.3</td>
<td>24.0</td>
<td>21.0</td>
<td>24.6</td>
<td>10.4</td>
<td>29.7</td>
</tr>
<tr>
<td>10. Common CT rate, at EU mean</td>
<td>36.7</td>
<td>34.1</td>
<td>23.6</td>
<td>21.8</td>
<td>22.7</td>
<td>27.8</td>
<td>6.3</td>
<td>28.4</td>
</tr>
<tr>
<td>11. Common CT rate incl. local profit taxes, at EU mean</td>
<td>37.1</td>
<td>24.0</td>
<td>24.5</td>
<td>23.1</td>
<td>24.0</td>
<td>26.5</td>
<td>5.3</td>
<td>25.3</td>
</tr>
<tr>
<td>12. Common CT rate of 25% incl. local profit taxes</td>
<td>33.6</td>
<td>17.0</td>
<td>18.3</td>
<td>16.6</td>
<td>17.5</td>
<td>20.6</td>
<td>6.5</td>
<td>19.7</td>
</tr>
<tr>
<td>13. Common CT rate of 25% incl. all local taxes</td>
<td>9.6</td>
<td>17.0</td>
<td>16.2</td>
<td>16.2</td>
<td>14.8</td>
<td>14.8</td>
<td>2.7</td>
<td>16.2</td>
</tr>
</tbody>
</table>

Simulation 10 introduces a common corporation tax rate of 32.28% including all surcharges levied in France and Germany. The rate of 32.28% is the average rate across all 15 EU Member States for the fiscal year 1999 - except for Germany where the rates applying after the tax reform in 2001 have been used. However, this simulation does not imply that in all Member States all profits will be taxed at the same rates. Since local profit taxes are still levied, differences will remain.

Introducing such a common corporation tax rate increases the EU-5 average EATR significantly, by 3.2 percentage points. At the same time, however, there is also a considerable reduction of the standard deviation from 10.4 to 6.3 indicating less variation of the EATR across EU Member States. In fact, since the EATR does not change significantly in France, the Netherlands and the UK, these changes are mainly caused by Germany and Ireland. The EATR in Germany increases by 4.0 percentage points. Since there is an extra burden imposed by the trade tax on income in Germany, the statutory tax rate on profits would rise from 39.3% to 44.2%. However, the most significant change is in Ireland with an increase of the EATR by 15.3 percentage points from 8.3% to 23.6%. This is because the advantage of the 10% corporation tax rate would now disappear.

It should be noted that – in contrast to all simulations considering the tax base – the ranking of the countries would be different from the base case. Ireland would drop back from first to third place whereas the Netherlands would improve from third to first place. The other countries would keep their positions. Since only the corporation tax rate is harmonised, this country ranking reflects the remaining differences between the effects of the tax base, the local profit and non-profit taxes and the corporation tax systems.

Simulation 11 is based on the previous one, but now local profit taxes are included in the common statutory tax rate. For the countries considered here, this implies that the trade tax in Germany and the franchise tax on income in the USA are assumed to be abolished, or alternatively, credited against...
corporation tax. The uniform tax rate chosen is 33.84%, which represents the average statutory tax rate across the 15 EU Member States.

Since only Germany levies a local profit tax within the EU-5 Member States, this harmonisation scenario would significantly reduce the EATR in Germany. By contrast, there would only be moderate increases of the EATR in the other countries. Germany would improve two positions to second place, bringing it to a level equal to that of the UK. Altogether, the EU-5 average EATR would be reduced moderately and the standard deviation of the EATR across countries would fall further. The new value of 5.3 is almost 50% lower than the standard deviation of the EATR for the existing tax regimes (base case). Compared to the existing tax regimes, introducing a harmonised statutory tax rate on profits would therefore substantially reduce distortions resulting from differences between the EATR for domestic investment in Europe.

However, not all distortions would disappear. The remaining differences can be attributed to the tax bases, the local non-profit taxes and the corporation tax systems. France in particular, would still be in a very disadvantageous position with respect to the levy of non-profit taxes.

Compared to the previous case, simulation 12 simply reduces the common statutory tax rate on profits from the EU average rate of 33.84% to 25%. As a consequence of the lower tax rate all of the national EATRs as well as the EU-5 average EATR would be further reduced. However, with respect to the increasing standard deviation, the more striking result of this simulation is that the dispersion of the EATR rises. This happens because the tax saving due to the deductibility of local non-profit taxes becomes smaller as the statutory tax rate on profit decreases. In other words, the effects of the different non-profit tax levels emerge more obviously if the statutory tax rate on profits is reduced.

The result of this simulation is also important since it reveals the effects of the tax rate on the variation in the effective tax burdens. The comparison with the previous simulation makes clear that a further reduction of a statutory tax rate on profits, which is already harmonised, to a level significantly lower than the average across countries, will only reduce the average effective tax burden. However, the economic distortion will increase, since the standard deviation rises.

In addition to measures considered in the previous case, simulation number 13 abolishes non-profit taxes (e.g. real property tax). This implies that the only tax that exists in each country is a tax on profits which is levied at a uniform rate of 25%. Since there are no other taxes, the remaining differences between the EATR are the result of the different tax bases and the corporation tax systems. As a result of this simulation, all of the national EATRs and the EU-5 average EATR would be further reduced. Moreover, the standard deviation of the EATR falls to 2.7, by far the lowest value obtained in any of the 15 simulations.

This scenario illuminates the remaining dispersions of the effective tax burdens across countries which can be attributed to the tax bases and the corporation tax systems.

In the country ranking France moves from last to first position. But this result is not surprising, since France has the lowest tax base and is the only country that uses an imputation system.

C) Scenarios involving the corporation tax systems

The following table presents the impact of a common classical tax system on the level and dispersion of companies' effective tax burden. All the other elements of the tax regimes remained the same. Since the corporation tax system is the linkage between corporate and personal income taxes, personal taxes have
been introduced in a separate step. In the case of personal taxes, the amount of dividends is the same as in the base case and there is no “shareholder relief” on dividend income.

### TABLE H  Results for corporation tax system scenarios
- effective average tax rates
- corporate and personal taxes

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>D</th>
<th>IRL</th>
<th>NL</th>
<th>UK</th>
<th>EU-5 Average</th>
<th>EU-5 Stand. Dev.</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base case (only corporate taxes)</td>
<td>39.7</td>
<td>30.1</td>
<td>8.3</td>
<td>24.0</td>
<td>21.0</td>
<td>24.6</td>
<td>10.4</td>
<td>29.7</td>
</tr>
<tr>
<td>Base case (corporate and personal taxes)</td>
<td>48.8</td>
<td>31.0</td>
<td>17.2</td>
<td>32.0</td>
<td>25.6</td>
<td>30.9</td>
<td>10.4</td>
<td>32.0</td>
</tr>
<tr>
<td>14. Common CT system, classical system (only corporate taxes)</td>
<td>48.0</td>
<td>30.1</td>
<td>8.3</td>
<td>24.0</td>
<td>21.0</td>
<td>26.3</td>
<td>13.0</td>
<td>29.7</td>
</tr>
<tr>
<td>15. Common CT system, classical system (corporate and personal taxes)</td>
<td>55.7</td>
<td>32.0</td>
<td>17.2</td>
<td>37.4</td>
<td>26.6</td>
<td>33.8</td>
<td>12.8</td>
<td>32.0</td>
</tr>
</tbody>
</table>

At the corporate level the introduction of a common classical system would only affect the EATR in France. This is because all of the countries considered here except France already apply a kind of classical system at the corporate level. The abolition of the imputation system, in general, would increase the EATR. The reason is that if the tax credit is denied, a relatively higher cash distribution will be required to pay the same amount of dividends as before. As a result of the increasing French EATR, both the average EU-5 EATR and the standard deviation of the EATR across countries rises.

Introducing an EU-wide classical system and including personal taxes would leave only the effective tax burden in Ireland (and in the USA) unaffected. By contrast, since none of these countries operates a pure classical system, the EATR in all other countries would rise. The EATR increase would be most significant in France (from 48.8% to 55.7%) due to its high average income tax rate. There would be only minor increases in the EATR in Germany and the UK. Altogether, the EU-5 average EATR at the overall level would rise. The same is true for the standard deviation, which increases from 10.4 to 12.8.

To summarise, it seems reasonable to conclude that the introduction of a common corporation tax system without modifying other elements of the tax regimes at the same time would increase distortions, resulting from different levels of company taxation, within the EU. There are different reasons for this result. At the corporate level the effects resulting from the different tax rates, tax bases and local taxes would emerge if there were a common corporation tax system. At the overall level it is the different structure of the income tax rates that increases the variation of the EATR.
D) Concluding remarks

A major finding of the analysis of the effective tax burdens by means of the Tax Analyser model is that all tax regimes seem to be designed as more or less integrated systems. This means that there is a particular relationship between the tax rate, the tax base and the corporation tax system. As a broad conclusion, it is possible to say that, in general, a higher statutory tax rate on profits correlates with a lower taxable base and vice versa.

The simulations presented in this box help to understand the weights of each of the most important elements of a tax regime in the effective tax burden.

Introducing a common corporate tax base (simulation 9) clearly helps to achieve more transparency in the calculation of effective tax burdens. However, the outcome of this simulation indicates that such a change would result in increasing values both for the average effective tax burden and – what seems more important – the dispersion of the EATR across EU Member States.

Similarly, a common classical corporation tax system (simulation 14) tends to increase both the average effective tax burden in Europe and the dispersion of the EATR across EU Member States.

By contrast, the introduction of a common statutory tax rate on profits (simulation 11) would significantly reduce the dispersion of the EATR across the EU Member States. None of the other hypothetical scenarios considered here reduced the variation of the effective tax burdens in a comparable way. The effects on the EATR of a common statutory tax rate on profits depends on level of the tax rate. In our example, the average EATR increases. Although a lower common tax rate would reduce the average EATR, the dispersion of the EATR across countries tends to rise again. Therefore, reducing statutory tax rates on profits significantly does not simultaneously ensure greater neutrality towards taxation.
SOME EFFECTS OF TAX OPTIMISATION BY MEANS OF FINANCIAL INTERMEDIARIES ON THE EFFECTIVE TAX RATES ON TRANSNATIONAL INVESTMENTS BY GERMAN AND UK COMPANIES

Introductory remarks

The potential distortions highlighted in the analysis of cross-border investments indicate that there can be considerable incentive for companies to alter their behaviour in order to minimise their global tax burden.

Section 6.3.3 showed that companies can considerably minimise their effective tax burden if they choose selected forms of finance for the subsidiaries, the most tax convenient form of finance depending on the result of the interaction of the taxation regimes of the home/host countries. The results of the analysis indicate that this situation corresponds to a degradation of capital export and capital import neutralities.

Companies may also use more complex financial arrangements and group structures in order to minimise their effective tax burdens. The area of financing offers many possibilities, in particular for multinational companies. In general, the implementation of an intermediary financial company is advantageous if the relevant income bears a lower tax burden compared with the direct financing of a foreign subsidiary by the parent company.

Therefore, the purpose of this section is to understand to what extent the tax optimisation strategy of companies -by means of an intermediary financial company- affects their effective tax burden and, in general, the results arising from section 6, in terms of tax induced distortions in the allocation of resources.

The most tax efficient strategy for cross border financial arrangements through financial intermediaries depends on the tax burden in all countries involved and on the provision of the tax treaties between these countries. It is therefore obvious that there is no universally valid tax optimisation strategy for international financing (see Box 10).

In order to work out the most relevant tax driven factors influencing this strategy and keeping the analysis still manageable, Germany and the UK only are taken as examples for the location of the parent company (the subsidiary being located in all Member States). For the intermediary financial companies, the case of a Belgian co-ordination centre and a Dutch finance company are considered.

As is the case for the main body of the quantitative analysis, the tax regimes considered here are those in operation in 1999. Thus, the two countries differ with respect to the national profit tax rate (30% in the UK and 52.35% in Germany), the method for eliminating the international double taxation of dividends (exemption in Germany and credit with limitation in the UK) and the provisions for withholding taxes on interest payments in their tax treaties concluded with the other Member States. All this will clearly have an impact on both the choice of location of the financial intermediary and the use of the source of finance.

It is worth noting that the situation has dramatically changed since 1999. The German tax regime has been subject to a fundamental reform and the UK has reviewed its legislation in the area of tax planning. Moreover, there have been developments in tax co-ordination at the EU level, involving, among other things, the scheduled rollback of the Belgium co-ordination centre and of the Dutch finance companies.

It is however still very useful to consider the results of the analysis of the cases presented in this section. They can illustrate whether, and to what extent, the strategies considered here have an impact on the analysis above which showed that countries are competing mostly with their tax rates for attractive
conditions as a place of location for foreign investors. It can, therefore, help to understand whether removing these forms of financial intermediaries, for example in the context of the Code of Conduct for business taxation, helps to solve the problem of tax-induced resources misallocation.

Box 12: Possible financial arrangements

<table>
<thead>
<tr>
<th>Transfer of money from parent to financial intermediary / from financial intermediary to subsidiary</th>
<th>Taxation at the level of the</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subsidiary</td>
</tr>
<tr>
<td>Symmetric financing</td>
<td></td>
</tr>
<tr>
<td>New equity / New equity</td>
<td>Taxation of profits</td>
</tr>
<tr>
<td>Debt / Debt</td>
<td>No taxation of profits as interest on loan is deductible</td>
</tr>
<tr>
<td>Asymmetric financing</td>
<td></td>
</tr>
<tr>
<td>New equity / Debt</td>
<td>Taxation of profits</td>
</tr>
<tr>
<td>Debt / New equity</td>
<td>No taxation of profits as interest on loan is deductible</td>
</tr>
</tbody>
</table>

- New equity / New equity: The transfer of new equity capital via a financial intermediary could be more tax efficient if the tax treaty between the country of the subsidiary and the parent eliminates the double taxation of dividends by granting a limited tax credit, whereas the tax treaty between the country of the subsidiary and the country of the intermediary company as well as between the country of the intermediary company and the parent provide the exemption method. Moreover, the financial intermediary could be used as a “mixer company” in order to avoid excess foreign tax credits. If the dividends from different subsidiaries are pooled at the level of the financial intermediary the parent company benefits from the averaging of foreign tax credits when double taxation of dividends is avoided by the credit with limitation on a per-country basis. Finally the above strategy is advantageous when the country of the subsidiary uses a split-rate corporation tax system.
- Debt / Debt: A financial intermediary that is used as a conduit company for interest payments typically gains an advantage from the reduction of withholding taxes on interest (treaty shopping). This can be achieved if the tax treaty between the state of residence of the subsidiary and the intermediary company allows to collect lower or even no withholding taxes on interest compared to the tax treaty between the state of residence of the subsidiary an the parent company.

- New equity / Debt: Where debt capital is transformed into new equity capital there is an advantage to an intermediary company if the tax saving from the interest deduction at the level of the intermediary is higher than the tax burden on the interest receipts at the level of the parent.

- Debt / New equity: The transformation of equity into debt financing offers advantages if the financial intermediary pays taxes at a lower rate than the subsidiary would have to pay on its profits and the parent company would have to pay on receipt of the interest. Moreover, the ultimate repatriation of the equity funds to the parent should bear no further tax liability (e.g. dividends are exempt from tax at the level of the parent).

The German parent's approach for optimising international financial arrangements (1999)

The legal framework of the analysis

In 1999 Germany has a comparably high national tax rate on profits. International double taxation of dividends is eliminated by the exemption method. One might reasonably argue therefore that the principle aim of German multinationals is to establish financial intermediaries as base companies (asymmetric financing) in order to shelter the low taxed income from taxation in Germany. The predominant way of financing is that the German parent contributes new equity funds to the intermediary company and the intermediary company transforms these equity funds into debt financing of the subsidiary (i.e. new equity / debt from box 12). Figure 3 summarises the sources of finance and the resulting cash flows.

From the perspective of a German parent company Belgium, Ireland and the Netherlands are the most important countries for the location of financial intermediaries. The following analysis concentrates on Belgium and the Netherlands which allows the fundamental principles of the German taxation of foreign financial intermediaries in 1999 to be highlighted.
A) The case of a Belgian co-ordination centre

Subject to certain prerequisites a Belgian Co-ordination Centre (BCC) can be formed by a foreign (i.e. non-Belgian) parent company either as a Belgian corporation or a branch. The BCC must be a member of a multinational group and carry on only the development and centralisation of certain activities including financial operations for the sole benefit of the group (so-called “intra-muros” requirement). Limits are imposed as a BCC may not own shares of other (Belgian or foreign) corporations. Therefore, the BCC can only act as a financial intermediary but not as an intermediary holding company.

Although, like every Belgian corporation or branch, a BCC is liable to corporation tax at an effective statutory rate of 40.17% (corporation tax of 39% plus surcharge of 3%), there is a special tax benefit resulting from the definition of the tax base. The tax base is computed on a cost-plus basis rather than on realised profits. The costs that are taken into account is the sum of the BCC’s operational expenses excluding personnel or financial charges. Due to this definition of the tax base interest payments received by the BCC from other group members are in principle not taxable in Belgium. Moreover, distributed dividends are not subject to Belgian withholding tax which results in a quasi-exemption from any Belgian taxes for the financing activities. On the other hand, withholding taxes on interest payments from the subsidiaries to the BCC deducted in the state of residence of the subsidiaries become final and cannot be credited against Belgian corporation tax.
As a general rule, retained profits of the BCC are only taxable in Belgium (deferral principle) and, according to the Belgian-German tax treaty, distributed profits are exempt from corporation tax and trade tax at the level of the German parent.

The deferral principle is violated to a certain extent by the German Controlled Foreign Companies (CFC) legislation including Passive Foreign Investment Company (PFIC) rules. Accordingly, following the German “deemed dividend approach”, retained profits of a foreign company resulting from passive income are attributed to the German parent company and are subject to corporation tax and trade tax if the shareholding in the financial intermediary is at least 50% (controlled foreign company) and the total (effective) tax burden on the profits is less than 30% (low tax jurisdiction).

As passive income is defined, inter alia, as income realised by the foreign financial intermediary from holding of liquid funds or the lending of equity capital received by a parent company, a BCC earns passive investment income. The German legislation explicitly provides, however, that the tax treaty provisions applicable to distributed dividends also apply to deemed dividends under CFC legislation. As the Belgian-German tax treaty does not contain an “activity proviso” the passive income of a BCC would be – as a first step – exempt from German taxation.

With regard to capital investment income, however, the German PFIC rules set out of force treaty provisions which provide the exemption method. To the extent that the capital investment income is stemming from the financing of a foreign based company which is engaged in active business, 60% of the investment income is treated as passive income and attributed to the German shareholder (i.e. the parent company). Although the amount of 60% is entirely subject to corporation tax it is exempt from trade tax. To mitigate double taxation an indirect foreign tax credit is granted to taxes paid by the BCC and to taxes withheld on investment income received by the BCC. The remaining 40% of the capital investment income are treated as ordinary passive income so that the participation exemption according to the Belgium-German tax treaty applies. Moreover, a genuine distribution of the profits (part of the 60% profits) of the financial intermediary company which have been already attributed to the German shareholder according to the PFIC rules are explicitly exempt from corporation tax.

Depending on the location of the subsidiary that is financed by the BCC the financial operation bears different tax burdens: The (minimum) statutory corporation tax rate including the solidarity levy is 42.2% (40% * 1.055) plus trade tax in the case of a German subsidiary and 25.32% (60% * 40% * 1.055) in the case of a foreign based subsidiary. Therefore a German parent does not benefit from a BCC with regard to the financing of its domestic subsidiaries. The tax burden will be the same. With regard to the financing of foreign subsidiary, however, the tax burden is significantly lower compared to both domestic subsidiaries and direct financing by the German parent. In the latter case the interest receipts from the foreign subsidiaries would also be subject to the statutory tax rate of 42.2% plus trade tax.

B) The case of a Dutch finance company

The Netherlands are the most common place for the location of financial intermediaries of German multinationals. A Dutch Finance Company (DFC) like every other company is subject to corporation tax with its profits at a nominal rate of 35%. As this tax rate is very close to the EU-average, the main tax advantages are therefore an extensive network of tax treaties and the possibility of informal advance rulings with the Dutch tax authorities with respect to the taxation of profits. A special tax incentive for a DFC, however, is the creation of a so-called financial risk reserve which enables a DFC to put up to 80% of the taxable income from annual group financing into a book reserve and to deduct the annual contribution from taxable income. Depending on the contribution to a risk reserve a DFC is able to arrive at an effective statutory corporation tax rate between 35% and 7%. This is also the final tax liability in the Netherlands. Withholding taxes on interest receipts are creditable against Dutch corporation tax and distributed dividends to a German parent company are not subject to withholding tax in the Netherlands.
With regard to the taxation of profits of a DFC the general rule is that they are not taxable in the hands of the German shareholder as long as they are retained (deferral principle). In case of a distribution the dividends of a DFC are exempt from corporation tax and trade tax according to the Dutch-German tax treaty.

As the DFC in principle is always resident in the Netherlands and the effective tax burden usually is above 30%, there is no taxation in Germany either due to a German place of residence or according to the German PFIC rules. The latter rules are likely to apply, however, if the DFC makes contributions to a risk reserve resulting in an effective statutory corporation tax rate below 30%. The critical contribution is around 14.3% (35% * 85.7% = 29.995%). As any contribution above this amount would result in an even higher tax burden due to the PFIC rules compared to the situation in which no contributions to the risk reserve are made at all, the most tax efficient strategy would be to contribute such an amount so that the effective corporation tax rate is just above 30%.

Although this strategy bears certain risks as the total profits of the DFC could be treated as capital investment income it is assumed to prevail in the case where the DFC is granting loans to its subsidiaries. Moreover, it is assumed that the reserve can be released tax free (e.g. a purchase of participation is assumed) so that the Dutch corporation tax rate will be fixed at 30%.

Relevant economic measures: cost of capital and EATR of a German parent and its EU subsidiaries

Tables 32, 33 and 34 compare the cost of capital and the EATR of a German parent and its EU subsidiaries both for the most tax efficient way of financing the subsidiaries by the parent and for the case of a financial intermediary. The financial intermediary can be either a BCC or a DFC, financed by the German parent with equity capital, and which transfer the money as debt capital to other group members located in the Member States. For each way of financing averages and standard deviations are calculated.

As a consequence of the high German statutory tax rate the most tax efficient direct way of financing an EU subsidiary from the perspective of a German parent is always profit retention of the subsidiary (see section 6).

Compared to this, the use of a financial intermediary results in a lower cost of capital/EATR in 10 out of 14 cases if it is assumed that distributions are financed out of domestic earnings (see table 32). Only for subsidiaries located in Ireland, Italy, Sweden and the UK is direct financing by the German parent still more favourable. On average, the use of a BCC is more tax efficient than direct financing. A DFC only offers very minor advantages. However, with regard to the standard deviations the dispersion is reduced significantly if a financial intermediary is used. This is due to the fact that for the marginal return (cost of capital) or interest payments (EATR) a uniform statutory tax rate of 25.32% (in case of a BCC) or 30% (in case of a DFC) applies.

The most important reason for the advantage in using a financial intermediary compared to direct financing is a reduction of the statutory tax rate on company profits where they are channelled through an intermediary. Debt financing by a BCC turns out to be more advantageous than profit retention in the subsidiary if the statutory tax rate in the host country of the subsidiary is higher than the effective statutory tax rate on interest after the German Passive Foreign Investment Company (PFIC) rules are applied.

47 Although a DFC may also hold participation in other companies and therefore provide a subsidiary with new equity capital, this way of (equity financing) is not considered here. The reason is that there are no additional tax advantages compared to the direct supply of new equity capital by the German parent as Germany exempts the resulting dividends
applied (as shown above the effective tax rate is around 25%). All Member States except Ireland and Italy impose corporation tax rates above 25%.

Compared to a BCC a DFC might be expected to offer a less favourable tax effect as the relevant tax rate on the interest income is higher (as shown above, the effective tax rate is around 30%). For four Member States, however, the opposite turns out to be true. This result is explained by the levy of withholding taxes on interest payments in the host country of the subsidiary to the financial intermediary. In case of a DFC these withholding taxes are not relevant as they can be credited against Dutch corporation tax on the interest income. In case of a BCC, however, the withholding tax becomes relevant for that part of the underlying income that is not covered by the PFIC rules (i.e. 40%).

As only 60% of the income attributed to a BCC is taxable and 40% exempt, in Germany 40% of the withholding tax deducted cannot be credited against German corporation tax and thus becomes final. In the case of France, Greece, Portugal and Spain the 15% withholding tax on interest payments to a BCC overcompensates for the advantage of a lower effective statutory tax rate on profits as compared with a DFC.

The ranking of the host countries for the subsidiaries from the perspective of a German parent company differs between the cost of capital and the EATR.

In the case of a financial intermediary the cost of capital of a cross-border investment is determined by the (individual) tax base in the host country of the subsidiary and the (uniform) effective tax rate imposed on profits of the financial intermediary. Therefore, in the case of a marginal investment, Member States only compete as places of location in their rules for determine corporate profits (i.e. their tax bases). This is demonstrated by the BCC case where Belgium (4.5%) has a lower cost of capital than Luxembourg (4.6%) and Denmark (5.2%).

For a more profitable investment the EATR is relevant. Although with respect to the EATR the changes in the country ranking are only minor, one important aspect has to be considered. As the economic rent cannot be shifted from the subsidiary to the financial intermediary by means of financial arrangements based on the arm’s-length-principle (the possible shifting by transfer prices is not considered here), the economic rent is always taxed at the statutory rate in the host country of the subsidiary. As the national tax rates on profits are lower in Denmark (EATR of 16.8%) and Luxembourg (EATR of 19.2%) both countries can improve their position in the ranking compared with Belgium (EATR of 21.2%).

Therefore, as has already been demonstrated in the base case and for several of the simulations attempted in section 7 above, countries are competing with their tax rates for attractive conditions as a place of location for foreign investors. The use of a financial intermediary cannot change the country ranking. It only reduces the EATR by a certain amount as the profits that are transferred by the financial arrangement are subject to a lower tax rate. The predominant role of the tax rate in comparison with the tax base is also demonstrated by the significant reduction of the standard deviations of the cost of capital. All in all this reveals a greater disparity of the tax rates than of the tax bases among Member States.

The introduction of personal taxes has no effect on the country ranking and the relative advantages of the different ways of financing if it is assumed that all distributions to the ultimate shareholder of the German parent are financed from domestic earnings.
Table 32  Tax Optimisation in the case of Germany: distributions by parent out of domestic earnings
- cost of capital and EATR
- most tax efficient way, BCC and DFC
- corporate and personal taxes

<table>
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<th>Denmark</th>
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### Table 33: Tax Optimisation in the case of Germany: distributions by parent out of foreign earnings
- cost of capital and EATR
- most tax efficient way, BCC and DFC
- corporate and personal taxes

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If we now consider that distributions to the ultimate shareholder are also financed from foreign profits and ignore personal taxes for the moment, we can see from the results shown in Table 33 that a BCC does improve its relative position in comparison with both the most tax efficient direct way of financing and the use of a DFC. This can be explained by the German PFIC rules that add 60% of the profits of a BCC to the German corporation tax base. As these profits are subject to corporation tax they qualify for the reduction of the corporation tax rate for distributed profits. On the other hand, both profits resulting from the most tax efficient direct way of financing and distributed dividends from a DFC are exempt from corporation tax in Germany and therefore cannot take advantage from the split-rate corporation tax system. As a consequence, only in the case of Greece, Ireland and Italy will a BCC offer fewer advantages. (Compared with the other scenario that assumes that distributions are taken from domestic earnings, a BCC now is also more attractive for subsidiaries in France, Portugal, Spain, Sweden and the United Kingdom).

Moreover, if we take personal taxes into account, a BCC would even become more attractive as only certain dividends taken from profits of a BCC (i.e. those 60% of the profits covered by the PFIC rules) qualify for the domestic German corporation tax credit.

Finally, Table 34 compares the cost of capital and the EATR on domestic investment and on outbound investment depending on the assumptions of the financing of profit distributions. The results are overall averages taken from the section on domestic investment and the previous Tables in this section.

**Table 34** Tax Optimisation in the case of Germany: comparison of domestic and outbound investment
- cost of capital and EATR
- most tax efficient way, BCC and DFC
- corporate and personal taxes

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<td>3.9 3.9</td>
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<td>19.0 18.2</td>
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<td>16.7 25.8</td>
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(1) Member States' mean of the most tax-efficient way out of the three possibilities

Compared with domestic investment in Germany, tax optimisation reduces the cost of capital and the EATR on outbound investment. The advantage for foreign investment increases significantly if it is assumed that in the case of outbound investment the distributions are taken from domestic profits. If instead the distributions have to be taken from foreign profits, outbound investment is still more tax efficient than domestic investment if the focus is on corporate taxes only. Tax optimisation again
increases the advantage of outbound investment. In addition, if personal taxes become relevant, outbound investment can now be in a better position with respect to the cost of capital if a BCC is used. Tax optimisation can therefore overcompensate for the disadvantages of foreign source income that does not carry a tax credit within the imputation system. However, with respect to the EATR, domestic investment remains in a better tax situation. The reason is that the economic rent distributed from the subsidiary to the parent does not allow for a tax credit at all.

The UK parent's approach for optimising international financial arrangements (1999)

The legal framework of the analysis

In contrast to Germany the effective statutory tax rate on profits in the UK (currently 30%) is below the EU-average. Another important difference that has an impact on any tax planning strategy is the method for eliminating international double taxation of foreign dividends. Instead of the exemption method the limited foreign tax credit method applies. Having regard to the comparably low corporate tax rate in the UK it is therefore less attractive to establish a foreign intermediary as a base company. Sometimes, however, an intermediary is used as a group financing company following in principle the same structure as was suggested for a German multinational (i.e. asymmetric financing of new equity / debt - see figure 3). Having regard to the application of the tax credit method the principle aim of a UK multinational ought to be to optimise its position towards foreign tax credits. This can be achieved by an intermediary holding company that serves as a so-called “Mixer Company”. Recalling the principle forms of financial arrangements set out in box 10 this structure belongs in the category of symmetric financing (new equity / new equity). Figure 4 summarises the sources of finance and the resulting cash flows.

Figure 4: UK perspective of international financial arrangements

From the perspective of a British parent company the Netherlands, Ireland or Jersey are important countries for the location of intermediary companies. The following analysis concentrates on the Netherlands as this example illustrates the fundamental principles and effects of these tax planning strategies.
A) The case of a Dutch Finance Companies (DFC)

The interposition of a Dutch Finance Company (DFC) between a UK parent and another EU subsidiary follows the same structure as set out in section 8.2 on Germany. Moreover, the Dutch taxation of UK owned Dutch finance companies is exactly the same. Contributions to a risk reserve are also the same and it is assumed that the risk reserve can be released tax free so that the effective corporation tax rate of the DFC is 30%.

Under the UK controlled foreign companies legislation, the profits of the DFC would not be imputed back to the UK if it was a “holding company” within the meaning of the relevant provisions. This could normally be achieved relatively easily. If and when the finance company declares a dividend to the UK parent, that dividend will be subject to UK corporation tax at 30% less a credit for the underlying tax borne by the finance company. Assuming a fixed Dutch corporation tax rate of 30% there will be no further UK tax liability.

B) The case of a Dutch Mixer Company

Against the background of tax optimisation for foreign tax credits under the UK method for eliminating double taxation of foreign dividends, the use of an overseas holding company was a relatively common tax planning strategy for UK multinationals. Although this structure has been legislated against in the UK Finance Act 2000, it was the standard tax planning for UK based multinationals up to 1999 and is therefore considered here.

When a UK company receives a dividend from an overseas subsidiary, that dividend is subject to UK corporation tax at 30%. The UK eliminates double taxation of foreign dividends by granting a tax credit for the underlying foreign tax. However, this credit is calculated on a per-source basis and limited to the UK corporation tax on the grossed-up amount (i.e. dividend plus underlying tax). Therefore, optimum efficiency arises where the overseas subsidiary’s underlying rate of tax is equal to the UK tax rate of 30%. To the extent that the underlying rate is greater than 30%, some of the credit is effectively wasted since the first 30% of the underlying tax is sufficient to prevent any further UK tax liability on the dividend arising. Correspondingly, to the extent that the underlying tax rate is less than 30%, UK tax is payable. UK law did not permit the averaging out of underlying tax rates at the UK company level.

If a “mixer” company was incorporated in the Netherlands, these inefficiencies could be minimised and the effective rate of tax on overseas dividends reduced to 30%, thus ensuring that no further UK tax was payable, and that no overseas tax was ‘wasted’.

The Dutch mixer would receive dividends from high-tax (e.g. EU) subsidiaries and also hold shares in companies in low-tax jurisdictions. Due to the Dutch participation exemption there was no Dutch tax payment on the dividends. At the level of the Dutch holding company dividends from the low-tax companies (with low foreign tax applied to them) could be mixed with dividends from the high-tax EU subsidiaries. The mixer company would then pay a single dividend to the UK parent.

The dividends from the Dutch mixer company is the total amount of dividends that was received by the UK parent from the various overseas subsidiaries. At the level of the UK parent, in calculating the underlying tax borne by the Dutch mixer company, the average rate of tax on the dividends determines the amount of foreign tax credit available. Judicious adjustment of the timing and amount of dividends would ensure that the overall rate was 30%. This was extremely advantageous for UK parents of groups with subsidiary companies in jurisdictions with varied local tax rates, since the effect of this is to average out the level of underlying tax, so a well-structured group could ensure that profits were only repatriated which were subject to an underlying rate of approximately 30%.
The use of mixers to smooth the rate of tax on overseas subsidiaries could be extended by the introduction of subsidiaries with artificially low rates of tax, effectively money-box companies, where an appropriate amount of zero-taxed income could be mixed with ‘real’ foreign income to achieve a 30% rate.

Although in an optimum situation there is an effective tax rate of 30% on all overseas subsidiaries it is not clear to which subsidiaries the benefits should be attributed. They could be attributed to those subsidiaries located in high tax jurisdictions (i.e. with statutory tax rates above the UK rate of 30%) as their tax burden is effectively reduced to 30%. However, the benefits could also be attributed to subsidiaries in low tax jurisdictions (i.e. with statutory tax rates below the UK rate of 30%) as a further UK tax on their dividends is avoided due to mixing. Economically, the latter dividends are thus exempt from UK tax. In the following, however, the first interpretation is used.

8.3.2 Relevant economic measures: cost of capital and EATR of a UK parent and its EU subsidiaries

Tables 35 and 36 compare the cost of capital and the EATR of a UK parent and its EU subsidiaries both for the most tax efficient way of financing the subsidiaries by the parent and for the case of a financial intermediary. The financial intermediary can be either a DFC or a Dutch mixer company that are both financed by the UK parent with equity capital. However, different forms of finance are used by the intermediaries: whereas the DFC transfers the money as debt capital to other group members the mixer company injects new equity capital into the subsidiaries. In case of a mixer company the subsidiaries can also retain their earnings. In addition to the country results, averages and standard deviations for each way of financing are calculated.

Table 35 shows that, as a consequence of the comparably low UK statutory tax rate and the limited tax credit on foreign source dividends the most tax efficient way of directly financing an EU subsidiary from the perspective of an UK parent is, on average, debt financing. Only in source countries with an even lower statutory tax rate does profit retention in the subsidiary turn out to be more tax efficient. This is the case for Finland, Ireland, Italy and Sweden. The advantage of profit retention over new equity financing and debt financing can be attributed to the fact that the foreign subsidiaries do not pay the higher UK tax rate on profits.

Compared to the most tax efficient way of direct financing, the interposition of a mixer company is more advantageous in 11 out of 14 cases. Only for subsidiaries in the countries imposing lower tax rates than the UK (Finland, Ireland and Sweden) will tax optimising strategies offer no further advantages. Unlike the German situation, the interposition of a DFC has no tax benefit. This is explained by the UK tax credit system. The profits of a DFC cannot be effectively deferred from UK taxation because they are distributed to the UK parent and therefore always liable to the UK corporation tax.

The reason for the advantage of a mixer company compared to direct financing is the limited UK tax credit on dividends in the case of direct financing. As the statutory tax rates in those foreign countries where the interposition of a mixer company offers advantages are higher than the UK tax rate, there will always be excess foreign tax credits in the UK. This is also true in case of debt financing of a foreign subsidiary (which is the most tax efficient way of direct financing in most cases), as the foreign profits above the interest rate are distributed as dividends which only carry a limited tax credit. Mixing dividends reduces the tax rate attributed to foreign dividends to the UK rate of 30% and thus avoids any excess tax credits.

The total avoidance of excess tax credits explains the reduction of the cost of capital in case of a mixer company. In general this reduction compared with the most tax efficient way of direct financing increases with an increase in the statutory tax rate of the foreign subsidiary (i.e. the reduction is higher in
the case of a Belgian subsidiary (corporation tax rate of 40.17%) compared with an Danish subsidiary (corporation tax rate of 32%).

Looking at the results for a German and Italian subsidiary, specific features of these two tax systems come up. In the case of Germany the cost of capital for the most efficient way of direct financing (i.e. debt financing) are increased by 50% of the local trade tax (because 50% of the interest payments have to be added back to the base of the trade tax). With the interposition of a mixer company, however, new equity financing becomes advantageous as all German taxes including trade tax can be credited against UK corporation tax. In the case of Italy the result can be attributed to the dual income tax (DIT) which lowers the cost of capital of an Italian subsidiary. In case of a mixer company it is assumed that Italian corporation tax can be credited against UK corporation tax at the statutory rate leaving the DIT advantage unaffected.

In contrast to the tax optimising strategy of a German parent company (where debt is used as the only source of finance of a foreign subsidiary), the interposition of a mixer company also reduces the effective average tax rate by a considerable amount. This can be attributed to the fact that not only the foreign corporation tax on the marginal return but also the foreign corporation tax on the economic rent can be credited against UK corporation tax. The ranking of the host countries for the subsidiaries from the perspective of a UK parent company, do not differ between the cost of capital and the EATR. With respect to the cost of capital and the EATR among Member States, however, differences remain. These are explained by the differing domestic tax bases (rules for computing taxable income) which are still relevant. This also explains the greater standard deviation.

The introduction of personal taxes has no effect on the country ranking and the relative advantages of different ways of financing. This is because the shareholder relief system means all distributions are treated in the same way in the hands of UK shareholders.
### Table 35: Tax Optimisation in the case of UK

- cost of capital and EATR
- most tax efficient way, Dutch mixer company and DFC
- corporate and personal taxes

<table>
<thead>
<tr>
<th>Cost of Capital and EATR (%)</th>
<th>Austria</th>
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<th>Denmark</th>
<th>Finland</th>
<th>France</th>
<th>Germany</th>
<th>Greece</th>
<th>Ireland</th>
<th>Italy</th>
<th>Luxembourg</th>
<th>Netherlands</th>
<th>Portugal</th>
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<th>Sweden</th>
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Table 36 compares the cost of capital and the EATR on domestic investment and on outbound investment.

Table 36  Tax Optimisation in the case of UK: comparison of domestic and outbound investment
- cost of capital and EATR
- most tax efficient way, Dutch mixer company and DFC
- corporate and personal taxes

<table>
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<th>Cost of Capital/ EATR</th>
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<td>Outbound investment</td>
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<td>- Financing in most tax efficient way</td>
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<td>- Mixer Company (Netherlands)</td>
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<td>- Minimum(1)</td>
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<td>29.9</td>
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<td>29.9</td>
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</table>

(1) Member States' mean of the most tax efficient way out of the three possibilities

Compared with a domestic investment in the UK, the cost of capital on foreign investment is lower if the most tax efficient way of financing or tax optimisation are considered. However, the EATR on outbound investment is always higher except in case of a mixer company. This is simply explained by the mechanism of the limited UK tax credit for foreign income which now becomes relevant.
Final remarks

The strategy of tax optimisation depends on the tax system in the home country (in particular on the method for eliminating international double taxation) and the relative ranking vis-à-vis the statutory tax rate. For German and UK parents it has been shown that tax optimisation in the field of financing does reduce both the cost of capital and the effective average tax rate on outbound investment. However, there are still differences between the host countries, which can be attributed to the domestic tax bases in these countries and their statutory tax rates. The tax base always has an impact. However, this impact is only minor. The tax rate becomes important for profitable investments, as pure profits cannot be shifted from one country to another by simple financial arrangements. Therefore, tax optimisation cannot remove all tax obstacles for cross-border investment caused by different tax rates and different tax bases. Moreover, under specific circumstances there is a significant impact from withholding taxes on interest payments.

Compared to domestic investments the cost of capital and the EATR on outbound investments can be significantly reduced by the use of financial intermediaries. The advantage is more substantial in the case of a German parent which is explained by the higher tax burden on domestic investments. Given the fact that mixer companies will not be allowed in the UK in the future, only minor advantages from the use of financial intermediaries will remain. It seems likely that a UK multinational bears the same cost of capital and effective average tax rate on investment whether these investment are financed directly (by a loan) or a financial intermediary is interposed.

The effects of abolishing tax-reducing financing structures in Europe and elsewhere will depend on the location of the parent company. From the above results it seems reasonable to conclude that the tax burden for multinationals will be increased in those countries imposing high taxes on domestic investment. In contrast, there will be only minor effects for multinationals resident in low tax countries.

Therefore, removing these financial intermediaries will not contribute, per se, to solve the problem of tax-induced resources misallocation. Taking into account that the main tax driver for effective tax rates differentials is the overall tax rate, companies located in "high tax" countries will have the possibility to compensate for the removal of financial intermediaries by exploiting the possibility of tax arbitrage arising from those differentials.
EFFECTIVE TAX RATES FOR SMALL AND MEDIUM-SIZED ENTERPRISES IN GERMANY, ITALY AND THE UK IN 1999

This section presents estimates of the costs of capital and effective average tax rates which apply to small and medium sized enterprises in Germany, Italy and the UK. First the tax regimes which apply in each country is outlined. Then the position of small and medium sized enterprises is compared with that of large corporations.

Tax Regimes in Germany, Italy and the UK

a) Germany

Entrepreneurs in Germany may set up the legal form of their firm as a corporation or partnership (or as a sole trader). For the purposes of the analysis it is assumed that there are restrictions on the sale of the shares and participations. Hence the entrepreneur is assumed not to sell the firm, with the consequence that the effective capital gains tax rate is zero.

Small and medium-sized corporations are taxed in the same way as large corporations. However, depending on the book value of their assets, small corporations are permitted a 20% accelerated capital allowance for machinery. In addition, they can establish a tax-free reserve of 50% of the initial cost two years in advance of the purchase of the asset. This reserve is reversed when the first depreciation allowance is granted.

Partnerships are not subject to an income tax directly; instead the income is imputed to the partners. However, for the purposes of the trade tax and the real estate tax, the partnership itself effectively is subject to tax. Both taxes are deductible from the income tax base of the partners. The income tax base of the partners is determined in the same way as the corporate profit tax for a corporation. The accelerated capital allowance also applies. The tax base of the trade tax and the real estate tax are also determined in the same way as they are for corporations. However, the trade tax has a tax exempt amount, which means that for small partnerships the marginal rate can be zero. To allow for this, results below are presented for both a zero-rate and top-rate trade tax.

As the personal income tax follows a progressive schedule from 0% to 53% (in 1999), the marginal statutory tax rate depends on the overall personal income. A 5.5% solidarity surcharge on the income tax is also levied. However, for most partnerships the marginal tax rate on trade profits is limited to 45% plus the solidarity surcharge.

The analysis below is presented for shareholders with the following tax rates: (a) zero (b) 35.1% (the marginal rate on taxable income of 30,000 Euro) and (c) 45% (the top rate). Allowing for local taxes, this results in the following overall tax rates:
corporation  52.35  43.7  0 ; 35.4 ; 54.3  0 ; 35.4 ; 54.3
partnerships:
no trade tax  -  -  0 ; 37 ; 47.5  0 ; 37 ; 55.9
with trade tax  -  -  17.6 ; 48.1 ; 56.7  0 ; 37 ; 55.9

The income tax rates shown correspond to each of three cases (a), (b) and (c) described above.

b) Italy

As in Germany, small and medium sized enterprises can take the form of a corporation or a partnership/sole trader. The tax regime for corporations is the same as for larger corporations.

Also as in Germany, the profits of a partnership are imputed to the partner and taxed according to the personal progressive income tax with rates ranging from 19\% to 46\%. Partnerships pay the regional tax (IRAP) and the tax on immovable properties (ICI). Neither is deductible from the personal income tax.

To be eligible for the Italian DIT (dual income tax) relief, partnerships must comply with two rules. First, partnerships must use ordinary (not simplified) accounting. Second, the “ordinary return” must be within the first bracket of tax - and hence taxed at 19\%. It is assumed that, in the case of debt finance, partnerships borrow from banks, implying that the tax rate charged is 12.5\%, as for corporations.

As with the German case, we analyse shareholders with three different personal income tax rates (zero; marginal rate on taxable income of 30,000 Euro; top rate). The results are as follows:

<table>
<thead>
<tr>
<th>overall CT rate on retained earnings</th>
<th>overall CT rate on distributed profits</th>
<th>overall income tax rates</th>
<th>overall income tax rates on interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>corporation</td>
<td></td>
<td>41.3</td>
<td>0 ; 34.0 ; 46.0</td>
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<td>partnerships</td>
<td></td>
<td>4.3 ; 38.3 ; 50.3</td>
<td>0</td>
</tr>
</tbody>
</table>
c) The United Kingdom

In the UK, most small and medium sized enterprises take the legal form of a corporation. Corporation tax differs in two respects from that levied on larger companies. First, the tax rate applied is lower: here it is assumed to be 20%. Second, plant and machinery receives capital allowances at the rate of 40%, rather than 25%.

The personal tax rates for the three types of shareholders (zero; marginal rate on taxable income of 30,000 Euro; top rate). Considered here are:

<table>
<thead>
<tr>
<th>overall CT rate on retained earnings</th>
<th>personal income tax rates on distributions</th>
<th>imputation rate</th>
<th>overall income tax rates on interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>corporation</td>
<td></td>
<td>20</td>
<td>0 ; 10 ; 32.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 ; 10 ; 10</td>
<td>0 ; 20 ; 40</td>
</tr>
</tbody>
</table>

**Cost of Capital and Effective Average Tax Rate**

This section presents measures of the cost of capital and the effective average tax rate for each of the three countries considered. There are three tables, corresponding to three possible income tax positions of the owner of the firm: a zero rate, a top rate, or a medium rate. In the first two cases, the results for small and medium sized enterprises can be compared with the results for large companies. The types of assets and sources of finance as well as their weights are the same as for the base case. This results in 15 types of investment.

Given the different legal forms available to small enterprises and the differences in the tax treatment described above, tax measures for a number of cases are presented. Thus, in Germany, a company is considered, and the company may or may not benefit from the accelerated depreciation allowances and the tax-free reserve. Both positions for a partnership are also considered. In addition, partnerships which are liable, and those which are not liable, to trade tax are considered. This gives six separate categories for German enterprises.

For Italy, there are three categories. An enterprise may be a company. Alternatively, it may be a partnership, in which case it may or may not receive the benefit of the DIT regime. For the UK, only a company is considered.

**Zero rate shareholder**

Table 37 analyses the situation of a zero-rated entrepreneur. It gives measures for each of the categories described above, as well as, for comparison, the case of a large company undertaking domestic investment in the same country.

Beginning with Germany, the cost of capital for a small or medium sized company which receives no incentives is equal to that for a similar large company. The same is true of the EATR. However, if the small company does receive these incentives, it faces a lower cost of capital, and a slightly lower EATR. However, both the cost of capital and the EATR are much lower for partnerships. In the absence of trade tax and personal income tax, essentially only the real estate tax is paid, which has only very small effects relative to no tax at all. If the partnership has a liability to trade tax as well, the cost of capital and the EATR are correspondingly higher, although still lower than those facing a company.
Table 37  Cost of Capital and Effective Average Tax Rate  
- zero-rate personal taxpayer  
- average over 15 types of investment

<table>
<thead>
<tr>
<th>Cost of Capital (upper line)</th>
<th>Large Corporation</th>
<th>Small and Medium-sized Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>EATR (lower line)</td>
<td>Base Case corporation</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>no trade tax</td>
<td>incentive</td>
</tr>
<tr>
<td>Germany</td>
<td>6.9</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>22.3</td>
<td>20.4</td>
</tr>
<tr>
<td>Italy</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>27.1</td>
<td>27.1</td>
</tr>
<tr>
<td>UK</td>
<td>6.6</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>28.2</td>
<td>19.3</td>
</tr>
</tbody>
</table>

Note. Only Germany levies a trade tax. The "incentives" are as follows. Germany: 20% accelerated capital allowance for machinery; tax-free reserve of 50% of investment two years in advance of the purchase of the asset, which is reversed when the first capital depreciation allowance is granted. Italy: the "incentive" refers to when the DIT relief is available. UK: corporation tax rate of 20% and 40% capital allowances for plant and machinery.

In Italy, the tax system has the same impact on small and medium-sized companies as on larger companies. Note here that in the table, both types are assumed to benefit from the DIT relief. This implies that the tax system provides an incentive to invest in Italy relative to the case of no tax (where the cost of capital would be 5%). In turn, this implies that the cost of capital is actually higher for partnerships with zero-rated shareholders than it is for small companies. However, by contrast, since the income tax rate is zero, then the EATR on such partnerships is also zero. The comparison between large companies and small and medium sized partnerships (with zero personal income tax rates) in Italy is therefore subtle. At the margin, the Italian corporation tax regime effectively subsidises investments, and so treats marginal investments more generously than the regimes for partnerships. However, for more profitable firms and investments, the lack of income tax on the partnerships implies that they are more favourably treated than larger companies.

In the UK, the comparison is straightforward. Small and medium-sized companies receive the benefit of a lower statutory tax rate and higher allowances. Both the cost of capital and the EATR are therefore lower than for larger companies.
Table 38 analyses the situation of entrepreneurs who pay income tax at the highest rate. In general, the costs of capital are lower in Table 38 than in Table 37 while the EATRs are higher. This reflects the discussion in Section 4. The shareholder is assumed to compare the return which can be earned on the hypothetical investment analysed here, with some other financial investment, such as a bank account which pays interest. Introducing tax on the interest receipt from the bank implies that the post-tax rate of return from the alternative asset is now much lower. Other things being equal, this reduces the required return - i.e. the cost of capital - from the hypothetical investment. On the other hand, an extra layer of tax must raise the EATR.

The relative position of large companies, small companies and small partnerships in Germany and in the UK is similar to that shown in Table 37. The small company is assumed to have non-qualified shareholders, and so the cost of capital and the EATR in the absence of the incentives are the same as for the large company. The incentives marginally reduce the cost of capital and the EATR. The figures for the partnership are lower than those for the companies. Similarly, in the UK, the small company again benefits from the lower corporation tax rate and the higher allowance.

Table 38 Cost of Capital and Effective Average Tax Rate
- top-rate personal taxpayer
- average over 15 types of investment

<table>
<thead>
<tr>
<th>Cost of Capital (upper line)</th>
<th>Large Corporation</th>
<th>Small and Medium-sized Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>EATR (lower line)</td>
<td>Base Case</td>
<td>corporation</td>
</tr>
<tr>
<td></td>
<td>qualified</td>
<td>non-qualified</td>
</tr>
<tr>
<td></td>
<td>incentive</td>
<td>noe incentive</td>
</tr>
<tr>
<td></td>
<td>no incentive</td>
<td>no incentive</td>
</tr>
<tr>
<td>Germany</td>
<td>5.4</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>47.7</td>
<td>43.3</td>
</tr>
<tr>
<td></td>
<td>3.4</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>4.2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>37.1</td>
<td>35.5</td>
</tr>
<tr>
<td>Italy</td>
<td>5.1</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>37.1</td>
<td>35.5</td>
</tr>
<tr>
<td>UK</td>
<td>5.1</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>35.3</td>
<td>36.1</td>
</tr>
</tbody>
</table>

Note. See notes to Table 37. In this table, the results for the large company are split into those for qualified shareholders and non-qualified shareholders.

However, in Italy, the position is a little different. The DIT relief still has the effect of reducing the cost of capital for companies to be below 5%. However, this is now also the case for partnerships (which receive the DIT relief). In fact the net impact of the differences in rates faced by companies and
partnerships is that the cost of capital is lower for the partnerships. The same is true of the EATR. Part of the difference between large and small companies is that the owners of the latter are assumed not be liable for capital gains tax.

"Medium" rate shareholder

Table 39 presents the results for "medium" rate (the average of the zero and top rate) entrepreneurs. The position is similar to that discussed above.

Table 39 Cost of Capital and Effective Average Tax Rate
- medium-rate personal taxpayer
- average over 15 types of investment

<table>
<thead>
<tr>
<th>Cost of Capital (upper line)</th>
<th>Small and Medium-sized Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>EATR (lower line)</td>
<td>corporation</td>
</tr>
<tr>
<td></td>
<td>no trade tax</td>
</tr>
<tr>
<td></td>
<td>incentive no incentive</td>
</tr>
<tr>
<td>Germany</td>
<td>4.3 4.5</td>
</tr>
<tr>
<td></td>
<td>33.0 33.8</td>
</tr>
<tr>
<td>Italy</td>
<td>4.0 -</td>
</tr>
<tr>
<td></td>
<td>24.7</td>
</tr>
<tr>
<td>UK</td>
<td>5.0 -</td>
</tr>
<tr>
<td></td>
<td>14.3</td>
</tr>
</tbody>
</table>

Note. See notes to Table 37. In this table, there are no results for large companies, as the analyses of shareholders in such companies elsewhere in this study are limited to zero-rate and top-rate shareholders.
Concluding remarks

To conclude, the results of this section show that the specific tax rules applied to SMEs in the countries analysed have the effect of lowering the effective tax burden. In Germany (1999) and in Italy the partnerships bear a lower tax burden in comparison to companies whatever the position of the shareholders.

But, when comparing the results of this section with those shown in section 6.3.3, which examined the tax minimisation approach, it is worth noting that small and medium sized enterprises in Germany, Italy and the UK bear a higher tax burden than multinationals investing abroad.

MEMBER STATES’ EFFECTIVE TAX RATES IN 2001

This section presents estimates of the cost of capital and of the marginal and average effective tax rates for the EU Member States in 2001. The purpose of this section is to give a summary update of the 1999 picture in order to highlight the principal changes in individual positions and of the overall picture during the last two years. The case presented is that of a domestic investment taking into account corporate taxes but not personal taxes. In fact, the detailed analysis presented for 1999 has shown that the general conclusions arising from the domestic and international analysis are broadly similar in terms of the range of variation, the ranking of Member States and the principal tax driver.

The hypotheses underlying the definition of the investment and of the economic framework in which the investment takes place are the same as in the 1999 analysis. The same tax parameters are also applied, updated to take into account the 2001 tax regimes. Annex B details the tax parameters applied in the present computation.

Tables 40 and 41 present 2001 country data and correspond to Tables 7 and 8 shown in section 4.3.

Table 40 shows the cost of capital and the EMTR for the level of corporation and compares these data with the overall country data presented in Table 7.
Table 40 shows that 7 Member States (Belgium, Denmark, Ireland, Luxembourg, Netherlands, Spain and Sweden) have the same cost of capital in 2001 as in 1999. Five Member States have minor changes. Finland and the UK show a slight increase in the cost of capital and in the EMTR due to an increase in the corporation tax rate from 28% to 29% and a minor increase in real estate tax (Finland) and a minor increase in real estate tax (UK). France, Greece and Portugal have a slight decrease in the cost of capital and in the EMTR. In the case of France this is due to a reduction in the corporation tax rate from 40% to 36.43% which is compensated to a small extent by a reduction in the coefficient of declining-balance depreciation by 0.25%. The reduction for Greece and Portugal is due to a reduction in the corporation tax rate from 40% to 37.5% and from 34% to 32% respectively. It is worth noting that Denmark has the same cost of capital in 2001 as in 1999 and a very minor reduction in the EMTR, which is almost unchanged. This is due to the combination of a reduction of the corporation tax rate from 32% to 30% almost entirely compensated for by lower allowances for machinery.

For Germany, Austria and Italy there are some substantial difference between 2001 and 1999.

The reasons for the reduction of the cost of capital and of the EMTR for Germany have been widely commented on when presenting the effects of the German tax reform in section 4. As already underlined, this reform seems to have only limited effects on the ranking of Germany.

In 2000 Austria introduced a reform of the corporate tax in the form of a dual income tax. This reform included a reduction of corporation tax rate from 34% to 25% on deemed profits that can be attributed to the increase of equity capital. Moreover, a reduction in straight-line depreciation on buildings from 4% to 3% was approved in 2001. As a result, the Austrian cost of capital and EMTR have substantially

Table 40 Cost of Capital and EMTR by Country -2001
- by asset, source of finance and overall
- only taxes on corporations

<table>
<thead>
<tr>
<th>Country</th>
<th>Overall Mean 1999</th>
<th>Overall Mean 2001</th>
<th>Cost of Capital 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost of Capital</td>
<td>Cost of Capital</td>
<td>Intangibles</td>
</tr>
<tr>
<td></td>
<td>EMTR</td>
<td>EMTR</td>
<td>Industrial Buildings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Machinery</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Financial Assets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inventories</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Retained Earnings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>New Equity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Debt</td>
</tr>
</tbody>
</table>

- Austria 6.3 20.9 5.7 12.6 5.3 5.8 5.2 6.6 6.6 6.6 4.1
- Belgium 6.4 22.4 6.4 22.4 5.2 7.0 5.3 8.0 6.7 8.0 3.5
- Denmark 6.4 21.9 6.4 21.6 4.3 8.1 5.6 6.9 6.9 4.6
- Finland 6.2 19.9 6.4 21.3 6.1 6.4 5.6 6.8 6.8 4.6
- France 7.5 33.2 7.3 31.8 5.2 8.4 8.5 7.6 7.0 8.7 4.8
- Germany 7.3 31.0 6.8 26.1 5.4 7.1 6.1 8.2 6.9 8.0 4.4
- Greece 6.1 18.2 6.0 16.9 6.7 5.1 6.0 5.2 7.1 7.4 3.5
- Ireland 5.7 11.7 5.7 11.7 5.3 6.8 5.2 5.5 5.5 5.9 5.2
- Italy 4.8 - 4.1 4.3 -15.9 2.4 4.0 3.2 7.5 4.4 4.7 3.6
- Luxembourg 6.3 20.7 6.3 20.7 5.2 6.8 5.3 7.7 6.5 7.7 3.7
- Netherlands 6.5 22.6 6.5 22.7 5.1 7.0 5.9 7.4 6.9 7.8 4.1
- Portugal 6.5 22.5 6.3 21.0 6.5 6.1 5.1 7.5 6.4 7.6 4.0
- Spain 6.5 22.8 6.5 22.8 6.5 6.7 5.4 7.4 6.4 7.7 4.1
- Sweden 5.8 14.3 5.8 14.3 5.0 6.0 5.0 6.6 6.6 6.7 4.3
- UK 6.6 24.7 6.7 24.8 5.5 8.3 5.6 6.9 6.9 7.7 4.8
decreased. The aim of the introduction of a dual system was to ensure a more homogenous treatment between debt and equity financing as is the case for the Italian dual income system. When comparing the EMTR for the different forms of finance in 1999 (see Table 7) and in 2001 it can be observed that the reduction in the Austrian EMTR is the result of the reduction of the EMTR on retained earnings and new equity whereas the EMTR on debt financing is practically unchanged. Therefore, the reform does seem to result in a more homogeneous treatment of the different sources of finance.

The reduction in the Italian cost of capital and EMTR in 2001 is the result of a reduction of the corporation tax rate from 37% to 36% and, more substantially, of an increase in the equity base concerning the calculation of the allowance for the dual income tax from 100% to 120% in 2000 and 140% in 2001. It is worth noting that, following the 2001 spring elections, the new Italian government has "frozen" the dual system as of the 30 June 2001 and has introduced other forms of tax incentives. It is therefore rather difficult, at this stage, to define precisely the tax code applied to Italian investments in 2001.

Overall, the picture for 2001 shows that a number of Member States have a lower cost of capital and EMTR as a result of changes in the tax codes aimed at reducing the corporate tax rate or introducing or modifying the dual income system. These changes have not fundamentally affected the ranking of Member States nor reduced the dispersions of the EMTRs inside the EU. The most evident change is the remarkable reduction in the Austrian effective tax burden, which now places Austria at the lower end of the ranking together with Italy, Ireland and Sweden.

As far as the situation of the different taxation of specific forms of investment by assets and sources of finance is concerned, the picture is not very different from that of 1999. Only Austria and Italy, due to the implementation or modification of the dual system, seem to have in 2001 a considerably more balanced taxation of the different sources of finance. However, due to the reduction of the statutory tax rates in a number of Member States, the benefit of debt finance on equity finance decrease as the value of the tax deductions decrease.

Table 41 presents a summary of the effective average tax rate for each Member State in 2001 for investment where the pre-tax real rate of return is 20% and compares these data with the overall country data presented in Table 8.

Considering that the EATR is more closely tied to the statutory tax rate than is the cost of capital or the EMTR, the large reduction in the statutory tax rate in Germany generates the largest fall in the average EATR, despite the decrease in allowances. In terms of reduction in the average EATR, this is followed by France because of the reduction in its statutory rate of just over 3.5 percentage points.

In contrast, it is the EMTR that is more affected under the dual income system in Italy and Austria than the EATR. Therefore, although the modification (Italy) and the introduction (Austria) of the dual income system lowers their respective EATRs, the effect is not so great as the effect on their EMTRs and the Irish and Swedish EATRs (unchanged in comparison to 1999) remain the lowest.

As a result, when the pre-tax real rate of return is fixed at 20%, the EU 2001 differential is reduced mainly due to the effect of the reduction of the German and French effective tax burden, whereas the lowest effective average tax rate remains the Irish rate. Apart from this reduction in the range of rates of about 4 percentage points, the global picture arising from 2001 in terms of countries at the highest or lowest range of the ranking and principal tax drivers is fundamentally unchanged in comparison to the 1999 picture.
Table 41 Effective Average Tax Rate by Country - 2001
- by asset, source of finance and overall
- only taxes on corporations

<table>
<thead>
<tr>
<th>Country</th>
<th>Overall</th>
<th>Intangibles</th>
<th>Industrial</th>
<th>Buildings</th>
<th>Machinery</th>
<th>Financial</th>
<th>Assets</th>
<th>Inventories</th>
<th>Retained Earnings</th>
<th>New Equity</th>
<th>Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>29.8</td>
<td>26.4</td>
<td>28.2</td>
<td>26.2</td>
<td>30.9</td>
<td>27.6</td>
<td>30.7</td>
<td>30.7</td>
<td>22.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>34.5</td>
<td>30.7</td>
<td>36.1</td>
<td>31.0</td>
<td>39.2</td>
<td>35.3</td>
<td>39.1</td>
<td>39.1</td>
<td>25.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>28.8</td>
<td>19.9</td>
<td>33.3</td>
<td>24.7</td>
<td>29.3</td>
<td>29.3</td>
<td>30.7</td>
<td>30.7</td>
<td>21.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>25.5</td>
<td>25.7</td>
<td>26.6</td>
<td>23.9</td>
<td>28.3</td>
<td>28.3</td>
<td>30.0</td>
<td>30.0</td>
<td>20.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>37.5</td>
<td>27.8</td>
<td>38.2</td>
<td>38.4</td>
<td>35.6</td>
<td>33.8</td>
<td>39.0</td>
<td>39.0</td>
<td>26.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>39.1</td>
<td>30.8</td>
<td>36.0</td>
<td>33.0</td>
<td>39.2</td>
<td>35.4</td>
<td>38.7</td>
<td>38.7</td>
<td>27.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>29.6</td>
<td>33.3</td>
<td>28.5</td>
<td>31.3</td>
<td>11.9</td>
<td>34.8</td>
<td>32.4</td>
<td>32.4</td>
<td>19.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>10.5</td>
<td>8.9</td>
<td>15.8</td>
<td>8.2</td>
<td>9.8</td>
<td>9.8</td>
<td>11.7</td>
<td>11.7</td>
<td>8.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>29.8</td>
<td>22.5</td>
<td>27.1</td>
<td>24.9</td>
<td>35.1</td>
<td>28.4</td>
<td>28.7</td>
<td>28.7</td>
<td>25.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>32.2</td>
<td>28.6</td>
<td>33.7</td>
<td>29.2</td>
<td>36.6</td>
<td>32.9</td>
<td>36.6</td>
<td>36.6</td>
<td>24.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>31.0</td>
<td>26.7</td>
<td>32.6</td>
<td>29.2</td>
<td>34.2</td>
<td>32.5</td>
<td>35.2</td>
<td>35.2</td>
<td>23.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>32.6</td>
<td>31.3</td>
<td>30.1</td>
<td>26.9</td>
<td>34.4</td>
<td>30.9</td>
<td>34.8</td>
<td>34.8</td>
<td>23.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>31.0</td>
<td>31.1</td>
<td>31.8</td>
<td>27.4</td>
<td>34.2</td>
<td>30.7</td>
<td>35.2</td>
<td>35.2</td>
<td>23.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>22.9</td>
<td>19.6</td>
<td>23.4</td>
<td>19.7</td>
<td>25.7</td>
<td>25.7</td>
<td>26.0</td>
<td>26.0</td>
<td>17.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>28.2</td>
<td>24.2</td>
<td>34.0</td>
<td>24.7</td>
<td>29.3</td>
<td>29.3</td>
<td>31.8</td>
<td>31.8</td>
<td>21.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Almost all the changes to corporation taxes in the EU between 1999 and 2001 have resulted in a reduction of tax liabilities. In two of these cases, Austria and Italy, reforms have been directed towards reducing the tax burden on marginal investments. Consequently, the reforms in these two countries have a greater effect on the EMTR than the EATR.

However, six other countries have reduced their statutory tax rates, albeit with relatively small reductions (the main exception being Germany which reduced its rate from 40% to 25%). In some of these countries, governments have offset the reductions by also reducing allowances (again to the greatest extent in Germany). In general, this has resulted in relatively small reductions in the EMTR, but rather larger reduction in the EATR.

The trend analysed here is consistent with a pattern of generally declining statutory tax rates and hence generally declining EATRs, notably for high tax rates countries. It is possible that this decline in the effective tax burdens is a result of tax competition between the Member States as they attempt to attract investments.
COMPARISON OF THE RESULTS WITH THOSE OF THE RUDING AND BAKER & MCKENZIE REPORTS

During the last decade a number of studies have presented international comparisons of effective corporate tax burdens. For the reasons outlined in Section 3, the most commonly used approaches for international comparisons have been based on general forward-looking frameworks partly similar to the approach taken in this study. At the European level, the most well-known studies are the Report of the Ruding Committee of 1992 (to which the mandate given to the Commission from the Council for the current study explicitly refers) and the Baker & McKenzie study commissioned by the Dutch Ministry of Finance in 1999.

The purpose of this section is to compare the principal results arising from these two studies with those presented in the above analysis.

As already explained in Section 3, the application of the forward-looking approach, common to all these studies, gives synthetic measures of the effective tax burdens based on hypothetical situations. In practice, it consists in defining a hypothetical investment identical in all countries and then applying to this identical hypothetical investment the different national tax codes. This "isolates" the taxation elements among all the other factors influencing the effective tax burdens and can thus help identify the most important tax drivers influencing the effective tax burdens and their differences.

The results obtained by the application of this approach depend, therefore, on the hypotheses and assumptions underlying the definition of the hypothetical investment considered and the economic framework.

Consequently, when comparing different studies using this methodology, it should always be borne in mind that the aim of these approaches is not to give universally valid values of the effective tax burden for each country considered, but to allow comparisons between countries on the basis of the same investment. In fact, the individual measures of effective tax burdens rely on the specific assumptions used when applying the model. Therefore, when comparing the results of these different studies, the differences in the underlying hypothesis and assumptions must always be borne in mind.

Comparison of the methodology and the assumptions with those of the Ruding and Baker and McKenzie reports

A) Ruding report

The scope of the mandate received by the Ruding Committee in 1990 covered some of the aspects that this study is addressing: in particular, the effects of differences in business taxation on incentives to invest and the way to alleviate distortions deriving from business taxation differentials.

In order to investigate the overall effect of taxation on the incentive in each country to undertake new investment, either at home at abroad, the Ruding report presented an analysis based on forward-looking indicators related to the taxation of a hypothetical investment. Only the case of a marginal investment was covered and, thus, the computation presented evidence of the cost of capital and marginal effective tax rates for the 12 Member States of the 1992 European Community and some selected main economic partners, on the basis of the theoretical background presented above. The Report assessed also the contributions of particular features of taxation to the lack of neutrality of taxation systems on capital flows by means of simulations.
The present report has gone beyond this approach to also consider effective average tax rates both on hypothetical investments and hypothetical model firm behaviour.

As far as the hypotheses and assumptions are concerned, the Ruding report presented results related to a simple investment in the manufacturing sector taking into account the effects of corporate taxes and ignoring all personal taxes, but considering the effects of imputation credits. The Ruding report considered three forms of assets (machinery, buildings and inventories) whereas the present study takes into account two more forms of assets: intangible and financial assets. For the simulations, the personal taxation of the suppliers of fund was included. The present report has considered the effects of overall corporate taxation (statutory tax rates, surcharges and local taxes) on a simple investment in the manufacturing sector and has also included, separately, the effects of personal income taxation of dividends, interest and capital gains.

Concerning the other tax parameters used in the calculation, the Ruding report and the present report rely on the same framework.

B) Baker and McKenzie study

As with the current study, the purpose of the Baker & McKenzie study was to compute the differences of the EU countries corporate effective tax burden in order to underline the principal tax drivers for these differences.

The Baker & McKenzie study presented an analysis based on the King and Fullerton methodology related to the taxation of a hypothetical investment. Only the case of a marginal investment was covered and, thus the study presented evidence of effective marginal tax rates for the 15 EU countries using the tax codes in force in 1998. Effective marginal tax rates were computed for all the 15 countries in the domestic case. For the transnational investment only the cases of Germany, the United Kingdom and the Netherlands were analysed. The report did not assess the contributions of specific features of taxation to the lack of neutrality by means of simulations.

As far as the hypothesis and assumptions are concerned, the hypotheses related to the hypothetical investment considered are very similar to those used in the present study. The main difference is that the Baker & McKenzie study considered a pre-tax real rate of return of 10% against the 5% post-tax rate of return considered in this study and in the Ruding report and an inflation rate of 1.1% against the 2% used here.

The Baker & McKenzie report considered a simple investment in the manufacturing sector composed of 5 assets taking into account the effects of corporate taxes and, separately, of personal taxes.

The following box summarises the main differences of the hypothesis and assumptions used in the three studies compared in this section.
### Box 13 Comparisons of the hypothesis and assumptions between the Commission study (2001) and the Ruding (1992) and the Baker & McKenzie (1999) reports

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Methodology</strong></td>
<td>Devereux &amp; Griffith:</td>
<td>King and Fullerton:</td>
<td>King and Fullerton:</td>
</tr>
<tr>
<td></td>
<td>Marginal and average</td>
<td>Marginal indicators</td>
<td>Marginal indicators</td>
</tr>
<tr>
<td></td>
<td>indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type of analysis</strong></td>
<td>Domestic analysis</td>
<td>Domestic analysis</td>
<td>Domestic analysis</td>
</tr>
<tr>
<td></td>
<td>Cross-border analysis</td>
<td>Cross-border analysis</td>
<td>Cross border analysis</td>
</tr>
<tr>
<td></td>
<td>(all EU countries)</td>
<td>(all 1992 Community</td>
<td>(only UK, D and NL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>countries plus</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>selected partners)</td>
<td></td>
</tr>
<tr>
<td><strong>Year (tax code)</strong></td>
<td>1999 and 2001</td>
<td>1990</td>
<td>1998 and 2001</td>
</tr>
<tr>
<td><strong>Simulations of</strong></td>
<td>yes</td>
<td>yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td><strong>hypothetical reforms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sector</strong></td>
<td>Manufacturing</td>
<td>Manufacturing</td>
<td>Manufacturing</td>
</tr>
<tr>
<td></td>
<td>Sensitivity analysis</td>
<td>Sensitivity analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for services</td>
<td>for services</td>
<td></td>
</tr>
<tr>
<td><strong>Types of assets</strong></td>
<td>Intangibles, machinery,</td>
<td>Machinery, buildings,</td>
<td>Intangibles, machinery,</td>
</tr>
<tr>
<td></td>
<td>buildings, financial</td>
<td>inventories</td>
<td>buildings, financial</td>
</tr>
<tr>
<td></td>
<td>assets, inventories</td>
<td></td>
<td>assets, inventories</td>
</tr>
<tr>
<td><strong>Weight of assets</strong></td>
<td>1/5 each</td>
<td>Machinery: 50%,</td>
<td>Machinery: 70.49%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Buildings: 28% inventories: 22%</td>
<td>Buildings: 12.99%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inventories: 22%</td>
<td>Inventories: 29.84%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Intangibles: 1.43%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Financial assets: 38.25%</td>
</tr>
<tr>
<td><strong>Source of finance</strong></td>
<td>New equity, retained</td>
<td>New equity, retained</td>
<td>New equity, retained</td>
</tr>
<tr>
<td></td>
<td>earnings, debt</td>
<td>earnings, debt</td>
<td>earnings, debt</td>
</tr>
<tr>
<td><strong>Weight of sources</strong></td>
<td>New Equity: 10%</td>
<td>New Equity: 10%</td>
<td>New Equity: 10%</td>
</tr>
<tr>
<td></td>
<td>Retained earnings 55%</td>
<td>Retained earnings 55%</td>
<td>Retained earnings 55%</td>
</tr>
<tr>
<td></td>
<td>Debt: 35%</td>
<td>Debt: 35%</td>
<td>Debt: 35%</td>
</tr>
<tr>
<td><strong>Inflation rate</strong></td>
<td>2% for all countries</td>
<td>3.1% for all countries</td>
<td>1.1% for all countries</td>
</tr>
<tr>
<td><strong>Rate of return</strong></td>
<td>Post-tax rate:5%</td>
<td>Post-tax rate:5%</td>
<td>Pre-tax rate:10%</td>
</tr>
<tr>
<td><strong>Tax parameters</strong></td>
<td>Overall corporation</td>
<td>Statutory corporation</td>
<td>Overall corporation</td>
</tr>
<tr>
<td></td>
<td>tax rates including</td>
<td>tax;</td>
<td>tax rates including</td>
</tr>
<tr>
<td></td>
<td>surcharges and local</td>
<td>Withholding taxes on</td>
<td>surcharges and local</td>
</tr>
<tr>
<td></td>
<td>taxes; Corporate real</td>
<td>dividends and</td>
<td>taxes; Corporate real</td>
</tr>
<tr>
<td></td>
<td>estate taxes, net</td>
<td>interest</td>
<td>estate taxes, net</td>
</tr>
<tr>
<td></td>
<td>wealth taxes and other</td>
<td></td>
<td>wealth taxes and other</td>
</tr>
<tr>
<td></td>
<td>non-profit taxes on</td>
<td></td>
<td>non-profit taxes on</td>
</tr>
<tr>
<td></td>
<td>wealth; Tax credit</td>
<td></td>
<td>wealth; Tax credit</td>
</tr>
<tr>
<td></td>
<td>associated with</td>
<td></td>
<td>associated with</td>
</tr>
<tr>
<td></td>
<td>dividend and</td>
<td></td>
<td>dividend and</td>
</tr>
<tr>
<td></td>
<td>equalisation tax;</td>
<td></td>
<td>equalisation tax;</td>
</tr>
<tr>
<td></td>
<td>Personal income tax</td>
<td></td>
<td>Personal income tax</td>
</tr>
<tr>
<td></td>
<td>rates, including</td>
<td></td>
<td>rates, including</td>
</tr>
<tr>
<td></td>
<td>withholding taxes on</td>
<td>Withholding taxes on</td>
<td>Withholding taxes on</td>
</tr>
<tr>
<td></td>
<td>dividend, interest and</td>
<td>dividends and</td>
<td>dividends and</td>
</tr>
<tr>
<td></td>
<td>capital gain; Individual</td>
<td>interest</td>
<td>interest</td>
</tr>
<tr>
<td></td>
<td>net wealth taxes on</td>
<td>Treatment of foreign</td>
<td>Treatment of foreign</td>
</tr>
<tr>
<td></td>
<td>shareholdings and</td>
<td>source dividends and</td>
<td>source dividends and</td>
</tr>
<tr>
<td></td>
<td>lending Withholding</td>
<td>interest received by</td>
<td>interest received by</td>
</tr>
<tr>
<td></td>
<td>taxes on dividends and</td>
<td>parent companies</td>
<td>parent companies</td>
</tr>
<tr>
<td></td>
<td>interest Treatment of</td>
<td>Capital allowances</td>
<td>Capital allowances</td>
</tr>
<tr>
<td></td>
<td>foreign source</td>
<td>for industrial</td>
<td>for industrial</td>
</tr>
<tr>
<td></td>
<td>dividends and interest</td>
<td>buildings, machinery</td>
<td>buildings, machinery</td>
</tr>
<tr>
<td></td>
<td>Treatment of foreign</td>
<td>and intangibles.</td>
<td>and intangibles.</td>
</tr>
<tr>
<td></td>
<td>source dividends and</td>
<td>Tax treatment of</td>
<td>Tax treatment of</td>
</tr>
<tr>
<td></td>
<td>interest received by</td>
<td>financial assets and</td>
<td>financial assets and</td>
</tr>
<tr>
<td></td>
<td>parent companies</td>
<td>inventories</td>
<td>inventories</td>
</tr>
</tbody>
</table>
Comparisons of the results in the domestic case

Tables 42 and 43 present a comparison of effective tax burdens across the three studies considered. The Ruding report presented only cost of capital indicators. Therefore Table 42 compares the cost of capital presented in Section 4 of this study with those computed in the framework of the Ruding report. The Baker & McKenzie study presented only effective marginal tax rates. Table 43 thus compares the EMTR presented in Section 4 of this report with those published in the Baker & McKenzie study.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COST OF CAPITAL</td>
<td>COST OF CAPITAL</td>
</tr>
<tr>
<td></td>
<td>Overall average</td>
<td>Intangibles</td>
</tr>
<tr>
<td>Austria</td>
<td>6.3</td>
<td>5.9</td>
</tr>
<tr>
<td>Belgium</td>
<td>6.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Denmark</td>
<td>6.4</td>
<td>4.2</td>
</tr>
<tr>
<td>Finland</td>
<td>6.2</td>
<td>6.1</td>
</tr>
<tr>
<td>France</td>
<td>7.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Germany</td>
<td>7.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Greece</td>
<td>6.1</td>
<td>6.8</td>
</tr>
<tr>
<td>Ireland</td>
<td>5.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Italy</td>
<td>4.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>6.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>6.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Portugal</td>
<td>6.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Spain</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>5.8</td>
<td>5.0</td>
</tr>
<tr>
<td>UK</td>
<td>6.6</td>
<td>5.5</td>
</tr>
</tbody>
</table>
Table 42 shows a rather different picture across the two studies. In general, the cost of capital is lower in the figures arising from the Ruding report and the ranking of the Member States is different in the two computations. The differences in the tax parameters considered may have a great influence on these results, notably on the observed levels of the cost of capital. As was shown in Box 11 the present study considers a broad range of taxes levied on companies, whereas the Ruding report considered just the statutory corporate tax rate. Section 4 of this study underlined the weight that taxes other than the corporate tax may have on the level of the effective tax burden, in certain countries in particular. Therefore, it cannot be concluded, simply by comparing the results of Table 42, that the cost of capital is generally higher now than ten years ago.

It is interesting to observe that differences due to different assets and weight of assets seem to play a lesser role in determining differences in the results. In fact, Section 5 (sensitivity analysis) showed that the results of the present study would not be fundamentally affected by using the same weights as those used in the Ruding report. By contrast, when using the "Ruding report" weights for the sources of finance the cost of capital of the present study would be slightly lower. (See sensitivity analysis number 5 in section 5.1).

The fact that the ranking of the Member States is also different may be due, on the one hand, to the differences on the tax parameters used and, on the other hand, to the number of tax reforms undertaken by Member States this last decade. It is difficult, just on the basis of the results shown in Table 42, to infer which is the relative weight of these two factors in determining differences in the picture presented now and the situation of ten years ago. It is evident that national tax reforms may have had a considerable effect in determining ranking differences.

One useful way to compare the results presented in Table 42 is to analyse whether the global picture in terms of influence of the tax systems on the incentives to invest and financing decisions has evolved since early 1990s.

The analysis of Section 4 suggested that the tax systems tend to create a misallocation of resources by favouring certain forms of assets and certain sources of finance. The same patterns are observable in the figures of 1992. Today, however, the differences in the effective tax burdens held by different forms of investment or financing are smaller then ten years ago, although still considerable. This seems to suggest that the tax reforms undertaken during the last decade may have in part contributed to make more neutral the influence of taxation on the organisation of domestic investments. Nevertheless, the persistence of high differences reopens the debate on the possible distortive effects of taxation on the allocation of resources within the EU and on the possible frustration of equity goals of policymakers by tax arbitrage arrangements.

When comparing the size of the Member States' differentials, it is worth noting that the magnitude of the variation of the cost of capital between countries has not diminished. On the contrary the range between the lowest and highest value is wider. At the corporate level, the Ruding report presented a range of the average countries' cost of capital between 5% and 6.2%. The present report shows a range between 4.8% and 7.5%. Once again, it has to be underlined that the current study takes into account a broader range of taxes levied on companies and that the Member States with the highest cost of capital are countries which levy high non-corporate profit taxes. The difference with the situation ten years ago is that now it seems to be a group of "core countries" which have very similar costs of capital.

Table 43 compares the effective marginal tax rates computed in the Baker & McKenzie study with those arising from the current study.

Here again the differences in the assumptions determine differences in the country data.
<table>
<thead>
<tr>
<th>Table 43</th>
<th>EMTR for Domestic Investment:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>only corporation taxes</td>
</tr>
<tr>
<td>Country</td>
<td>EMTR overall</td>
</tr>
<tr>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td>Austria</td>
<td>20.9</td>
</tr>
<tr>
<td>Belgium</td>
<td>22.4</td>
</tr>
<tr>
<td>Denmark</td>
<td>21.9</td>
</tr>
<tr>
<td>Finland</td>
<td>19.9</td>
</tr>
<tr>
<td>France</td>
<td>33.2</td>
</tr>
<tr>
<td>Germany</td>
<td>31.0</td>
</tr>
<tr>
<td>Greece</td>
<td>18.2</td>
</tr>
<tr>
<td>Ireland</td>
<td>11.7</td>
</tr>
<tr>
<td>Italy</td>
<td>-4.1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>20.7</td>
</tr>
<tr>
<td>Netherlands</td>
<td>22.6</td>
</tr>
<tr>
<td>Portugal</td>
<td>22.5</td>
</tr>
<tr>
<td>Spain</td>
<td>22.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>14.3</td>
</tr>
<tr>
<td>UK</td>
<td>24.7</td>
</tr>
</tbody>
</table>

**Commission Study (2001)**
(Tax code of year 1999)

(Tax code of year 1998)
The main difference between the Commission report and the Baker and McKenzie report is that the first considers a fixed post-tax return (the real interest rate) and the second a fixed pre-tax rate of return. It is noteworthy that the results of the quantitative approaches depend on the interest rate assumption adopted as the real interest rate corresponding to the post-tax rate of return. This study uses a post-tax rate of return of 5% as the base reference case for real investment decisions and computes the range of effective tax rates applicable at the fixed post-tax rate of return. The Baker and McKenzie study, contrary to the prevailing practice, use a fixed pre-tax rate of return typically set at the higher rate of 10% and compute the range of effective tax rates applicable at the fixed pre-tax rate of return. This explain to a large extent the different numerical results of the two studies.

The differences of the values arising from the two computations are also partly due to the different hypothesis in terms of the considered investment and tax parameters.

Notwithstanding these differences, there is a remarkable similarity in the general conclusions arising from the two pictures.

First of all, the ranking of countries is consistent in the sense that, even if the individual country positions can vary (for instance France has the highest EMTR in the Baker & McKenzie study and the second highest EMTR in the present study), we find the same group of countries at the top and at the bottom of the scale (apart from Ireland). It should be underlined that when countries have a very similar cost of capital (see previous Table) even a small change in the assumptions and parameters is likely to affect the ranking of these countries.

Notwithstanding the difference in the relative position of Ireland due to the important difference in the tax rate considered, the lowest EMTR countries in both studies are Italy, Sweden, Greece and Finland and the highest EMTR countries are France, Germany and Spain. The results of both studies reveal a considerable range of around 30 points between the highest and lowest values. Moreover, the Baker & McKenzie study stressed that the principal tax driver for these differences is, above all, the overall corporate tax rate and that differences in the tax base can play an important role in specific individual situation. The present study comes to at the same conclusions.

The two studies also show similar results for the differences in the effective tax burden on different assets and sources of finance, and therefore similar conclusions can be drawn from the two studies. It is worth noting that the Baker and McKenzie study considered an inflation rate of 1.1%, against 2% in the present study. A higher rate of inflation exacerbates the differences between debt and equity finance. This is due to the fact that nominal interest rates are assumed to rise in line with inflation; since these are deductible in the case of debt financing, the EMTR falls for debt financing.

In general, the two studies make similar statements on the ranges of tax differentials, the country ranking and the reasons for these differentials.

Baker and McKenzie has recently published an updated version of its study, taking into account the Member States' tax codes for the year 2001. This updated version also applies some different economic and tax parameters. In contrast to the 1999 study the updated version considers a broader range of non-profit taxes including the payroll taxes. Moreover, for Ireland the rate of 12.5% (rate which will be in force in 2003) is taken into account in the 2001 version, as against 28% in the 1999 version. The inflation rate is now fixed at 2% (as against 1.1% in the 1999 version).

As was the case for the 1999 study, the computation is based on a fixed pre-tax rate of return of 10%. It includes sensitivity analysis for different levels of the pre-tax rates of return. As mentioned above this study uses a fixed post-tax rate of return of 5% as the base reference case.
The following table shows the Member States' effective marginal tax rates computed by Baker and McKenzie for 2001 where the pre-tax rate of return is fixed at 10% and 6% respectively. These data are compared with the effective marginal tax rates computed in this study where the post-tax rate of return is fixed at 5%.

Table 44  EMTR for domestic investment:  
Baker and McKenzie report (2001) and Commission Study (2001)  
- only corporation taxes

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRE-TAX RATE OF RETURN (p)</td>
<td>POST-TAX RATE OF RETURN (r)</td>
</tr>
<tr>
<td></td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Austria</td>
<td>18.25</td>
<td>20.42</td>
</tr>
<tr>
<td>Belgium</td>
<td>18.89</td>
<td>17.22</td>
</tr>
<tr>
<td>Denmark</td>
<td>18.81</td>
<td>19.79</td>
</tr>
<tr>
<td>Finland</td>
<td>18.09</td>
<td>18.58</td>
</tr>
<tr>
<td>France</td>
<td>30.11</td>
<td>36.84</td>
</tr>
<tr>
<td>Germany</td>
<td>25.20</td>
<td>23.80</td>
</tr>
<tr>
<td>Greece</td>
<td>6.76</td>
<td>4.89</td>
</tr>
<tr>
<td>Ireland</td>
<td>9.43</td>
<td>10.64</td>
</tr>
<tr>
<td>Italy</td>
<td>13.74</td>
<td>11.54</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>18.98</td>
<td>17.12</td>
</tr>
<tr>
<td>Netherlands</td>
<td>20.67</td>
<td>19.94</td>
</tr>
<tr>
<td>Portugal</td>
<td>18.15</td>
<td>16.55</td>
</tr>
<tr>
<td>Spain</td>
<td>18.30</td>
<td>16.56</td>
</tr>
<tr>
<td>Sweden</td>
<td>15.73</td>
<td>15.53</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>20.83</td>
<td>23.40</td>
</tr>
</tbody>
</table>

Due to the differences in the hypothesis (fixed pre-tax rate of return as against fixed post-tax rate of return) the results of the Baker and McKenzie and of the current study are not directly comparable. The
case in which the pre-tax rate of return is fixed at 6% is the closest to the case considered in this study where the post-tax of return is fixed at 5%, accordingly these two situations forms the basis of the present comparison.

The differences in individual results of the two studies are due not only to the different fixed pre-tax/fixed post-tax assumptions but also due to differences in a range of other assumptions.

The Baker and McKenzie study for 2001 considers a broader range of non-profit taxes including the payroll taxes and the rate applied to Ireland is 12.5% as against 10% rate in force in 2001 for the manufacturing sector. Moreover, the "dual income" system in force in Italy has been applied in a different way in the two studies. The Italian "dual income" tax systems splits the tax base for profits into two components, taxed at different tax rates. Very broadly, the ordinary return, calculated as the interest rate multiplied by equity invested into the company, is taxed at 19%, while the residual profit is taxed at 37%. However a rule applied in the past and abolished in 2000, stated also that, whatever the result of the application of the dual system, at the end the average rate applied (resulting in the application of these two different rates according to the method of financing and the amount of residual profit) should not be less than 27%. This study has not taken into consideration this "minimum" global corporate rate of 27% and in the marginal case (no extra-profits) the rate of 19% has been applied. Instead, the Baker and McKenzie study applies this "minimum" rate of 27%. As a result the EMTR in this study is lower than the EMTR in the Baker and McKenzie study. And, finally, the weights of the five assets composing the hypothetical investment considered is different in the two studies.

Notwithstanding these differences, there is a remarkable similarity in the general conclusions arising from the two pictures for 2001, as it was the case for 1999. The same conclusions drawn from the comparison with the 1999 results remain valid for the 2001 results.

**Comparisons of the results in the transnational case**

As, in the transnational case, the Baker & McKenzie report computed effective marginal tax rates only for three countries (D, NL and UK), this section does not make a comparison between the results of the present study and those arising from the Baker & McKenzie study. The comparison is thus limited to the results of the Ruding report.

The present study showed, in section 6 (Tables 17 to 19), that there is a large variation in the way each Member State treats other Member States. Each Table presented the cost of capital for each country averaged across the five different assets and the three sources of finance of the parent and showed separately the three different ways in which the subsidiary is financed.

Table 45 shows the cost of capital for transnational investment presented in the Ruding report. This table shows average cost of capital for each Member State across the sources of finance and the assets considered making also an average of the three different ways in which the subsidiary can be financed.
<table>
<thead>
<tr>
<th>Residence (investment from)</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Germany</th>
<th>Greece</th>
<th>Spain</th>
<th>France</th>
<th>Ireland</th>
<th>Italy</th>
<th>Luxembourg</th>
<th>Netherlands</th>
<th>Portugal</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>5.4</td>
<td>6.7</td>
<td>6.2</td>
<td>5.4</td>
<td>7.5</td>
<td>7.0</td>
<td>5.6</td>
<td>7.2</td>
<td>6.5</td>
<td>6.1</td>
<td>7.2</td>
<td>6.4</td>
</tr>
<tr>
<td>Denmark</td>
<td>6.6</td>
<td>5.8</td>
<td>6.1</td>
<td>6.5</td>
<td>5.6</td>
<td>6.5</td>
<td>5.3</td>
<td>6.7</td>
<td>6.4</td>
<td>5.9</td>
<td>5.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Germany</td>
<td>7.7</td>
<td>7.5</td>
<td>5.5</td>
<td>4.9</td>
<td>7.2</td>
<td>7.7</td>
<td>6.1</td>
<td>9.5</td>
<td>6.9</td>
<td>7.4</td>
<td>8.1</td>
<td>6.9</td>
</tr>
<tr>
<td>Greece</td>
<td>6.7</td>
<td>9.3</td>
<td>6.5</td>
<td>5.1</td>
<td>8.8</td>
<td>10.3</td>
<td>9.1</td>
<td>7.4</td>
<td>6.5</td>
<td>6.4</td>
<td>8.4</td>
<td>7.0</td>
</tr>
<tr>
<td>Spain</td>
<td>6.6</td>
<td>6.7</td>
<td>6.4</td>
<td>6.5</td>
<td>6.1</td>
<td>7.2</td>
<td>6.7</td>
<td>7.0</td>
<td>6.7</td>
<td>6.3</td>
<td>6.0</td>
<td>6.7</td>
</tr>
<tr>
<td>France</td>
<td>6.2</td>
<td>6.0</td>
<td>5.2</td>
<td>6.0</td>
<td>7.2</td>
<td>5.4</td>
<td>5.4</td>
<td>6.7</td>
<td>6.5</td>
<td>6.2</td>
<td>6.5</td>
<td>6.4</td>
</tr>
<tr>
<td>Ireland</td>
<td>6.6</td>
<td>6.7</td>
<td>6.4</td>
<td>11.7</td>
<td>14.2</td>
<td>7.3</td>
<td>5.1</td>
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<td>7.0</td>
<td>6.8</td>
<td>14.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Italy</td>
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<td>7.7</td>
<td>5.4</td>
<td>7.2</td>
<td>8.5</td>
<td>9.5</td>
<td>9.6</td>
<td>6.0</td>
<td>8.0</td>
<td>8.3</td>
<td>7.6</td>
<td>9.0</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>6.4</td>
<td>6.5</td>
<td>6.4</td>
<td>6.5</td>
<td>7.0</td>
<td>7.0</td>
<td>5.5</td>
<td>7.1</td>
<td>6.2</td>
<td>6.3</td>
<td>7.7</td>
<td>6.2</td>
</tr>
</tbody>
</table>

48 Assuming the subsidiary is financed by one-third retentions by the subsidiary, one-third new equity from the parent and one-third debt from the parent; investment in a weighted average set of assets; inflation of 3.1% everywhere; real interest rate of 5% everywhere; personal taxes are zero; parent raises finance in weighted average of debt, new shares and retained earnings.
<table>
<thead>
<tr>
<th></th>
<th>6.1</th>
<th>6.2</th>
<th>6.4</th>
<th>5.7</th>
<th>7.0</th>
<th>7.0</th>
<th>5.5</th>
<th>6.3</th>
<th>6.7</th>
<th>5.7</th>
<th>8.4</th>
<th>6.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>6.6</td>
<td>6.7</td>
<td>6.4</td>
<td>10.9</td>
<td>7.0</td>
<td>7.6</td>
<td>8.4</td>
<td>7.1</td>
<td>9.5</td>
<td>11.1</td>
<td>5.7</td>
<td>7.0</td>
</tr>
<tr>
<td>UK</td>
<td>5.9</td>
<td>6.0</td>
<td>5.9</td>
<td>5.9</td>
<td>6.9</td>
<td>7.0</td>
<td>7.0</td>
<td>6.1</td>
<td>6.5</td>
<td>6.2</td>
<td>6.6</td>
<td>5.9</td>
</tr>
</tbody>
</table>
Tables 17 to 19 and Table 45 are not directly comparable, for three main reasons. First, as was the case for a domestic investment, differences in the parameters used, and notably the number of taxes levied on companies, can explain some differences in the results between the two studies.

Second, the tax reforms of the last decade and notably the reforms related to the tax regimes can explain the different results in individual Member States in 1999 compared with those of ten years ago.

Third, the fact that these matrices summarise all the domestic and international features of taxation makes it very difficult, when comparing the figures from the two studies, to attribute to one factor or another the origin of differences in the results.

All that said, two observations can be made. Tables 17 to 19 show that subsidiaries located in some host countries, and notably Ireland and Italy, always have a lower cost of capital than subsidiary located in other host countries. On the other side, subsidiaries located in Germany and France always have a higher cost of capital. Table 45 presents a more mixed picture and it is impossible to say that some host countries are generally more or less attractive.

As far as the size of variation is concerned, the picture arising from Tables 17 to 19 shows considerable variations within columns and rows. Therefore, on the one hand, there is considerable incentive for companies to choose tax favoured locations and, on the other, the effective tax burden of a subsidiary depends heavily on the home country of the parent company. When looking at Table 42, it does not seem that such incentives have diminished compared to the situation of ten years ago.

Table 46 compares the figures in the Ruding report and the present study which assess the extent to which the tax treatment of transnational investments gives incentives to undertake transnational, as opposed to domestic investments.
### Average Cost of Capital by Country

- Ruding report and Commission study
- domestic, average inbound and outbound
- only corporation taxes
- average over sources of finance of subsidiary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>EU Average</td>
<td>EU Standard Deviation</td>
</tr>
<tr>
<td></td>
<td>Domestic</td>
<td>Inbound</td>
</tr>
<tr>
<td>Austria</td>
<td>6.3</td>
<td>6.5</td>
</tr>
<tr>
<td>Belgium</td>
<td>6.4</td>
<td>6.7</td>
</tr>
<tr>
<td>Denmark</td>
<td>6.4</td>
<td>6.6</td>
</tr>
<tr>
<td>Finland</td>
<td>6.2</td>
<td>6.4</td>
</tr>
<tr>
<td>France</td>
<td>7.5</td>
<td>7.7</td>
</tr>
<tr>
<td>Germany</td>
<td>7.3</td>
<td>7.0</td>
</tr>
<tr>
<td>Greece</td>
<td>6.1</td>
<td>6.4</td>
</tr>
<tr>
<td>Ireland</td>
<td>5.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Italy</td>
<td>4.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>6.3</td>
<td>6.5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>6.5</td>
<td>6.6</td>
</tr>
<tr>
<td>Portugal</td>
<td>6.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Spain</td>
<td>6.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>5.8</td>
<td>6.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>6.6</td>
<td>6.8</td>
</tr>
</tbody>
</table>
As is the case now, both capital export and capital import neutrality were absent ten years ago. The Ruding report showed differences between domestic, outbound and inbound cost of capital that were larger than the differences found in the present study. Moreover, the standard deviations for inbound and outbound costs of capital were also higher. It seems, therefore, that the reforms undertaken during the last decade had a positive influence in reducing, on average, the incentives to undertake domestic investments as opposed to transnational investments.

But, as pointed out above, the averages presented in the current study mask large differences across the possible home/host countries. A lot of information is lost, in particular the variation between countries and sources of finance. There is, in fact, a remarkable range of variation in the effective tax burden of subsidiaries located in different host countries or for subsidiaries operating in a given country.

Moreover, it has to be stressed, once again, that the different picture arising from the two studies is at the same time the result of evolving tax systems and of different economic assumptions and parameters underlying the computations.

One important difference in the results of the two studies is that, while ten years ago all Member States had a cost of capital for domestic investment lower than the outbound cost of capital, now, there are some Member States for which outbound investment is less heavily taxed than domestic investment. These are the Member States with the highest national profit rate. On the other side, Member States with the lowest national profit tax give a marked advantage to domestic investment.

Comparison of the results of the simulations of hypothetical tax reforms

The results of the simulation presented in section 7 of this study are generally in line with the impact of hypothetical reforms simulated in the Ruding report.

In particular, the importance of the harmonisation of statutory corporate tax rates to increase the degree of locational tax neutrality is one of the main conclusions of the Ruding report. In addition, that report similarly demonstrated that "harmonisation of certain aspects of the tax base in isolation does not always increase neutrality".

The limited impact of the abolition of withholding taxes on cross-border interest payments is underlined in the Ruding report, as is the potentially large positive impact of the abolition of withholding taxes on dividend payments between related companies. It is likely that further progress in this respect, beyond that currently provided for in the Parents-Subsidiaries directive could still bring some benefit as far as locational neutrality is concerned.

As to the possible adoption by all EU Member States of a common exemption system for foreign source income, the Ruding report noticed that this would have improved capital export neutrality and capital import neutrality. The current study (see simulation 10 in section 7) however produces the opposite result for capital export neutrality. Similarly, for a common credit method, the Ruding report presented unambiguously positive results, both for capital export and import neutrality, while simulation 9 in section 7 shows a move away from capital import neutrality.
Lastly, the conclusion, made in the Ruding report, that the adoption of a common classical corporation tax or a common imputation system would not improve the overall degree of locational tax neutrality slightly differs from the results presented in the current study. Indeed, simulation 12 in section 7 suggests that a common classical system could improve the overall allocational neutrality in the EU.

**Results from other studies**

Measuring the effects of corporate income taxes on the cost of capital is a standard way of assessing the potential impact of corporate taxation on investments.

During the last few years a number of studies have presented estimates of effective corporate tax burdens at national and international level by means of the application of approaches similar to that used in the present report.

In particular, the French Sénat (1999) published a report on tax competition in Europe which includes a comparison of domestic and international effective corporate tax burdens for the EU Member States in 1998. More recently Bond and Chennels (2000) published a comparative study of effective corporate tax burdens for seven selected world economies (five EU Member States plus USA and Japan) with the purpose of studying the trends in effective corporate taxation over the last thirty years.

As already underlined above, the numerical results arising from the application of forward-looking methodologies and therefore also the country ranking can differ due to different hypotheses concerning the economic environment in which the investment takes places and the specific investment considered.

A detailed analysis of the different numerical results of studies published over the last few years would demand a detailed assessment of the different hypotheses and goes beyond the scope and purpose of the present report. It is nevertheless useful to compare the general statements arising from these different studies in order to understand whether the different applications give coherent answers to the question of the potential role of taxation on investments.

The quantitative results presented in the French Sénat report showed tax differentials as high as the differentials arising from the computation in the present study. They confirmed that capital export and import neutrality are never attained and that the average values for each country in the international case hide considerable bilateral variations. Moreover, they pointed out that the present tax regimes give a strong advantage to debt financing and tend to favour investment in machinery (intangibles have not been included in the considered investment).

The Bond and Chennels comparisons, which also confirm the size of tax differentials and the nature of imbalances, goes a step further in showing a decline and a marked convergence in the cost of capital measures over the last ten years in particular.

**Conclusions**

This is the first time a comprehensive study has analysed such a broad range of indicators of the effective company tax burden, both marginal and average, for the Member States of the European Union. These different indicators reflect different
hypotheses related to the underlying methodology, as well as to the domestic or international localisation of the investment, the profitability of the investment or of the firm considered, and the size and behaviour of the companies. The computations have been supplemented by "sensitivity analysis" which tests the impact of different hypotheses on the results.

The broad range of data computed is not intended to give "universally valid values" for the effective tax burden in different countries, but rather to give indicators, or illustrate interrelations, in a series of relevant situations. In fact, effective tax rates may vary depending on the characteristics of the specific investment project concerned.

A number of general conclusions regarding both the differences in the effective tax burdens and the identification of the most relevant tax drivers which influence these tax burdens, can nevertheless be formulated on the basis of the results. Therefore, coherent explanations can be given of how Member States' tax regimes create incentives to allocate resources. The most striking feature of the quantitative analysis in this study is that, across the range of different situations, the relevant conclusions and interpretations remain relatively constant.

This study does not aim to estimate quantitatively the impact of differences in effective tax rates on the actual location of investments. The data arising from the application of the principles and assumptions underlying this study give summary measures of the incentives (or disincentives) to undertake different investments but do not provide empirical evidence of the impact of taxation on actual economic decisions. The empirical studies which have attempted to study the relevance of tax considerations in investment decisions show that there is, to differing degrees, a negative correlation between the size of taxation and location decisions. Nevertheless, certain methodological weaknesses and data shortages which affect these studies make it difficult to define "the" quantitative indicator which summarises this relation.

When domestic investments are considered, (see section 4) the analysis for 1999 suggests that there is a variation in the effective tax burden faced by investors resident in the different EU Member States, depending on the type of investment and its financing. However, the Member States tax codes tend to favour the same forms of investment by assets and sources of finance.

The range of the differences in national effective corporate taxation rates, when personal taxation is not taken into account, is around 37 points in the case of a marginal investment (between -4.1% for Italy and 33.2% for France) and around 30 points in the case of more profitable investments (between 10.5% for Ireland and 39.1% for Germany when the hypothetical investment methodology is applied and between 8.3% for Ireland and 39.7% for France when the "Tax Analyser" model is applied). In the "Tax Analyser" model France shows a higher effective tax burden than Germany (which is second in the ranking) because this model takes into account a high number of non-profit taxes which are particularly relevant in France.

Germany and France are always at the upper range of rankings of the Member States and Ireland is, in general, at the lower range of these rankings, apart for the case of a marginal investment where Italy shows a considerably lower effective marginal tax rate. The advantage of the Italian tax regime for marginal investments can be largely traced to the Italian "dual income" tax system. At the margin the Italian corporation tax regime...
effectively subsidises investment. But, when the profitability of the investment rises the effective tax burden rises and for an intra-marginal investment the Italian effective tax burden is in the middle of the EU range. In general, there are not substantial differences in the ranking of the Member States when comparing marginal and infra-marginal indicators.

The analysis suggests also that, in practically every situation analysed, on the one hand, the tax systems tend to favour investment in intangibles and machinery and, on the other hand, debt is, by far, the most tax-efficient source of finance for all Member States.

The introduction of personal taxation substantially increases the effective tax burdens and the observed differences. In this situation the ranking of Member States by effective tax burden is very different from the case in which only corporate taxation is considered. Moreover, it is no longer true that debt is always the form of finance which minimise the effective tax rate, even if for a majority of Member States debt is still the most favoured form of finance.

It is worth noting that the values of the effective tax burden for each Member State can vary according to the definition of the economic variables and parameters underlying the application of the methodology and, as mentioned above, there is no universally valid value in one country. However, the sensitivity analysis in section 5, suggests that the ranking of Member States is largely unaffected by changes in the assumptions used in the base scenario.

Differences between the effective tax burden in the EU Member States may be important for two reasons. First, differences in effective tax rates faced by companies located in different Member States, but competing in the same market, may affect their international competitiveness: two different companies, competing in the same market, may face two different tax rates. Second, when multinational companies face only the tax rate of the country where the activity takes place then differences in the effective tax rates between countries could also affect the location choice of individual activities. This can occur either as a result of the provisions of international tax codes, for example when the repatriation of profits by way of dividend from a subsidiary to a parent results in no further taxation because the dividend is exempt, or as a result of tax planning. A multinational company may therefore face different tax rates, depending on where its activities are located.

The EU wide spread cannot be explained by one single feature of the national tax system. However, the analysis tends to show that the different national tax rates on profits (statutory tax rates, surcharges and local taxes) can explain most of the differences in effective corporate tax rates between Member States.

Therefore, although tax regimes are designed as more or less integrated systems (in general high tax rates on profits seem to correlate with a narrower taxable base and vice versa), tax rate differentials more than compensate for differences in the tax base. This is particular relevant when discussing the compensatory effects of a generous tax base compared to a relatively low tax rate on the effective tax burden.

The quantitative analysis also shows that the relative weight of rates in determining the effective tax burden of companies rises when the profitability of the investment rises
and that, consequently, the compensatory effects of a lower tax base in countries with high tax rates on effective tax rates tend to disappear when the profitability rises.

When transnational investments are considered, (see section 6) the data for 1999 arising from the quantitative analysis illustrates a variation in the way each Member State treats investments in or from other countries. Thus, the effective tax burden of a subsidiary of a parent company in one country depends crucially on where that subsidiary is located. The range of variations of the effective tax burdens of subsidiaries located in different host countries can reach even more than 30 points regardless of the method of financing of the subsidiary. This suggests that there is considerable incentive for companies to choose the most tax-favoured locations for their investment, which may not be the most favourable location in the absence of taxes. Similarly, subsidiaries operating in a given country face different effective tax burdens depending on where their parent company is located. Even in this case the range of variation can reach more than 30 points.

The analysis of the effective tax burden of transnational investment also allows an assessment of the allocation effects of international taxation by capturing the extent to which the tax treatment of transnational investments gives incentives to undertake transnational, as opposed to domestic, investment. The data show that, on average in the EU, outbound and inbound investments are more heavily taxed than otherwise identical domestic investments and, therefore, the additional components of the transnational system add somewhat to the effective tax rates on investment.

But, to the extent that companies are free to choose the most tax-favoured form of finance, then the international tax system works such that foreign multinationals operating in a host country are likely to face a lower effective tax burden than domestic companies. This is true even when the treatment of multinationals is compared with the more favourable domestic treatment allowed for small and medium sized companies (see sections 6 and 9).

The spreads observed between the effective rates of taxation in the international analysis are the result of complex interactions between different tax regimes and cannot be explained by just one feature of taxation. However, as was the case for the domestic investment, the analysis tends to show that the relevant component that results in distortions with respect to cross border location and financing decisions is, above all, the overall national tax rate. This is, in general, the most important tax driver when the incentives of taxation to use particular sources of finance and specific locations are considered. The tax base does however have a greater impact in specific situations - for example when a Member State applies a particularly favourable depreciation regime as is the case in Greece, and to a lesser extent in Finland and Sweden.

It is worth noting that across the range of domestic and cross-border indicators presenting the effective tax burden at the corporate level, there is a remarkable consistency as far as the relative position of Member States is concerned, notably at the upper and the lower ranges of the ranking. In general, Germany, and France tend to show the highest tax burdens while Ireland, Sweden and Finland tend to be at the lower range of the ranking. (The particular situation of Italy in the marginal case has been commented on above).

When the domestic analysis is updated to take into account the 2001 tax regimes (section 10), the overall picture shows that a number of Member States have a lower
cost of capital and effective marginal tax rate as a result of changes in the tax codes aimed at reducing the corporate tax rate or introducing of modifying the dual income system. These changes have not fundamentally affected the ranking of Member States nor reduced the dispersion inside the EU. The most evident change is the remarkable reduction in the Austrian effective tax burden, due to the introduction of the dual income system, which now places Austria at the lower end of the ranking together with Italy, Ireland and Sweden.

In the case of a more profitable investment, the EU differential is reduced mainly due to the effect of the reduction of the German and French effective tax burden, whereas the lowest effective average tax rate remains the Irish rate. Apart from this reduction in the range of rates of about 4 percentage points, the global picture arising from 2001 in terms of countries at the highest or lowest range of the ranking and principal tax drivers is fundamentally unchanged in comparison to the 1999 picture.

The German tax reform that entered into force on 1.1.2001 is undoubtedly a significant reform which implies a substantial cut in the corporation tax rate and in income tax rates, partly financed by the broadening of the tax base, including the abolition of the split rate system and the imputation system. However, despite these changes and the considerable reduction of the average effective tax burden at the corporate level, the German tax reform has only minor effects on the relative position of Germany in the EU country ranking. In fact, the overall national corporate rate in Germany remains high by the standards of the EU. Consequently, the effective tax burden remains among the highest in the EU.

When the role of specific features of the tax regimes is examined by simulating the impact of hypothetical policy scenarios on the measure of effective tax rates by means of harmonisation of particular features of taxation in isolation (see section 7), the results of the application of the two methodologies underlying this study show that:

• Introducing a common statutory tax rate in the EU would have a significant impact by decreasing the dispersion - both between parent companies and between subsidiaries - of effective tax rates across the Member States. To the extent that taxation matters, such reform would be likely to go some way in reducing locational inefficiencies within the EU.

• By comparison, no other scenario would have such a significant impact. For example, introducing a common tax base or applying the definition of the home country tax base to the EU-wide profits of a multinational would tend to increase the dispersion in effective tax rates if tax rates were kept constant. Two remarks have to be made concerning these results. First, the methodologies applied do not take into consideration all the elements of the tax base. However, the "Tax Analyzer model", the results from which are similar to those arising from the simulations of hypothetical investment, does consider a significant number of elements of the tax base. Second, benefits which would arise under either a common consolidated tax base or a home country tax base approach such as loss consolidation and simplified transfer pricing cannot be modelled using the methodologies used in this report.
Introducing a common form of integration of corporate and personal taxes, other than a pure classical system, would not tend to reduce the dispersions of effective tax rates between Member States.

It should be noted that these conclusions are the result of a static analysis. They therefore do not assess the dynamic effects and possible reactions induced by the harmonisation of particular features of taxation in isolation.

The potential distortions in the allocation of resources found in the analysis of transnational investments indicate that there can be a considerable incentive for companies to alter their behaviour in order to minimise their global tax burden. Therefore this study considered some stylised examples of tax optimisation strategies of companies by means of an intermediary financial company, focusing on the likely effects of an abolition of these tax reducing financing structures (see section 8). The study shows that preventing such tax optimisation strategies will not contribute, per se, to solving the problem of tax-induced resources misallocations. Taking into account that the main tax driver for effective tax rates differentials is the overall tax rate, companies located in "high tax" countries will have the possibility to compensate the removal of financial intermediaries by exploiting the possibility of tax arbitrages arising from those differentials.

The size of tax differentials and dispersions in the EU measured in this study deserves attention. The principal tax driver for these differences is, above all, the overall national corporation tax rate. Although the existence of market failures can justify a certain degree of tax differentials in order to offset these externalities, the size of the differences observed in this study is likely to impact on economic efficiency. This study has not attempted to quantify the size of any efficiency loss that might be associated to existing differences in effective corporation tax rates in the European Union.

But taxation ultimately involves a political choice and may entail a trade-off between pure economic efficiency and other legitimate national policy goals and preferences. The objective of neutrality of taxation systems within the Internal Market has therefore to be seen in the context of national autonomy in the field of taxation.
PART III:
COMPANY TAX OBSTACLES TO CROSS-BORDER ECONOMIC ACTIVITY IN THE INTERNAL MARKET

2. INTRODUCTION

The Council mandate given to the Commission defines "the remaining tax obstacles to cross-border economic activity in the Internal Market" as "tax provisions that may hamper cross-border economic activity in the Internal Market". This description of tax obstacles is rather broad. Hence, the present study focuses on additional tax or compliance burdens which companies incur as a result of doing business in more than one Member State and which therefore represent a barrier to cross-border trade, establishment and investment.

The underlying cause of those additional tax and compliance burdens is the existence within the Internal Market of 15 separate tax systems. First, the fact that each Member State is a separate tax jurisdiction has a number of consequences. In particular:

- companies are obliged to allocate profits to each jurisdiction on an arm’s length basis by separate accounting, i.e. on a transaction by transaction basis;
- Member States are reluctant to allow relief for losses incurred by associated companies whose profits fall outside the scope of their taxing rights;
- cross-border reorganisations entailing a loss of taxing rights for a Member State are liable to give rise to capital gains taxation and other charges;
- double taxation may occur as a result of conflicting taxing rights.

Moreover, each Member State has its own sets of rules, in particular laws and conventions on financial accounting, rules for determining taxable profit, arrangements for collection and administration of tax and its own network of tax treaties. The imminent enlargement of the EU makes it all the more urgent to address the underlying problems.

The need to comply with a multiplicity of different rules entails a considerable compliance cost. To face this multiplicity of approaches at all levels is an important obstacle to cross-border economic activity, involving not only financial costs, internal and external, but also significant frictional losses and braking effects. The costs and risks associated with complying with more than one system may even discourage small and medium-sized enterprises from engaging in cross-border activity.

These fundamental problems mean European multinational companies are in a more difficult competitive situation in comparison to third country businesses, especially when the latter enter the European market for the first time, as they are free in their location decisions and can develop a tax-optimal structure. Interestingly enough, once established in the EU, the US business community is often complaining about having to
cope with 15 different tax systems in the EU as well and pleads, for instance in the Trans-Atlantic Business Dialogue, for a simpler EU system.49

In a broader perspective, the tax obstacles to the Internal Market may also result in economic terms in a loss of potential EU welfare. In setting a tax incentive towards domestic economic activity the obstacles violate the basic neutrality criterion explained in Part I of this study. Moreover, they may result in an overall economic situation of the EU and its citizens that is less efficient, equitable and effective than it could be and thus reduces the general well-being. However, in order to determine the size of these welfare effects, it would in particular be necessary to quantify the compliance cost inherent in the existence of 15 different tax systems within the Internal Market or, in other words, the fiscal surcharge for international activities.

Currently, such calculations are not available for the EU and there is certainly scope for future economic research in this area. The present study could not embark on such a demanding exercise. The available studies50 on compliance cost mostly concern the USA, Canada and Australia, i.e. countries which are economically broadly comparable to the EU economies. It is difficult to draw firm detailed conclusions from these studies. Nevertheless, they show that tax compliance costs for international and cross-border activities are substantial. Moreover, such costs are regressive to size, which means that ceteris paribus they hit small and medium-sized enterprises relatively harder than bigger companies.

Against this background, the following analysis of company tax obstacles in the Internal Market focuses on the company tax issues encountered by groups of companies active in the Internal Market. This includes the tax rules governing mergers and acquisitions, capital gains taxation, transfer pricing, the cross-border off-setting of losses as well as the taxation of all forms of cross-border flows of income, notably dividends. Company tax obstacles in the Internal Market also concern possible hindrances to cross-border economic activity resulting from the taxation of specific forms of remuneration (notably stock options, etc.) and of posted and migrant workers in the EU (notably concerning supplementary pensions). Finally, the specific situation of small and medium-sized enterprises and partnerships is considered and a section on value-added tax completes the overall picture of tax obstacles hampering cross-border economic activity. It is not attempted to provide a detailed classification of any of the obstacles that are presented. Where appropriate, however, indications are made of whether a given obstacle is related to one-off or to ongoing measures and an attempt is made to elaborate on concrete welfare effects.

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49 For a broader discussion of the competitiveness of the tax systems within the European Union see: Lodin, S.-O., The Competitiveness of EU Tax Systems, European Taxation, May 2001

50 An overview about the available studies in this respect is presented in Annex 2.

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DIVIDEND TAXATION

A basic concern of companies operating within the Internal Market is the flow of (correctly taxed) income between associated companies free of (additional) tax.

Payments of interest and royalties between associated companies of different Member States are often still subject to withholding taxes that effectively create situations of double taxation. The Commission has already presented a proposal for a directive on this subject [COM(1998)67], and it is expected that this proposal will be adopted in the context of the "tax package". The usefulness of the Directive will however be undermined by its relatively narrow scope. While the Commission proposal would apply to direct or indirect holdings of 25% or more, the Council has decided to limit the scope of the directive to direct holdings.

Cross-border dividend payments still cause problems which are considered in detail below. Industry sees these, despite certain achievements at the EU level, as a major impediment to cross-border activities in the EU.

**Double taxation of profits and dividends distributed to corporate and individual shareholders**

There is a general risk of (economic) double taxation inherent in dividend payments. The dividends are paid out of profits which have usually already been subject to corporation tax. At the shareholder level, the dividends are then liable for income or corporation tax. Unless some form of relief applies, this means that the profits are taxed twice: at company and at shareholder level.

Dividends paid to Member State companies by other Member State companies are in principle covered by Council Directive 90/435/EEC (the "Parent-Subsidiary Directive"), which requires double taxation to be avoided either by exempting the dividends or granting a tax credit equivalent to the tax already paid on the distributed profits. The directive covers dividends paid between associated companies where the recipient company has at least a 25% holding in the company paying out the dividends. However, where dividends are not covered by the Directive, for example where the holding is less than 25%, there is no obligation for Member States to avoid double taxation. Such dividends may still be subject to withholding taxes which often give rise to interest costs (for the period before the other state gives relief) or in certain circumstances even become definitive. In any event, they create additional compliance costs and distort allocational efficiency.

Dividend payments between companies may therefore either be covered by the Directive, or not covered by the Directive. However, dividends paid to individuals are completely outside the Directive. As this present study specifically addresses company taxation the main issue concerns dividends between associated companies. However dividend payments to individuals cannot be ignored as their tax treatment might influence business behaviour. Therefore, both are considered in detail below.
Box 14: The main provisions of the Parent-Subsidiary Directive

Scope
1. The Directive applies to distributions of profits.
2. Profit distributions must be effected between associated companies from different Member States.
   a) Distributions covered by the Directive
   Profit distributions must meet all the following conditions:
   - they must be between companies from different Member States;
   - they must be effected by companies subject to corporation tax and made to companies also subject to corporation tax;
   - they must be effected between companies with a legal form listed in the Annex to the Directive;
   - they must be made to associated companies with a minimum direct holding of 25% in the capital of the companies paying the dividends. Member States have the option of not applying the Directive if this minimum 25% holding is not maintained for a period of at least two years.
   b) Profit distributions not covered by the Directive
   The Directive’s tax rules do not apply:
   - to distributions of dividends between companies of the same Member State;
   - to distributions of dividends paid to partnerships not subject to corporation tax;
   - to dividends paid between companies subject to corporation tax where one of the companies concerned does not take one of the legal forms listed in the Annex to the Directive;
   - if the company receiving the dividends has a direct holding of less than 25% in the company paying the dividends. Indirect holdings by other companies in the same group are not taken into account;
   - if the 25% holding is not maintained for an uninterrupted period of at least two years. However, although Member States have the option of not applying the Directive if the minimum holding has been maintained for less than two years on the date of payment of the dividends, they must apply it retroactively if the holding is still maintained when the two-year period expires (Court of Justice ruling, 17 October 1996, Joined Cases C-283, 291 and 292/84 Denkavit, Vitic and Voormeer).
   Member States also have the option of not applying the Directive in the case of fraud or abuse.

The Directive’s tax rules
1. For the Member State of the company paying the dividends
   The Member State of the subsidiary paying the dividends may not charge withholding tax on the dividends paid. Transitional measures were provided for Greece, Portugal and Germany but they are no longer being applied.
2. For the Member State of the company receiving the dividends
   There are two options:
   (a) the dividends received may be exempted from corporation tax;
   (b) the dividends received are taxed but a tax credit equivalent to the corporation tax paid by the subsidiary on the profits distributed to the parent company is granted. The tax credit may not exceed the amount of tax due on the dividends.

Member States may also exclude the management costs relating to the holding from the parent company’s taxable profit. These management costs may be fixed as a flat rate but the flat-rate amount may not exceed 5% of the dividends.
Dividends currently not covered by the Parent-Subsidiary Directive

The taxation of dividend payments has not yet been harmonised at Community level. Traditionally there are two systems of taxation, the so-called “classical” system and the “imputation” method. There are also a number of varieties of the two systems but the basic problems can be usefully discussed by examining the effects of the two fundamental methods.

Different methods for taxing dividend payments

Under the imputation system the shareholder includes the dividends he receives in the tax base for income or corporation tax but is granted a tax credit equivalent to all or part of the corporation tax paid by the company distributing the dividend on the profits from which the dividends derive.

The classical system, on the other hand, does not neutralise double taxation as shareholders receiving the dividends are taxed on them without being granted a tax credit to offset the corporation tax already levied on the profits of which the dividends form a part. However, in some Member States modified systems are applied and double taxation is mitigated by applying a lower rate of tax to the dividends, by taxing only a proportion of the value of the dividends or by granting a specified imputation tax credit in the amount of a percentage of the dividend received - so called ‘shareholder relief’.

Moreover, the Scandinavian countries apply a 'dual income tax system' which generally provides for a progressive tax rate for employment income and taxes capital income separately, at a lower proportional rate.

The various systems exist side by side in the Community. However the current trend seems to be towards a partial or total switchover from the imputation to the (modified) classical system or shareholder relief system. Nevertheless, irrespective of the particular system used by a Member State dividends paid to shareholders are often taxed differently depending on whether they are domestic or cross border, i.e. foreign dividends. Two examples illustrate this: first a shareholder in two companies, one domestic, one foreign, receiving dividends may receive on the domestic dividend a tax credit (imputation system) or some form of shareholder relief (modified classical system), but on the foreign dividend an unusable or only partially repayable tax credit (imputation system) or no or a reduced form of shareholder relief ((modified) classical system)). Second, two shareholders resident in two different states who own shares in the same company may be taxed differently, one making use of the tax credit, the other unable to and/or receiving a partial repayment (imputation system) or one receiving shareholder relief, the other not or only a reduced form of relief ((modified) classical system)). In principle these differences could be considered discriminatory, and hence an obstacle to the Internal Market.

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51 For a detailed comparison see, for instance: Gangemi, B., Imputation versus Classical System: How to avoid Discrimination between Taxation of Domestic and Foreign Shareholders, contribution for the CFE Forum 2000, Brussels 2000
Obstacles relating to the imputation system

Usually the tax credit is granted to shareholders receiving the dividends only if they are established in the same Member State or there is a permanent establishment there. The shareholder established or resident in a different Member State is not usually able to make use of it against his own ‘local’ tax. Where this is the case Member States argue that this is because the tax has been paid to another Member State. Neither is the shareholder often able to obtain a repayment from the State levying the initial tax. Member States argue that this is justified on the grounds that residents are liable to tax on dividends and benefit from a tax credit, whereas non-residents are not liable to tax on the dividends and hence not able to benefit from the tax credit.52

Thus - depending on their precise design - imputation systems often create inequalities of treatment between resident and non-resident shareholders that many commentators in the literature consider discriminatory.53

Box 15:
Example of how the imputation system works

A French company holds shares in a French company and in a Danish company which both pay a dividend of 100. Corporation tax in France in 1999 was 40% (including surcharges) for large companies. No withholding tax is levied on the dividends paid. The tax credit granted by France in 1999 is equal to 45% of the dividend received where the shareholder is a legal person.

The French company pays the following corporation tax on dividends it receives:
- On the dividend of 100 received from the French company: 100 + 45 (tax credit) = 145. Gross tax = 145 x 40% (rate of corporation tax) = 58. Net tax to be paid = 58 – 45 (tax credit) = 13.
- On the dividend of 100 received from the Danish company: 100 x 40% = 40.

It should be noted that France has meanwhile changed this system and notably reduced the tax credit (25% in 2001; 15% in 2002) as well as additional social security contributions.

It is true that some double-taxation treaties provide in certain cases, generally on the basis of reciprocity, for a tax credit or repayment for foreign shareholders. However, this is not the general rule and often the tax credit or repayment that is granted is smaller than the one received by shareholders who are resident in the same country as the company concerned. Also, where the double-taxation treaties of two Member States effectively extend this tax credit cross-border, this is usually subject to an extremely cumbersome and slow procedure which is, in itself, a disincentive for and obstacle to foreign investment. Moreover, this system does not provide for an equal treatment within the Internal Market and even creates inequalities in the sense that some foreign shareholders of a given company receive a tax credit or repayment whereas others do not.

52 For a more detailed assessment of the arguments, also in the light of recent jurisprudence by the ECJ see, for instance, Lupo, A., Reliefs from Economic Double Taxation on EU Dividends: Impact of the Baars and Verkooijen cases, European Taxation, July 2000

Clearly, such divergence of treatment and its economic effects are difficult to explain to the shareholders who do not receive a tax credit or repayment and which therefore have a clear incentive to invest in Member States which do give some form of relief.

By contrast, where the situation of non-resident taxpayers is the same as that of resident taxpayers, the tax credit must be granted under the same conditions to resident and non-resident taxpayers (as confirmed by the Court of Justice judgement of 28 January 1986 on case 270/83).

**Box 16:**

*Court of Justice judgement of 28 January 1986 in Case 270/83*

**Summary of the issue**

Insurance companies with registered offices in France, including French subsidiaries of foreign companies, receive a tax credit for dividends paid by French companies. French permanent establishments of insurance companies with registered offices in another Member State are not granted a tax credit.

**The Court’s ruling**

French tax law does not distinguish between companies which have their registered offices in France and French-based permanent establishments or branches of companies whose registered offices are in other countries for the purposes of establishing the corporation tax base. By treating the two forms of establishment in the same way for the purposes of taxing profits, the legislator has acknowledged that there is no objective difference between their positions which could justify different treatment. It is hence not possible to treat companies and permanent establishments differently as regards the granting of a tax credit without creating discrimination contrary to the principle of the freedom of establishment.

This difference in treatment can also seriously affect cross-border mergers and exchanges of shares as the shareholders of a company resident in one Member State can be expected to be reluctant to accept a merger under which the dividends on their new shares will arise in another Member State and therefore without (or with a smaller) tax credit attached. This is a very important practical problem that in economic terms leads to sub-optimal business decisions that imply overall efficiency losses for the Community.

**Box 17:**

*The imputation system and cross-border mergers: examples*

The expert panel has considered several practical examples highlighting the impact of differing dividend taxation systems on mergers and other cross-border restructuring actions. For instance, the friendly takeover (by means of a merger through exchange of shares) of an Italian company by a German competitor, in principle agreed by all parties and commercially very sensible, collapsed for the simple reason that the German imputation system applicable before 2000 did not give credit to foreign investors which is why the Italian shareholders would have suffered disproportionate losses on the dividend payments from the newly set up German holding company.

In the Finish/Swedish merger of the Merita Bank and Nordbanken it is said that the Finnish imputation system obliged the new MeritaNordbanken to take its seat, at least initially, in Finland instead of Sweden thus prejudicing a purely commercial assessment. Similarly, in the merger of Daimler-Benz with Chrysler from a taxation point of view there was no alternative to establishing the headquarters in Germany as otherwise, because of the German imputation system, the German shareholders would not have received the tax credit. In the Rhone-Poulenc/Höchst-merger it was possible to overcome this difficulty because the German/French double-taxation-treaty contains a (very rare) appropriate provision for extending the credit cross-border.
Obstacles relating to modified classical systems or shareholder relief systems

Under this system dividends are included in the taxable profits and no tax credit is granted. There are, however, ways of mitigating double taxation such as taxing dividends at a lower rate than that normally applying or granting other forms of tax relief on dividend payments – so called ‘shareholder relief’.

However such preferential tax arrangements sometimes apply only to domestic shareholdings and not to dividends from foreign shares. Where this is the case, such discrimination usually concerns individuals but may also apply to company dividend payments. As confirmed by the European Court of Justice in its judgement of 6 June 2000 in Case C-35/98 (Staatssecretaires van Financien v. Verkooijen), these arrangements are not compatible with the free movement of capital.

Box 18: The Verkooijen judgement

Summary of the issue
Dutch legislation exempts income tax on the first NLG 1 000 of dividends paid by Dutch companies (NLG 2 000 for married couples). This relief does not apply to dividends paid by companies from other Member States.

The Court’s ruling
Such a provision is a restriction on the free movement of capital.

Dividends covered by the Parent-Subsidiary Directive

Assessment of the functioning of the directive in practice

The narrow scope of the Directive

The system operated by the Parent-Subsidiary Directive has generally been well received by the companies concerned and appears to work relatively well. Although the Directive could be improved, it effectively eliminates double taxation of dividends paid between associated companies from different Member States. Business agrees that no radical changes are required. However, like the Merger Directive (about which see section 3 below), the Parent-Subsidiary Directive currently applies only to operations between companies liable to corporation tax who do not enjoy the right to opt to be so liable and who take one of the legal forms set out in the list attached to the Directive.

Consequently some dividend distributions are not covered by the Directive even where the companies concerned are wholly liable to corporation tax and pay or receive dividends. Companies which adopted a corporate form created after 1990 (e.g. simplified joint stock companies in France) or corporate forms which, for one reason or another, were omitted from the list in 1990 (e.g. Belgian co-operative societies, some Irish banking companies, etc) are excluded from the Directive.

Similarly, partnerships which in some Member States are liable to or may opt to be liable to corporation tax are excluded from the scope of the Directive even where
national legislation and bilateral double taxation treaties treat profits distributed by such companies to their associate companies as dividends.

To overcome this problem the Commission presented a proposal for a directive on 26 July 1993 (COM(93) 293 final) amending the 1990 Parent-Subsidiary Directive to extend it to all companies subject to corporation tax irrespective of their legal form. The stalemate reached in discussions within the Council in mid-1997 means some companies are still unjustifiably excluded from its scope.

**Triangular cases and the calculation of the threshold**

Moreover, the Parent-Subsidiary Directive does not cover shares held through permanent establishments. However, such cases are dealt with to a large extent by the above-mentioned interest and royalty payments proposal as permanent establishments often receive or pay interest or royalties.

Although it is rare for permanent establishments to have holdings covered by the Directive, this can occur (see Case C-307/99 Compagnie de Saint-Gobain v. Finanzamt Aachen-Innenstadt). Views are often divided on how to apply the Directive in the case of permanent establishments and different approaches are taken by national law. It would therefore be useful to clarify this matter.

At present the Parent-Subsidiary Directive applies where the parent company has a direct holding of 25% in the subsidiary located in another Member State. This can create cross-border problems, particularly in the case of restructuring, because indirect holdings are not taken into account to calculate the Directive’s threshold. As explained in more detail below, this can have undesirable implications for the internal organisation of groups of companies and hamper restructuring operations. Some Member States do apply thresholds of 5% or 10%, which are lower than the Directive’s 25%, but not all.

**Credit versus exemption method**

If a subsidiary of a parent-company is in turn parent to another (sub-) subsidiary, the question arises whether under the credit method the parent company can credit the tax paid by the sub-subsidiary or whether it has to limit the credit, as currently provided by the directive, to the tax paid by its immediate subsidiary.

In the latter case, the objective to eliminate double taxation is not achieved. The tax due for the subsidiary is reduced by means of applying the parent-subsidiary directive to the dividends paid by the sub-subsidiary. This automatically reduces the tax credit available for the parent company which can be credited against the tax due on the dividends received from the subsidiary.

Article 2 of the above-mentioned proposal for a directive of 26 July 1993 seeks to remedy this by modifying article 4 of the existing Parent-Subsidiary Directive such that the tax credit granted to the parent-company also includes the tax due by the sub-subsidiaries when they pay dividends under the Directive to the subsidiary. However, despite the positive stance taken by Member States on this part of the proposal it has not yet been adopted.

Member States may permit the deduction of management costs from related taxable dividend income. These management costs may be calculated on a flat-rate basis but the
flat-rate amount may not exceed 5% of the dividends (article 4 (2) of the directive). The fact that management costs are deductible from the related income is generally accepted. However, when the flat-rate method of calculation is adopted it is sometimes criticised inasmuch as companies who incur management costs under 5% are unable to deduct their true costs.\textsuperscript{54}

**Problems related to the implementation of the directive by Member States**

Some national legislation seems to contain provisions whose compatibility with the Parent-Subsidiary Directive is doubtful. This applies in particular to national legislation applying the “anti-abuse” clause contained in the Directive. Article 1(2) of the Directive does not preclude the application of domestic or agreement-based provisions to prevent abuse or fraud, but the implementation of this is not always consistent.

Some national legislation appears to make the application of the Parent-Subsidiary Directive subject to conditions which are not contained in the Directive. For example the provisions of the Directive may not be applied when the capital of a Community company is held by non-Community residents. This is considered to be a presumption of tax evasion or avoidance and the provisions of the Directive only apply when proof is provided to the contrary. The existence of such restrictive national legislation reduces the intended effect of the Directive.

**Conclusion**

The taxation of dividends in the EU is still not completely in line with Internal Market requirements. There are clear examples of both economic and legal double taxation at the level of both the corporate and individual shareholder. The Parent-Subsidiary Directive seems to work reasonably well but only in a limited sense. It does not cover all the companies it could and it does not address all the situations it could. Its implementation at Member State level also raises doubts, in particular in relation to specific anti-abuse rules. In addition to the obstacle of "double taxation", obtaining relief where it is available involves an unnecessarily high compliance cost. Economic decisions such as mergers or investments are distorted and efficiency at the EU level is therefore potentially reduced.

**THE TAXATION OF CROSS-BORDER BUSINESS RESTRUCTURING OPERATIONS**

**Company tax arrangements impeding cross-border business restructuring operations**

As outlined above, many EU businesses are in process of profound restructuring in order to realign their organisational structures to the Internal Market. However, business

\textsuperscript{54} A detailed overview of Member States' provisions can be found in Fédération des experts comptables européens, *Study on the allocation of expenses related to cross-border dividend income covered by the parent-subsidiary directive*, Brussels 1999
representatives strongly deplore the fact that company tax arrangements often create obstacles to a commercially straightforward organisation of their business.\textsuperscript{55}

Generally, cross-border restructuring is one of the few areas of direct taxation where there has been harmonisation at Community level. The relevant Community instrument is Council Directive 90/434/EEC on the common system of taxation applicable to mergers, divisions, transfers of assets and exchanges of shares concerning companies of different Member States, more commonly known under the name "Merger Directive". Other important tax aspects of cross-border business restructuring are not regulated in Community law. The following section considers both aspects.

\begin{table}[h]
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\hline
\textbf{Box 19:} & \\
\textbf{The main provisions of the Merger Directive} & \\
\hline
\textbf{Scope} & \\
Companies concerned: & Companies from different Member States must be involved in the restructuring operations. These companies must \\
- & - be subject to corporation tax; \\
- & - take one of the legal forms listed in the Annex to the Directive; \\
- & - be registered for tax purposes in a Member State. \\
The following are excluded from the Directive: & - restructuring operations involving companies from the same Member State; \\
- & - operations involving companies which are not subject to corporation tax (partnerships, natural persons, etc); \\
- & - companies which are subject to corporation tax but take a legal form not listed in the Annex to the Directive. \\
Restructuring operations concerned: & - mergers of companies; \\
- & - divisions of companies; \\
- & - transfers of assets whereby a company transfers one or more branches of its activity to another company in exchange for the transfer of securities representing the capital of the company receiving the transfer; \\
- & - exchange of shares whereby a company acquires a majority of the voting rights in a company in exchange for the issue to the shareholders of the company acquired of securities representing the capital of that company in exchange for their securities. \\
In the case of mergers and divisions assets and liabilities must remain connected with the permanent establishment of the receiving company in the Member State of the transferring company. & \\
The Directive does not cover: & \\
operations which do not involve an exchange of shares and in particular operations involving cash payments: sales even if they are within the same group of companies; \\
restructuring operations which do not involve the creation of a permanent establishment in the Member State of the transferring company: mergers and divisions which do not involve the creation of a permanent establishment in the Member State of the transferring company (mergers or divisions of holding companies, mergers or divisions following cessation of business in the Member State of the transferring company). & \\
\hline
\end{tabular}
\end{table}

\textsuperscript{55} See: UNICE position papers, Obstacles to cross-border business integration, Brussels, 1999; The lack of community action and its attendant costs for European business and industry, Brussels, 1996
The Directive’s tax rules

Mergers, divisions and transfer of assets
No capital gains tax charged on assets received
Member States cannot charge capital gains tax on assets received. However, the receiving company must compute depreciation and capital gains according to the rules that would have applied to the transferring company if the merger, division or transfer of assets had not taken place. Special rules apply to triangular operations (mergers, divisions or transfer of assets by a company with a permanent establishment in another Member State).

No taxation of tax-exempt provisions or reserves
These provisions or reserves are not taxed at the time a merger, division or transfer of assets takes place. However, the receiving company must assume the rights and obligations of the transferring company as regards the restatement of these provisions or reserves in its taxable profit.

Transfer of losses
Member States must ensure that cross-border operations covered by the Directive are subject to the same national rules relating to the transfer of losses from the transferring company to the receiving company that they apply to domestic mergers, divisions or transfers of assets.

Exchanges of shares
No tax is charged at the time shares are exchanged but Member States may tax the profit generated by the subsequent disposal of shares received in exchange in the same way as they would tax the profit from the disposal of the shares exchanged.

Anti-abuse clause
Member States have the option of not applying the Directive or excluding profit:
- if the merger, division, transfer of assets or exchange of shares has as its principal or one of its principal objectives fraud or tax evasion;
- if the operation is intended to prevent employees from being represented on the company’s management bodies.

Limits to the tax solution regulated in the Merger-Directive

Although the Merger Directive has improved the situation, it is not wholly satisfactory and does not enable companies to undertake cross-border restructuring operations in the way they would wish. Despite the Directive, cross-border restructuring operations can still involve significant tax costs.

The lack of Community legislation on company law

Although tax arrangements applying to cross-border restructuring operations covered by the Directive have existed since 1990, the Directive on company law which is intended to permit and regulate cross-border company mergers has still not been adopted (tenth proposal for a Council directive on cross-border mergers on public limited companies (COM(84) 727 final of 8 January 1985), due to difficulties concerning the issue of worker involvement.

Consequently cross-frontier mergers and divisions are still hampered by the fact that some national legislation does not allow companies to be absorbed or divided by foreign companies. If cross-border mergers or divisions of companies are not legally possible the 1990 Tax Directive has no effect. The lack of progress on company law is regrettable. The inability to undertake mergers is of course a source of extra costs for
companies who are unable to improve their organisation. Currently only cross-border transfers of assets or exchange of shares can be undertaken in all Member States.

The adoption of the European Company Statute will, however, change this situation and clearly calls for adaptations of the existing body of tax law, both at EU level and in Member States, in the area of company taxation. Therefore, the are good reasons to believe that the lack of EU company law on mergers will soon no longer raise problems: as from 2004 cross-border mergers will be possible under the form of European Companies.

The narrow scope of the Directive

At present the Merger Directive does not cover certain company restructuring operations even though the companies in question may be wholly subject to corporation tax. Companies which have adopted a corporate form created after 1990 (e.g. simplified joint stock company in France) or corporate forms which for various reasons were omitted from the 1990 list annexed to the Directive (Belgium cooperative societies, certain Irish banking companies, etc.) are excluded. Similarly partnerships, which in some Member States are or may be subject to corporation tax, are excluded from the Directive’s scope.

The Commission presented a proposal for a Directive [COM(93)293] to remedy this situation. It would amend the 1990 Merger Directive to extend it to all businesses subject to corporation tax irrespective of their legal form. However, a stalemate was reached in discussions within the Council in mid-1997. The main problem concerns the extension of the Directive’s scope to partnerships. Consequently businesses subject to corporation tax are still excluded for no good reason from the Directive’s scope. The conclusions of the ECOFIN Council of 26 and 27 November 2000 state that priority should be given to updating the list. It goes without saying that the new list will have to include the European Company statute.

Box 20: Example of problems owing to the failure to update the list of companies contained in the Directive

The SAS (simplified joint stock company) was set up in France in 1993, i.e. after the Merger and Parent-Subsidiary Directives had been adopted, and does not therefore appear on the list of companies annexed to the Directive. It is very similar to the public limited company which appears on the list but has simplified operating rules as it cannot make public offers for securities. This corporate form is very popular in groups of companies for subsidiaries with only minority shareholders. Such companies are still excluded from the scope of the 1990 Directive for no objective reason other than that they did not exist in 1990 and no agreement has been reached on updating the list. France appears to grant unilaterally the benefits provided for under the Directive to the simplified joint stock companies.

The Directive does not cover partnerships if they are not subject to corporation tax but their profits are taxed at partner level. Cross-border restructuring of such businesses could involve an extremely large tax burden for their associates. Moreover, transfers of assets by natural persons who own a business which is not operated as a company and who wish to transfer it to a company in consideration for shares of that company are not covered by the Directive.
Insufficient coverage of restructuring operations by the Directive

There are doubts about whether the “subsidiarisation” of companies’ branches is covered by the Merger Directive. This involves the transfer by means of a transfer of assets within the meaning of the Directive of a permanent establishment located in a Member State to a new company established in the same Member State. For example, a company headquartered in Member State A has a permanent establishment in Member State B and wishes to transform this permanent establishment into a company of country B. If Article 4 of the Directive which applies to transfers of assets under Article 9 is applied literally the Directive would not cover such operations. Article 4 of the Directive makes the deferral of capital gains tax conditional on the assets continuing to be effectively connected with a permanent establishment situated in the Member State of the transferring company, i.e. Member State A in the above example.

The Commission takes the view that, given the Directive’s purpose, Article 4, which was designed to cover mergers and divisions of companies, cannot be intended to exclude the conversion of permanent establishments into subsidiaries from the Directive’s scope. The conversion of a branch into a subsidiary does not affect the taxation right of the State where the former permanent establishment was located and cannot be interpreted as excluding it from the Directive’s tax neutrality principle.

Generally, the objective of the 1990 Directive is to guarantee the tax neutrality of restructuring operations covered by the Directive and, at the same time, safeguard Member States’ financial interests. Consequently - for mergers, divisions or transfers of assets - the assets transferred by the receiving, divided or transferring company must remain effectively connected with a permanent establishment of the receiving company located in the Member State of the acquired, divided or transferring company. The Directive does not apply when there is no permanent establishment.

**Box 21:**

*Example of cross-border restructuring not covered by the Directive*

An industrial group has a number of manufacturing and distribution companies located in various Member States of the Community for the same product. In order to rationalise its activities production is centralised in one single production unit located in one single Member State and distribution is carried out either by the same manufacturing company or by external companies.

The Merger Directive’s neutrality principle does not apply where restructuring does not result in the transfer of assets and maintenance of a permanent establishment in the Member State of the transferring company. In practice no activities have been maintained in the Member States where production or marketing has been abandoned. The client base (goodwill) of the manufacturing and marketing companies has been transferred to a single company which is responsible for production and, in some cases, distribution of the products. Companies transferring their client base may therefore be liable for capital gains tax on the value of the client base transferred to the company located in another Member State which retains its activities.

The mergers and divisions of holding companies which do not result in the creation of a permanent establishment in the Member State of the company concerned are equally not covered by the Directive. Similarly, the transfer of cash between companies of a same group but situated in different Member States often cannot benefit from the exemption
of capital gains taxation whereas it is common that in the framework of group taxation schemes within Member States such transfers do not give rise to capital gains taxation.

**Unsatisfactory outcome of the application of the Merger Directive**

Even where restructuring operations can be undertaken the results are not always satisfactory. A brief analysis of national measures transposing the Merger Directive has revealed important divergences. This is due to two different reasons.

In some cases national legislation seems to have adopted transposition measures which raise doubts concerning their compatibility with the Directive. In others, divergent legislation has been adopted because of the Directive’s lack of clarity on some particularly important points. The Directive has not necessarily been misinterpreted but the lack of uniformity in national legislation is unhelpful and undermines the practical usefulness of the directive.

**Doubts concerning the incompatibility of some national legislation with the Directive**

The present study does not make an exhaustive analysis of national transposition measures but the following impediments for cross-border economic activity are very apparent.

**The anti-abuse clause**

Some national legislation makes the application of the Merger Directive subject to conditions which are not laid down in the Directive. According to the Member States concerned these are based on Article 11(1)(a) of the Directive which allows them not to apply the Directive or to deny its benefit where the merger, division, transfer of assets or exchange of shares has as its principal objective or as one of its principal objectives tax evasion or tax avoidance ("anti-abuse-clause").

The case most often cited is where a number of Member States require that shares received under a transfer of assets or an exchange of shares be kept for a certain period which varies from three to seven years. The rapid disposal of shares received as a result of a transfer of assets or exchange of shares could be an abuse within the meaning of Article 11 of the Directive. However, in its judgement in Case C-28/95 Leur Bloem (1997), the European Court of Justice ruled that such abuse had to be assessed on a case-by-case basis. A blanket refusal to apply the Directive where shares received are disposed of before a particular deadline without giving taxpayers an opportunity to prove that such disposals are not of an abusive nature is therefore unlikely to be consistent with the Directive. Moreover, minimum holding periods that are particularly long - up to five or seven years after the initial operation - appear to be difficult to justify on the grounds of preventing abuse.

**Exchange of shares**

Article 8(1) of the Merger Directive provides that the exchange of shares within the meaning of the Directive may not give rise to taxation of the associate company relinquishing its shares for exchange. However, Article 8(2) states that Member States
may subsequently tax the gain arising out of the subsequent disposal of shares received in the same way as the gain arising out of the transfer of shares existing before the acquisition.

In some Member States shareholders exchanging shares in the acquired company for shares in the acquiring company are taxed before disposing of the shares received in the acquiring company, especially if shares in the acquired company are transferred by the acquiring company before shareholders dispose of shares in the acquiring company. Such an approach does not seem to be fully in line with Article 8 of the Merger Directive which does not provide for any form of taxation before a shareholder sells shares in the acquiring company received in exchange for shares in the acquired company.

**Box 22:**

*Example on the taxation of exchanges of shares before the disposal of shares received in exchange*

Company A of Member State A holds shares in company X. Company A exchanges its shares in company X with company B situated in Member State B for shares in company B. Article 8(1) of the Directive provides that the exchange of X shares for B shares may not give rise to taxation of associate A which relinquishes its shares. However, Article 8(2) stipulates that the Member State of company A may still apply capital gains tax on the disposal of B shares by A in the same way as the gain arising out of the disposal of X shares existing before the exchange of shares.

The imposition by Member State A of capital gains tax on X shares which were not taxed in the exchange of shares before company A had disposed of B shares received in exchange is questionable. This would be, for example, where company A is taxed by Member State A when company B disposes of X shares even if it had not disposed of B shares received in the exchange of shares.

**Problems not resolved by the Directive**

**Double-taxation of capital gains**

In the case of transfers of assets some Member States have introduced provisions into their national law requiring capital gains on the disposal of shares received in exchange for a transfer of assets to be calculated on the basis of the book value of the assets transferred on the date of transfer.

Similarly, in the case of exchanges of shares, some Member States require the acquiring company, when the shares in the acquired company are disposed of, to calculate the capital gains on these shares on the basis of the book value they would have had for the shareholder on the date of exchange.

Consequently the same capital gains resulting from the transfer of assets or exchange of shares may in the following two cases be taxed twice for two different shareholders:

- Transfer of assets: the beneficiary company is taxed on the capital gains which had been neutralised at the time the assets were transferred when the assets transferred are disposed of; the acquiring company is taxed on the same capital gains which had been neutralised when shares received in exchange under the transfer of assets are sold.
Exchange of shares: the shareholder is taxed on the capital gains on which taxation had been deferred when shares in the acquiring company received in exchange for shares in the acquired company are disposed of; the acquiring company is taxed on the same capital gains when shares in the acquired company are sold.

**Box23:**

**Example of double taxation in the case of transfers of assets**

Company X which has its activities in Member State A transfers assets to company Y situated in Member State B. Following this transfer of assets the activities are transferred to the permanent establishment of company Y situated in Member State A. Company X receives in exchange for the transfer of assets shares in company Y. The assets transferred by X to Y have a net book value of 100. At the date of the transfer these assets are worth 300. The capital gains on the assets transferred are hence 300 - 100 = 200. Company X receives shares in company Y which have a value corresponding to that of the assets transferred, i.e. 300.

Article 4(1) of the Directive prohibits Member State A from taxing company X on capital gains of 200 realised on the transfer of assets. However on the disposal of the assets transferred by company X, the permanent establishment of company Y situated in Member State A may tax the capital gains in the same way as company X would have done if the transfer of assets had not gone ahead, including on the capital gains of 200 which had not been taxed on the transfer of assets.

If Member State A taxes the capital gains on the disposal of Y shares received by company X on the basis of the book value of the assets transferred (100) and not their acquisition value of 300, Member State A will tax the capital gains of 200 which had not been taxed on the transfer of assets twice: 1. in the hands of company Y, when this company disposes of the assets transferred, and 2. in the hands of company X, when this company disposes of Y shares received in exchange for the transfer of assets.

Such double taxation would not appear to conflict directly with the wording of the Directive as it is not very specific about the value for tax purposes which must be attributed to shares received by the acquiring company in exchange for the transfer of assets or, in the case of exchange of shares, for shares in the company acquired received by the acquiring company. Nevertheless in the cases described above it is clear that the same capital gain is taxed twice, albeit for two different shareholders. This is not acceptable from an Internal Market perspective and runs against the spirit of the Directive.

**Losses pre-dating the restructuring operation**

Article 6 of the Merger Directive only requires Member States to apply to cross-border mergers, divisions or transfers of assets the national legislation applying to such operations in a purely domestic framework. Usually national legislation either forbids the losses of the acquired company to be transferred to the acquiring company or only allows this to be undertaken subject to a number of restrictions. The fact that deferrable losses cannot be transferred from the acquired company to the acquiring company is clearly an impediment to restructuring operations. It means companies are more likely to abandon or defer any restructuring operations they might have planned and thus negatively influences the competitive situation of EU businesses.
Other transfer taxes

Directive 69/335/EEC of 17 July 1969 (as amended) concerning indirect taxes on the raising of capital has not allowed capital duty to be levied on mergers since 1986. However Article 12(1)(b) authorises, by way of derogation, Member States to charge transfer taxes, including land registration taxes, on the transfer of immovable property or businesses to companies. In its judgment of 11 December 1997 in the SIF Case C-42/96 the European Court of Justice acknowledged that this provision allows registration, mortgage and land registration fees to be charged in connection with the capital increase of a company brought about by the contribution of immovable property provided that such taxes do not exceed those applicable to similar transactions in the Member States charging them.

Such taxes which can often account for 10% of the value of the immovable property contributed in company mergers or transfers of assets may well increase the cost of restructuring operations covered by the Merger Directive or be an impediment to them. The panel of experts assisting the Commission with this part of the study strongly underlined the importance and practical relevance of this problem.

Box 24: Example of the cost of a cross-border restructuring operation

The following recent real-life example of a large European multinational group has been presented by business representatives to the Commission. It can only be re-produced in an anonymous form. This group calculated the tax costs it would incur to restructure its European activities within one single company with permanent establishments in the Member States. The cost would be even higher if the Merger Directive had not been adopted.

The starting point is a Dutch holding company with shares in five national sub-holding companies situated in different Member States which themselves have holdings in three operating companies in the same Member State. The objective is to create a structure under which the parent holding company of the group would remain unchanged but would hold shares in only one single “European” company with five permanent establishments. The five national sub-holding companies and 15 operating companies would cease to exist. The means of arriving at this reorganisation would be as follows:

1. Create a new “European” company.
2. Transfer the assets from the 15 operating companies to the “European” company in exchange for the new company’s shares to the 15 operating companies.
3. The 15 operating companies sell their shares in the “European” company to the group’s parent holding company.

Taking advantage of existing Directives, this operation would result in the following tax costs:

- Cost of transferring assets to the “European” company: Transfer taxes (on immovable property in particular), tax costs involved in terminating a group scheme: total of €28 million. Capital gains tax on transfers of shares in the “European” company to the group parent holding company: €217 million. Total cost €245 million.
- If the operation is halted in the first stage (without transferring shares) €217 million of costs are avoided but there will be an annual cost of €23 million as withholding tax on dividends paid by the “European” company to the 15 former operating companies (the Parent-Subsidiary Directive does not apply as the 25% holding threshold is not reached). The restructuring operation will therefore cost €28 million plus €23 million each year.

Implications for the Parent-Subsidiary Directive

The Parent-Subsidiary Directive applies only where the company paying the dividends directly holds at least 25% of the capital of the company receiving them (Article 3 (1)(a) of the Parent-Subsidiary Directive). As indicated above, attention has often been drawn
to the difficulties created in restructuring operations by the fact that only direct holdings are taken into account when calculating whether the Directive’s threshold is met. The sole inclusion of direct holdings may hamper restructuring operations.

A company may, for instance, decide not to undertake a cross-border transfer of assets to a company whose capital is held by another company in the same group if the shares to be received in exchange account for less than 25% of the capital of the beneficiary company. The dividends that it will receive from this company are not covered by the Parent-Subsidiary Directive even though the subsidiary is wholly owned by other companies in the same group.

Similarly, a transfer of assets may dilute the shareholdings in the company receiving assets from other companies in the group and reduce their holding below the 25% threshold. This would mean they were no longer covered by the Parent-Subsidiary Directive. This also forms an obstacle to restructuring.

**Box 25: Example on restructuring operations and dividend taxation**

Company A in Member State A belonging to a group of companies A holds 26% of company B’s capital in Member State B. The dividends paid by company B to company A are covered by the Parent-Subsidiary Directive. Company A holds 100% of the capital of company C situated in Member State C. Company C transfers assets to company B and receives in exchange 10% of company B’s original capital, i.e., 9.09% of the capital after a capital increase (10% x 100/110). Following this capital increase company A’s holdings in company B is reduced to 26% x 100/110 = 23.63%.

The transfer of assets has the following consequences:

1. The dividends paid by company B to company C are not covered by the Parent-Subsidiary Directive although company C holds only 9.09% of company B’s capital. The holding of other companies of the group in company B, here the participation of A in B, are not taken into account.
2. Company A’s holding in company B is reduced from 26 to 23.63%. Consequently the dividends paid by company B to company A are longer covered by the Parent-Subsidiary Directive. The holding of C in B is not taken into account for calculating the threshold of 25% although company A holds 100% of C.

**Conclusion**

Although the Merger Directive has improved the situation, it is far from offering the kind of fiscal framework that is necessary to enable companies to undertake cross-border restructuring operations in the way they would wish. Despite the Directive cross-border restructuring operations can still involve significant tax costs. The Directive covers neither all companies nor all situations nor all types of taxes that should in principle be included. Its implementation by Member States gives rise to doubts, in particular with a view to anti-abuse clauses.

Transforming existing business structures, which are to a large extent still based on a "national" logic, into an Internal Market structure typically creates tax liabilities that would not occur in a purely domestic context. This may result in double-taxation and create significant compliance costs, including the opportunity cost of accepting sub-optimal structures. All in all, restructuring operations are much more difficult if they involve more than one country and, and even if they are possible, involve higher tax costs than in a purely domestic framework. This conflicts with a basic Internal Market
requirement and results in inefficient structures and welfare losses for the Community as a whole.

**CROSS-BORDER LOSS-COMPENSATION**

Loss-compensation in general and the difficulties encountered by businesses with loss-offset are a key element in the analysis of tax obstacles to cross-border economic activity in the Internal Market. The panel assisting the Commission services with this part of the study has identified the absence of cross-border loss-relief or full consolidation at EU level as one of the major obstacles that requires action as a matter of priority. The relevant issues are therefore presented in some detail. Given the considerable complexity of the issues, first some explanations about the technical possibilities for cross-border loss-offset and the current situation in Member States are given.

**The tax treatment of domestic losses and foreign losses generated by permanent establishments and subsidiaries**

*Domestic losses*

The rules on loss-compensation differ substantially for companies within a group (i.e. incorporated companies with a proper legal personality) and for unincorporated separate units of one company (i.e. branches). Broadly speaking, holdings in other companies constitute subsidiaries whereas business units of a single company abroad form permanent establishments.

The possibility to set off losses against profits for assessing the tax liability of a single domestic company is a basic feature of any company tax system. On the domestic level, it is available in all Member States and by definition includes losses from domestic branches. The detailed conditions, however, differ substantially. All Member States' tax legislation allow, for varying periods, the carry-forward of losses. Only a few Member States allow for loss carry-back. The basic functioning of the arrangements is illustrated in the following box:

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56 See also: UNICE position paper on the consolidation of losses, Brussels 1990
Box 26: 
Loss-compensation on the domestic level

In a given period, a single domestic company establishes the taxable income by taking into account all profits and losses of the company headquarter and all branches in the national territory. The entity is taxed as one company and thus by definition full loss-offset is ensured.

Member State A

If the overall result of the company is negative, the loss can be carried forward to future tax periods (or carried back to previous ones) and thus reduces the taxable profits in other years.

Most Member States permit domestic group taxation (profit consolidation) but the details differ substantially, for example concerning ownership thresholds and whether both direct and indirect holdings can be amalgamated. More fundamentally, three Member States (Belgium, Greece, Italy) do not have such schemes at all and within these Member States a branch structure would have to be used for a 'group' to achieve consolidation. The basic functioning of the arrangements are illustrated in the following box:

Box 27: 
Profit consolidation on the domestic level

Domestic group or consolidation taxation schemes provide full effective consolidation of profits and losses. Tax is assessed for the group and not for the individual corporations forming the group. Therefore, losses of the parent can be offset against profits of the subsidiaries (downstream vertical) and the other way round (upstream vertical) and if, say, the parent is making neither a loss nor a profit or when its profits are not sufficient for full loss-absorption, losses in one subsidiary can be offset against profits in another subsidiary (horizontal).

Domestic group of companies

Member State A
**Losses in Permanent Establishments**

As regards cross border situations most Member States permit, subject to certain conditions, losses from Permanent Establishments to be relieved. Immediate relief can be obtained under two methods –

**Credit/Imputation method**

The Permanent Establishment losses are included in the Head Office’s results and the net profits taxed. If the Permanent Establishment makes profits any tax it has paid is creditable against the Head Office’s tax liability. The basic functioning of the arrangements is illustrated in the following box:

**Box 28:**
Treatment of losses of permanent establishments (foreign branches) - credit method

A single domestic company has foreign branch(es)/permanent establishment(s).

The parent company includes the income (positive or negative) of its permanent establishments and receives a tax credit equal to the tax paid by the permanent establishment.

**Deduction/Reintegration method**

As above but no credit is given for the Permanent Establishment tax. The basic functioning of the arrangements is illustrated in the following box:
The losses incurred in a certain period by a permanent establishment (or a subsidiary) of a company are credited. In the subsequent years, the profits of the permanent establishment (or subsidiary) are also included in the taxable base of the company.

Therefore in both cases the losses of a Permanent Establishment are effectively recognised at the Head Office level as incurred, as are any subsequent profits.

The rules are often complex and differ between Member States. For example not all Member States permit unused tax credits to be carried forward and therefore where a Permanent Establishment is profitable and pays tax, but the combined Head Office and Permanent Establishment tax liability is less than the local tax suffered by the Permanent Establishment part of the tax credit may be lost. Many Member States limit the tax credit to the hypothetical domestic tax which would have been due on the Permanent Establishment profits had it been a domestic branch rather than a foreign Permanent Establishment.

A form of deferred relief for losses is available when a Member State applies a third method – the exemption method. Neither profits nor losses are recognised at the Head Office level. However, given that in many cases a newly established Permanent Establishment will make losses in early years, followed by profits, this may be less advantageous than the other two methods where recognition is immediate. The basic functioning of the arrangements is illustrated in the following box:
Losses in subsidiaries

Only two Member States (DK, F) extend immediate cross border loss relief to subsidiaries (again this is subject to certain conditions) both under the deduction/reintegration method.

A measure of relief is available in some Member States who permit the parent company a tax deduction for a write down in the carrying value of its investment in a subsidiary when it has made losses. However, such a deduction is limited to the carrying value in the balance sheet, and would only be available after the losses had been incurred (and the loss of value was considered permanent).

In most cases there is no provision for recognising losses incurred in a foreign subsidiary and the situation can arise where the subsidiary makes losses in excess of the parent company’s profits, ie the group is in an overall loss position, but tax is still due because the parent is unable to relieve the losses against its profits and reports a taxable profit.

The computation of losses

It is important to note that, given the absence of any approximation of rules in Member States, a loss in one Member State is not necessarily recognised as such in another, as there is no common definition of "losses" and the basic approaches vary. In some Member States they are based on civil law categories whereas in others more economic or fiscal concepts are applied. The question is also linked to Member States' approaches on accounting standards. Where cross-border loss-compensation is available, it is therefore most important to determine which country's rules are to be applied: those of the parent company or those of the subsidiary/permanent establishment. Currently, Member States tend to apply their own rules also to foreign losses.
Box 31: The definition of "losses"

Logically, the issue of loss compensation cannot be separated from the general determination of the taxable base and taxable income leading to a loss. Rules differ significantly between Member States in this respect. There are various aspects to this: the definition of various categories of income, the recognition of business expenses for tax purposes, the interrelation between specific (positive or negative) elements of the tax base and the deductibility of the overall loss. Against this background, it is also important to make sure that losses are not deducted (or offset) twice, in two different countries.

Some examples highlighting the difficulties and differences in this area are illustrated in the following questions:
- Are capital gains and losses included in the definition of "loss"?
- What about imputed costs (e.g. the theoretical income from letting a house occupied by the owner)?
- Are representation costs deductible? To what extent?
- Can revenue in all income categories be offset with expenses from all income categories or are there limits (e.g. between "active" and "passive" categories of income)?
- Which is the tax period for assessing the revenue and for assessing the deductible expenses?
- When are revenues and expenses (gains and losses) realized, i.e. accounted for, for tax purposes?
- What is the territorial scope for revenues and expenses (gains and losses) to be taken into account?

Notwithstanding the different treatment in Member States, it should be noted that for many of the above aspects a certain de facto approximation has taken place in Member States over the last few years. But the inclusion of some losses seems to remain highly controversial (e.g. capital losses).

Consolidation of profits and losses

Finally, even within Member States there are a number of varying group taxation or consolidation schemes. In some of them, a parent-company will include the income of its subsidiaries in its profit-determination and pay tax accordingly, in others losses may be ‘surrendered’ to other group companies. As mentioned above, in at least two Member States group taxation provisions are extended to foreign subsidiaries, thus extending the potential loss-relief cross-border (Denmark, France). In Denmark this applies to subsidiaries and in France this applies because of a different notion of the territoriality principle.

The offsetting of domestic losses at lower group levels, i.e. horizontal offsetting of profits and losses between subsidiaries is in principle available in almost all Member States. This implies that once a ‘group’ has been established one company (generally the parent) can settle the tax for the whole combined group of companies. However, even when the principle of consolidating the taxable results of several separate group companies is accepted the detailed rules can create problems. Ownership thresholds may differ, as may the rules for vertical or horizontal offsets. There is no general horizontal EU cross-border offset of losses (which would imply that the group of companies can determine at EU level the individual taxpayer within the group that will offset the results of other group members).

Within a single Member State, in a domestic group of companies, whether loss offsets are available both upwards and downwards (vertical) or sideways (horizontal) is perhaps less relevant than the type of losses, and the amount of losses which can be offset. Full consolidation is only achieved if losses brought forward can also be offset, or surrendered; otherwise relief for these losses is only achieved when the individual
company returns to profit. Similarly if the amount of losses which a subsidiary can surrender to its parent is restricted to the current profits of the parent the routes permitted become potentially important.

The same principles apply to cross border operations, and when assessing the effectiveness of the various techniques currently available for cross border loss compensation these factors must be taken into account.

The basic functioning of the consolidation is illustrated in the following box:

**Box 32
Cross-border consolidation of profits and losses**

The existing consolidation schemes work vertical upwards, i.e. losses of the subsidiaries are taken into account on parent level (but not the other way round).

**Member State A**

Parent company X

**Member State B**

sub. X1

sub. X2

**Problems created by the absence of cross-border loss-compensation**

*Differing loss-compensation arrangements as factor for localisation decisions*

**Impact on commercial decision-making**

The range of different domestic provisions on loss compensation (concerning both losses resulting from domestic activities and foreign investment) is considered detrimental to the good functioning of the Internal Market and may work as an obstacle in the broad sense to cross-border economic activity. The same holds, at least in principle, for the different group taxation schemes the detailed differences of which are no doubt a feature taken into account in business location decisions. The effects of these differences are also no doubt reflected in the group structure and in the choice of permanent establishments rather than subsidiaries. This, of course, applies to all differences in company tax systems in Member States. Loss-compensation is, however, a particularly important element in these systems and the different prospective tax treatment of possible losses resulting from the investment in different Member States affects significantly investment decisions. Therefore, companies based in countries with more generous rules for cross-border loss compensation will be put in a favourable competitive position compared to those who are not. In this context it is noteworthy that, subject to the appropriate Federal consolidation rules, US companies benefit from offset of losses within their home market.
As regards the domestic loss-compensation arrangements, carry-forward and carry-back are important criteria in deciding whether to take an economic risk in a country. Small businesses are particularly hit by not being able to carry back losses, and small start-up companies in particular risk losing the benefit of losses which they are not able to carry-forward long enough for offsetting (or only when their value has effectively diminished). According to the indications made by members of the expert panel assisting the Commission services with this part of the study, the increasing importance of cost centres (implying either cost-sharing/pooling arrangements or royalty payments) in modern EU-wide branch structures tend to exacerbate these problems. Cost centres for R&D are a good example. In this context, however, it should not be overlooked that cost centres, whether organised as a subsidiary or permanent establishment, often also give rise to transfer pricing problems which are considered below.

*Bias towards domestic investment and investment in larger Member States*

The current situation also implies a clear incentive for companies to invest in those countries where sufficient taxable profits are available against which future losses can be set off. In the absence of cross-border relief, investments in a location with an existing tax base, mostly in bigger Member States, will tend to be favoured. Moreover, the present arrangements put foreign investment at a disadvantageous position compared to domestic investment. Loss-compensation is generally available domestically but not always in cross-border situations and even when cross-border loss compensation is available, the general conditions (timing, availability of profits etc.) are more generous in the domestic context. Whenever, due to the above arrangements and their interplay, losses that cannot be absorbed locally (either immediately or in later periods via carry-forward) cannot be offset against profits within the same group of companies, (economic) double taxation occurs. When loss-relief can only be obtained in the future when an activity becomes profitable, there is no double-taxation but in cross-border situations foreign losses may be offset later than domestic ones. The resulting interest cost for the companies concerned are considerable and of high practical relevance.
Company A possesses all shares of company B, purchased at a value of 500,000 €. A generates a profit of 1,000,000 € a given year while B, a start-up company, suffers a loss of 600,000 €. If company B is resident in the country in which A is registered, under a Consolidated Tax Regime both companies are considered as a single taxpayer (subject to certain conditions, e.g. if A holds at least a certain percentage of the B shares). The consolidated group tax base is the result of the sum of the components’ tax bases, i.e. 400,000 € in this case. The losses of the domestic subsidiary are thus entirely taken into account for determining the parent company’s profits. A possible excess loss can be carried forward up to ten taxable periods.

This group taxation is only available under the condition that all companies are tax residents in the same country. If B is not tax resident, its tax base of - 600,000 € has to be taken into account under B’s domestic tax law. However, A will, in certain Member States, be allowed to build up a provision reflecting the lower value of B’s shares. Generally, such a tax effective provision (book-reserve) for shares quoted on the stock market is possible when the market value is lower than the acquisition value. For non-quoted shares the provision is deductible for the difference between the theoretical value at the beginning and the end of any given year. In both cases, the maximum provision possible is normally limited by the share acquisition value (i.e. the loss in value is restricted to cost). Consequently, A’s tax base amounts to 500,000 €, resulting from the profits of 1,000,000 €, reduced by the provision of 500,000 €. If the subsidiary is not tax resident, losses are taken into account through tax deductible provisions subject to the shares’ acquisition value. The excess cannot be carried forward.

Even when the losses of foreign branches (permanent establishments) are immediately transferable to the head office, the overall tax situation still works in favour of local branches. For instance, in countries operating the tax credit method for permanent establishments, the losses of foreign branches (permanent establishments) are an integral part of the head office determination of the taxable base as are those from any domestic branch. When, however, losses are made in the country of the head office and taxable profits arise in the foreign branch country, the profits of the permanent establishment often reduce the overall tax loss available for carry-forward in the home country, even though tax has already been paid in the country of the permanent establishment. This boils down to effective double-taxation of identical income in the two Member States involved, which can only be avoided if the tax credit granted in the headquarter state for compensating the foreign tax can be carried forward to subsequent tax periods. This is currently not a common feature of Member States' tax systems.

The basic problem is illustrated by the example in the following box:
Box 34:
Example on loss-compensation: Losses in a domestic branch vs. losses in a foreign branch

A Belgian company sets up a branch in Rotterdam. The losses which the company suffers in Belgium are available for carry-forward and set-off against future profits, but only after being reduced by the profits made in the foreign branch (even when these profits have been taxed there). If the branch is set up in Antwerp, the amount of losses of the head office that may be set off against future profits is the same as for a branch in Rotterdam but the profits of the branch are not taxed. This situation may also illustrate why industry representatives constantly suggest that the permanent establishment should be able to offset the head office losses against its profits.

Relation to double-taxation conventions

Generally, the varying availability of loss-compensation is often influenced by the arrangements in double-taxation treaties and the double taxation relief method (exemption vs. credit method) applied. It may therefore change even for identical transactions within one country, thus creating significantly different competitive conditions for competing EU businesses. The respective advantages and disadvantages of the exemption method and the foreign tax credit system are not discussed here. However, some points for discussion should be noted. The above example comparing domestic and foreign branches illustrates a peculiarity of the functioning of credit methods. Moreover, it is logical to argue that under the exemption method foreign branch profits are not subject to tax in the head office country and that consequently the losses should not be taken into account either. In any case, this situation provides an obstacle to cross-border expansion inasmuch as the benefit of start-up losses is lost (or the losses can only be offset after a long period when they have lost their value).

It follows from the foregoing that the differing loss-compensation arrangements do not only impact on the decision on where to locate but also on how to carry out an investment. This is, for instance, an effect of the different treatment of cross-border losses of permanent establishments (which can immediately be transferred to the parent-company) and subsidiaries (which can generally not be offset against parent profits). Where operations are initiated abroad with foreseeable substantial start-up losses, the possibility of cross-border loss compensation offered by branches (forming permanent establishments) will induce companies to opt for this legal form rather than for immediate incorporation of the foreign operation (as a subsidiary), even though the latter may well be the preferred structure for other reasons. It is therefore not uncommon to see permanent establishments being transformed into subsidiaries when they become profitable (an activity is initially operated via a permanent establishment so that its losses can be offset in the head office but when it moves into profitability it is converted into a subsidiary). It should however not be overlooked that in many situations companies effectively do not have a choice between the two legal forms of running foreign operations, notably in specific sectors (e.g. banking, retail trade etc.) or for other external reasons.
Box 35:  
**Cross-border compensation of losses in permanent establishments: the Futura Participations case and the AMID case**

The issue of cross-border losses was first considered by the European Court of Justice in Case C-250/95 Futura Participations, where it held that Luxembourg was entitled to demand that losses of a French company with a permanent establishment in Luxembourg should have an economic link with its territory in order to be taken into account. The limitation was said to be justified because Luxembourg only exercised source taxation. The Court considered that, provided residents who were liable for tax were not given more favourable treatment, this condition was compatible with Article 52 of the Treaty because it was in line with the principle of tax territoriality.

The second time that the European Court of Justice dealt with the issue was in its judgment of 14 December 2000 in the case C-141/99 Algemene Maatschappij voor Investering en Dienstverlening NV (AMID) v Belgische Staat. In this case, the Court had to consider the following situation: The Belgian tax legislation establishes an order of set off for losses which in the AMID case had the effect of requiring AMID’s Belgian Head Office losses be set off against its Luxembourg Permanent Establishment's profits, even though these profits were exempt from Belgian tax under the Double Tax Agreement between Belgium and Luxembourg. Therefore these losses were not available for offset against subsequent Belgian Head Office profits, and in effect were never relieved against taxable Belgian profits. In contrast, had AMID’s permanent establishment been Belgian then the Head Office losses would have been relieved against the permanent establishment profits. Despite the fact that the legislation could also produce a situation where a company benefited (a profitable Belgian Head Office with a lossmaking Luxembourg permanent establishment could relieve the Luxembourg losses against both the Belgian Head Office profits for Belgian tax purposes and also relieve them against subsequent Luxembourg permanent establishment profits for Luxembourg tax purposes) the Court found that AMID suffered an inequality of treatment in relation to companies without establishments outside Belgium. Since there was no objective difference between such companies and no justification for this discriminatory treatment it created a hindrance to the freedom of establishment guaranteed by Article 52 of the Treaty and such legislation is therefore precluded by the Treaty. The AMID case illustrates the application of the non-discrimination principle in relation to the taxation of permanent establishments. It may have wider implications for the situation where losses incurred by foreign subsidiaries are currently not relievable against domestic profits, but losses incurred either by foreign permanent establishments or by domestic subsidiaries are relievable.

The European Court of Justice has not yet to rule on other cases in this area. In particular, it did not have occasion to consider whether a residence state applying the credit method (and hence claiming taxing rights over foreign profits) must take account of foreign losses incurred in another Member State.

**The cost of the absence of cross-border loss-compensation**

The basic difficulties encountered by internationally active EU businesses are a very frequent phenomenon. For instance, a recent survey by the Federation of Swedish Industries reveals that for 96% of the participating companies having suffered cross-border losses, it had not been possible or only partly possible to set off these losses against profits of other companies in the group. According to the survey, in 56% of the cases this has resulted in permanent double taxation to at least some degree.

According to information provided by various members of the panel assisting the Commission with this part of the study, EU-based multinationals could have made considerable savings if they had been allowed to offset losses incurred by subsidiaries in other EU Member States with the profits of the parent company (or even within the group as a whole). The savings resulting from such an arrangement would be primarily in terms of financing cost, as a consequence of advancing loss-compensation compared to the current situation. There is clear evidence of numerous EU-based groups paying
substantial amounts of corporate taxes in specific Member States while the overall EU group result was negative. UNICE gives the example of a company having in 1993-1995 overall losses of 880 m. ECU in various EU Member States whereas it had taxable profits in other Member States amounting to 870 m. ECU, resulting in the payment of corporate taxes in the latter countries of 320 m. ECU. Clearly, full cross-border loss-compensation would have prevented this tax payment in this period. It also mentions one particular company with overall profitability in Europe but losses in some Member States and profits and others. This overall company loss carry-forward is reported to be 820 m. ECU (1996) which gives an idea about the possible cost-savings that would be achievable via immediate loss-compensation.

Loss-compensation arrangements are also very important in the case of mergers and acquisitions. It is evident that while carrying out cross-border business restructuring operations, companies try to preserve accumulated pre-conversion losses and ensure their tax-effectiveness, i.e. current or future absorption. Generally, in some countries, costs arising from the acquisition and holding of foreign equity are not or only to a limited extent deductible which can lead to significant taxation of assumed gains. Under specific circumstances, however, the post-merger situation can offer more possibilities of loss-compensation than the pre-merger situation (e.g. when two associated companies can reflect losses only via provisions before the merger whereas, at least in many Member States, the permanent establishment created through the merger offers full cross-border offsetting of losses).

Box 36: 
Survey of losses on cross-border activities within the EU by the Federation of Swedish Industries57

Set up of the survey
In order to investigate the magnitude of this obstacle the Federation of Swedish Industries has made a survey among its member companies. The Federation has approximately 6 000 member companies from the manufacturing industry, transportation, telecommunication and information technology. The member companies count for approximately 90 % of the industrial export from Sweden. The survey was carried out by sending out a questionnaire concerning the frequency of losses on cross-border activities and inquiring to what extent it had been possible to set off the losses suffered against profits in other Member States. It was also asked to what extent these difficulties had influenced their activities and/or the organisation of their businesses. The questionnaire was distributed to all member companies (or groups of affiliated companies) having more than 25 employees, in all 1086 companies (only one questionnaire per group of companies). Out of these 1086 companies 706, or 65 %, have answered the questionnaire. A limited random telephone survey among the non-answering companies indicates that the main reason for not answering was the fact that they had no affiliate companies in any other Member State than Sweden. Therefore they had considered the survey not applicable to them.

Comments to the results of the survey
- Out of the 706 responding companies 216 companies, 30%, had activities in other Member States. 46% of these companies were foreign owned and 54% Swedish owned. Some companies, not having activities in other EU countries have nevertheless answered some of the following questions, which explains that the number of total answers on the following questions sometimes exceeds 216. This has been taken into account in the analysis.
- Almost 50 % of the responding companies had activities in more than five Member States. That shows that the average company has widespread international activities within the European Union. 33 % have activities in only one or two Member States.

Out of the 216 companies having activities also in other Member States 172 companies, that is 81%, have suffered losses in one or more Member States. 1/3 of the companies have suffered losses several times.

In 166 companies, or 96% of the companies having suffered cross-border losses, it had not been possible or only partly possible to set off these losses against profits of other companies in the group. In 56% of the cases this has resulted in permanent double taxation to at least some degree. Together with the answers to other questions, this shows that 77% of the companies having cross-border activities within the European Union have suffered from a higher tax burden because of the difficulties of setting off losses against profits in other Member States. In more than 50% of the cases the result has been permanent double taxation to some degree and in the remaining cases temporary liquidity and interest losses.

Of those companies suffering losses on cross-border activities 73 companies indicated that the difficulties to set off losses against profits in other Member States had influenced the organisation or structure of their activities.

A breakdown of the figures in categories of small companies (less than 100 employees), medium sized companies, (100-500 employees), and companies with more than 500 employees has been made. The breakdown shows that small companies have fewer cross-border activities, only 13% of the companies, than larger companies. However, the small companies have had greater difficulties setting off losses against profits in other Member States. Those difficulties have not influenced their organisation to any substantial degree (quite naturally as they have fewer options for restructuring their businesses).

Comments by participating companies
The companies were invited to give comments on the causes and effects of the difficulties of cross-border loss-setoffs. All together, 114 comments were given. Here they have been classified into 10 different categories.

- According to 29 comments the cross-border loss problems have caused the companies to choose a tax motivated organisation of their businesses (e.g. national subgroups, holding company structures), instead of a business motivated structure such as an organisation by business sectors. In some cases a branch structure has been chosen instead of having the foreign operations organised in separate subsidiaries which otherwise would have been the natural organisation.

- According to 21 comments the cross-border loss problems gave rise to a higher over all tax burden for European businesses and have also caused liquidity problems and reduced expansion possibilities. Also, the survival of the business have been threatened. In two cases the problems have led to a liquidation of the business.

- In 16 comments transfer pricing problems have been listed as one of the main reasons for the cross-border loss problems.

- According to 8 comments the cross-border loss problems have caused a more complex and more costly organisation of the businesses.

- According to 9 comments the fragmentation of the European tax systems causes great problems for European businesses and the organisation of the businesses.

- According to 8 comments reorganisations and restructurings are hampered by the loss problems and other tax obstacles. The Merger Directive does not work satisfactorily.

- According to 6 comments the businesses have been organised with a sub-parent company in Denmark, as Denmark applies international consolidation and allows offsetting of foreign losses.

- According to 6 comments VAT problems are very serious.

- According to one comment the time limitation for loss deductions, existing in some Member States, causes severe problems.
Conclusion

The current situation in the EU leads to the taxation of company profits which, where foreign investment is involved, do not reflect the overall result of the business activities. In certain cases, this could result in discriminatory treatment. The non-availability or limitation of cross-border loss-compensation thus results in (economic) double- and over-taxation. Where limited cross-border compensation is available specific corporate structures may be required, thus influencing commercial decisions. Industry considers this one of the most important impediments to cross-border economic activities and in conflict with the very concept of the Internal Market.

Moreover, there appear to be good grounds to conclude that generally the company tax law of Member States contains a bias towards favouring domestic investment, thus indirectly hampering cross-border economic activities. This is in particular true in the larger Member States, because the domestic market of such States may be large enough to accommodate one important enterprise, while an enterprise of the same size operating from a smaller Member State is immediately confronted with the lack of cross-border loss compensation of some parts of its business operating in other Member States.

The effects of the above arrangements culminate in what many commentators consider violations of the basic right of free establishment (e.g. the economic problems resulting from the different treatment of permanent establishments and subsidiaries).

Transfer Pricing

The increasing importance of transfer pricing as an international company tax problem and in the Internal Market

It practically goes without saying that transfer pricing issues need to be considered when analysing possible company tax obstacles to cross-border economic activity in the Internal Market. Market operators emphasise the ever increasing importance of the issue, citing unduly high compliance costs as well as clear instances of double taxation. Some have even raised the more fundamental question whether the allocation of tax revenues between Member States on the basis of the 'arm's length principle' and 'separate accounting', which lie at the heart of transfer pricing, is still the most appropriate way of "dividing the tax cake" within the EU. As a matter of fact, in the Internal Market, with its increasing market integration as well as the increasing importance of intangibles make it increasingly difficult in practice to divide profits on a traditional transaction basis.

In principle, 'transfer pricing' based on the 'arm's length principle' represents a coherent and sound concept for establishing the correct attribution of company profits between countries. Moreover, the general requirement to enforce tax legislation via such means as particular documentation requirements and tax audits is not in question. However, many experts are questioning whether these traditional means, as applied by tax administrations in the field of transfer pricing within the Internal Market, are still the most appropriate and efficient. Increasingly they produce inconclusive or even contradictory results at a high cost and the potential problems, and potential ways of resolving these are analysed below.
The 1992 Ruding report identified transfer pricing as one of the most important areas for the future in international taxation and for the Internal Market and made some recommendations including, but not limited to, the ratification of the EU Arbitration Convention. However, the Ruding report did not analyse in any detail the problem of transfer pricing in the context of the Internal Market. As indicated in Part I of this study, the completion of the Internal Market and other international developments like the almost exponential growth of intra-group cross-border trade now call for a more thorough analysis. This section therefore takes a more comprehensive look at whether and how the tax arrangements concerning transfer pricing constitute an obstacle to the Internal Market.

Given the objective of this study, this section does not explicitly cover transfer pricing problems with third countries. However, transfer pricing is a global issue: double taxation, high compliance costs etc. are obstacles to cross border trade, both within the Internal Market and beyond the EU. It is nevertheless important to stress that Member States have a responsibility to address existing tax arrangements, including those with an impact on transfer pricing, which constitute an obstacle to the smooth functioning of the Internal Market. In tackling these obstacles care must, however, be taken that the international consensus on transfer pricing is not put into question.

**Basic concepts of transfer pricing and the Internal Market**

The taxation of transfer pricing is one of the most complex issues of international taxation\(^\text{58}\). It may therefore be useful, as a basis for the following analysis, to explain some basic concepts of transfer pricing and to consider its particular situation within the Internal Market.

**The technicalities of transfer pricing and the OECD Guidelines**

*The arm's length principle*

It is generally recognised that affiliated companies conducting cross-border business for tax purposes must do this on market principles, i.e. act as if the business was being conducted between independent parties. The price charged for goods and services - the transfer price - therefore has to be in accordance with the so-called arm's length principle. The basis for the arm's length principle is the separate entity approach; i.e. each affiliated company in a group is for tax purposes treated as a separate entity and taxed individually on the basis that it conducts business with other group members at arm's length. For the Internal Market this means that a company has to provide separate accounting for the 15 Member States (or at least every Member State where it is active).

The separate entity approach and the arm's length principle are globally accepted principles in the area of international taxation. The arm's length standard is evoked in

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\(^{58}\) A general discussion of the basic issues can, for instance, be found in Plasschaert, S., *Transfer pricing and Taxation*, in: United Nations Library on Transnational Corporations, Vol. 14
Article 9\(^5\) of the OECD Model Convention\(^6\), and maintained and developed in the 1995 OECD Transfer Pricing Guidelines (Guidelines)\(^7\). The practical application of the arm's length principle is complex and the Guidelines provide guidance for its application by tax administrations and taxpayers.

As indicated the application of the arm's length principle is generally based on a comparison of the conditions of transactions between affiliated parties (i.e. controlled transactions) with the conditions of transactions between independent parties. The latter transactions are generally referred to as comparables. Comparables can be either internal (i.e. transactions between the group company and third party) or external (i.e. transactions between two third parties). The Guidelines include extensive guidance on when a transaction between independent parties is sufficient comparable. Factors determining comparability include the characteristics of the property transferred or services provided, functions performed, risks assumed, contractual terms and economic circumstances and business strategies. The Guidelines explicitly recognise that comparability analysis is not an exact science, but requires an element of judgement.

Different methodologies can be applied to establish whether controlled transactions are in accordance with the arm's length principle. The methodologies are generally referred to as transfer pricing methods. The Guidelines explicitly mention five transfer pricing methods falling into two categories, which are the so-called traditional transaction methods and the so-called ‘other’ or (transaction-based) profit methods.

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\(^5\) For permanent establishments the principle is established in Article 7 of the OECD Model Tax Convention.


The traditional transaction methods (hereinafter transaction methods) are the Comparable Uncontrolled Price (CUP), the Resale Price Method (RPM) and the Cost Plus Method (CP). CUP compares the price for property or services transferred in a controlled transaction to the price agreed for property or services in comparable uncontrolled transactions. If applicable, CUP is likely to be the most direct and reliable method and is therefore preferred over all other methods. The RPM is based on the price at which a product purchased from an affiliated company is resold to an independent enterprise. The gross margin on a controlled transaction is compared with the gross margin of comparable uncontrolled transactions. The resale price to a third party is then reduced by the resale price margin and the remainder constitutes the arm's length price at which the product is deemed to have been purchased from the related company, i.e. RPM compares gross margins. The CP starts with the gross costs incurred by the supplier of property or services in a controlled transaction. A cost plus mark is added to this cost in order to raise the price to the level at which the product would have been sold in an uncontrolled transaction. The mark up must be consistent with mark ups in comparable uncontrolled transactions. Consequently, the CP also compares comparable gross margins on costs. This method is most relevant for production companies or service providers. The ‘other’ or profit methods comprise the so-called transactional profit methods (profit methods) which examine the profits arising from controlled transactions. The Guidelines explicitly list two profit methods, the Profit Split Method (PSM) and the Transactional Net Margin Method (TNMM). The PSM identifies the combined profit to be split between associated enterprises from a controlled transaction, and then splits this profit between the associated enterprises on an economically valid basis that approximates the division of profits that would have been anticipated and reflected in an agreement made at arm's length. It is important to note that the PSM differs from all other transfer pricing methods, including the TNMM, as according to the Guidelines it does not necessarily require the use of comparables. PSM is also especially relevant when one or several of the parties hold valuable intangibles. The TNMM examines the net profit margin relative to an appropriate base (e.g. cost, sales, and assets) that a taxpayer realises from a controlled transaction. TNMM is therefore largely similar to the RPM and CP, the difference being that the first compares net margins, the latter gross margins. TNMM was a new development introduced in the Guidelines and has the advantage, compared to RPM and CP, that it does not require the same amount of detailed information concerning the cost base, i.e. direct costs and indirect costs. Different profit based methods, in addition to the five explicitly mentioned (CUP, RPM, CP, PSM & TNMM), although not specified in the Guidelines, may also be used provided they are consistent with the specified profit based (methods PSM and TNMM). The most important example of such methods is the so-called Comparable Profit Method (CPM) which originated in the U.S. CPM is to a large extent similar to the TNMM, the difference being that TNMM stresses profit per transaction (product line etc.) whereas CPM can be used on a more aggregated basis. It is sometimes argued that TNMM and CPM are in practice identical although, in fact, TNMM constitutes a limited part of CPM. CPM is often used by US companies.

The transactional methods (CUP, RPM and CP) are, if applicable, preferred to the profit methods (PSM, TNMM etc.). Profit methods are therefore only methods of last resort. There are two main reasons for this. First, independent parties only rarely, if ever, establish their prices based on a profit method. Second, profit margins or splits – and thereby the transfer price - can be effected by factors irrelevant to the setting of transfer prices, for instance management (in)efficiencies.

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62 For more details see, for instance, Hamaekers, H., Taxation vis-à-vis international relations and the use of new technologies - Transfer Pricing at the beginning of the XXI century, Inter-American Center of Tax Administrations, September 1999

The Guidelines introduce the so-called arm's length range. This implies that often comparables will produce a range of figures, which are relatively reliable, and that tax authorities should not make adjustments provided the transfer prices are within the range. In this way it is recognised that the application of the arm's length principle is not an exact science. This arm's length ‘range’ principle is also relevant for transaction methods but is generally more important in the application of profit methods.

According to the Guidelines “practical experience has shown that in the majority of cases, it is possible to apply traditional transaction methods”. The Guidelines reject the use of global formula apportionment methods which work by allocating profits of a multinational enterprise on a consolidated basis among each group member according to a formula fixed in advance.

**Documentation requirements**

A key issue is the question of what kind of documentation a group company needs to prepare to demonstrate it has applied the arm's length principle. The Guidelines maintain that “the taxpayer should not be expected to provide more documentation than the minimum necessary to permit tax administrations to audit transfer prices and to verify if the taxpayer has applied the arm's length principle.” Generally the Guidelines aim at maintaining a balance between the right of tax administrations to obtain from tax payers as much information as possible to ascertain whether the price is or is not of an arm's length nature, and the compliance cost that any documentation rules imply for the taxpayer. The Guidelines recognise that the tax payer should make reasonable efforts, at the time transfer prices are set, to determine whether the arm's length principle is satisfied, and that tax authorities can expect or require tax payers to maintain documentation to support this. However, the amount and type of documentation required should be in proportion to the circumstances of each case. In this context the Guidelines introduce the important concept of the 'prudent business manager’. This implies that the process of considering transfer prices should be carried out in accordance with the same prudent business management principles as would govern the process of evaluating any other business decision of similar complexity and importance.

The Guidelines provide a list of items, which are likely to be useful in most cases, and other types of information that will be useful in many cases; but they do not include an exhaustive list of documents that the taxpayer should prepare. The Guidelines do explicitly mention that enterprises are not required to use more that one transfer pricing method, and also state that that there should be no contemporaneous requirement for supporting documentation to be prepared either at the time the prices are set or when the tax return is filed (i.e. it is acceptable for it to prepared only on request from the tax authorities).

**Fundamental tax issues of transfer pricing in the Internal Market**

**Impact on commercial decision-making and economic problems**

Member States' legislation generally also obliges domestic intra-group transactions to take place at arm’s length. However, in practice, transfer pricing is mainly a cross-border issue which creates specific compliance costs and contains a risk of double taxation. Multinational enterprises with cross-border transactions find themselves confronted with a number of difficulties that are explored in detail below:

- (sometimes heavy) documentation requirements,
- the risk of penalties and economic double taxation,
- the costs of temporarily having to finance the same tax burden twice and
- increased auditing by the tax authorities.

A general problem in this context for multinational enterprises is the one of uncertainty. It is claimed by business that there is a risk of suddenly having a business structure which has perhaps been in place for a number of years undermined by the tax authorities who will - for transfer pricing reasons - no longer accept it from a tax point of view. Moreover, according to the business representatives in the panel it is not uncommon that a certain structure and/or transfer price (or the application of a specific method) might be acceptable to one Member State but not to another.

Transfer pricing thus represents an additional burden for a company in one Member State to set-up and/or conduct business with an affiliated company in another Member State, and instead favours domestic investments/transactions. Furthermore, as independent enterprises are not subject to transfer pricing regulations on cross border transactions they will be in a better position than multinational enterprises. Transfer pricing can also affect the location of cross border investments. All other things being equal, a company would be less likely to set-up a subsidiary or branch in another Member State with a stricter transfer pricing policy than in another Member State with more lenient rules.

Small and medium-sized enterprises can be particularly hit by these problems. Frequently they are not even familiar with the basic concepts of transfer pricing and do not have the appropriate resources and structures to deal with the problem when they, say, create a first subsidiary abroad.

The setting of intra-group transfer prices in accordance with the separate entity approach and the arm's length principle does not necessarily correspond to the prices set for business reasons (effectiveness, performance measurement etc.). This has always been the case. However, business representatives maintain that the very concept of the arm's length principle will in the future lose its underlying commercial rationale. This is because large companies, in view of their EU-wide corporate restructuring, adopt so-called Euro-pricing. As sketched out above in Part I, as a result of the price convergence expected under the single currency, one transfer price is used per harmonised (intermediate) product for the group in the whole of Europe, regardless of which production facility the goods are purchased from. Business argues that from a management point of view, this avoids intra-group disputes about price levels and permits an optimum efficiency in the structure.
Multinational enterprises are usually organised in relatively autonomous divisions which are responsible for the (non-strategic) commercial decision-making. This often includes responsibility of the division management for their own profits (profit centre structure). On the one hand, this implies that every division must be able to decide whether buying a certain (semi-finished) product with third parties or from another related division. On the other hand, it must be ensured that the objective of profitability at division level does not hamper the profit-maximising objectives of other divisions or the overall group. A fully developed transfer pricing system of a multinational enterprise would have to motivate divisional managers and employees, allow the headquarters to evaluate the performance of the divisional management and link its remuneration to it, be perceived as fair by both the selling and the purchasing unit and allow for an optimal allocation of resources within the group. It is often difficult to find a transfer price that meets all these objectives. For instance, if there is an unused production facility it would make sense, in an overall group perspective, to instruct the supplying unit to transfer its output to the downstream affiliate at only marginal or variable cost. This means, however, that the supplier cannot recover its fixed cost and will incur a loss on this transaction. Thus, the objective of maximising the group profit conflicts with the objective of maximising the divisional profit. This kind of question has received extensive attention in the management literature. It shows that transfer prices that are set for commercial reasons are not necessarily identical to the arm's length price that is usually requested for taxation purposes.

Moreover, multinational enterprises will also have an incentive to apply non-arm's length prices in transactions with affiliated companies in those Member States who have taken a 'robust' line in the transfer pricing area. By providing affiliates based in these 'robust' Member States with more than an arm's length remuneration, transfer pricing problems with those Member States' tax authorities can be avoided.

**Profit shifting through transfer pricing**

This introduces the issue of profit shifting. Transfer pricing can of course be used as a tax-planning tool not simply to shift profits into those Member States with a ‘robust’ approach but also to shift profit from high tax to low tax jurisdictions by charging non-arm's length prices. It is, however, difficult to assess to what extent manipulation of transfer prices is systematically used as a profit-shifting instrument.

The Ruding report mentions that transfer pricing manipulation in the early 1990s was becoming less prevalent due to multinationals' movement away from the concept of cost centres towards that of profit centres, which make it more difficult to manipulate prices, and because of the increased interest paid to the subject by tax authorities. These trends have continued. The Ernst & Young survey presented below, a document commissioned by a private tax consultancy firm which represents the only available large scale survey in this area, supports the idea that transfer prices are not systematically used to shift profit. According to the survey business consider transfer pricing mainly as a compliance exercise and not a tax-planning tool. Prices are set to maximise operating profit, not to lower the tax burden.

A certain narrowing of the range between effective company tax rates in the different Member States in the last decade may also have reduced the incentive for transfer

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64 For more detailed explanations see for instance: Plasschaert, Sylvain, Transfer Pricing for Managerial Purposes in relation to Fiscal Parameters, IBFD - ITPJ, Vol. 4 No.5, September 1997

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pricing tax planning and deliberate profit-shifting. Instead, when intra-group transactions do not meet the arm's length principle, this would mainly be caused by the complexity of the transfer pricing rules, the difficulties in finding comparables, or because no attempt to check whether intra-group prices are at arm's length has been made at all.

The introduction of new business structures - as part of a corporate reconstruction - where an affiliate of a multinational enterprise has its functions or its risks reduced, may, by some tax administrations, be considered to have been motivated mainly or solely for tax purposes. This might particularly be the case in reorganisations where functions and risks are transferred to one or several affiliates resident in tax havens or subject to a preferential tax scheme. Business claims such business reorganisations are done primarily for business reasons and not to save tax and that the tax authorities generally should accept them. In this context it is also important to note that the possibilities for such types of tax planning instruments will be reduced significantly by the current exercises in the EU and in the OECD aimed at eliminating harmful tax measures.

However, in contrast to the Ernst & Young survey comprehensive studies made by some US researchers show that transfer pricing in a US context frequently is used to shift profit from high to low tax jurisdictions. The tightening up of the US transfer pricing rules in the early 1990s was based on studies showing that transfer pricing was used to a large extent to avoid taxation in the USA. There is also some evidence on profit shifting within the EU65. However, overall the available studies do not show uniform results on this question. In short, one can therefore conclude that, while there is undoubtedly evidence for aggressive transfer pricing by companies, there are equally genuine concerns for companies which are making a bona fide attempt to comply with the complex and sometimes conflicting transfer pricing rules of different countries.

The role of tax administrations

Although it is not directly an obstacle to the Internal Market, the effect of transfer pricing on tax authorities should also be mentioned. Tax administrations also suffer from the high compliance costs of transfer pricing. Transfer pricing auditing differs from normal auditing by being complex and expensive, and by requiring highly skilled tax auditors. It takes up a lot of resources, which in many cases can only be taken away from other audit areas. Of course a Member State can reduce these “difficulties” - and some have done so - by introducing robust transfer pricing rules, notably in the form of tough (up-front) documentation rules backed up by penalties for non-compliance, which transfers the burden to business and to other tax administrations.

It is important to stress that the above aspects must be seen in the context of Member States’ increasing interest in transfer pricing. Most Member States have increased auditing efforts in the transfer pricing area. These and other measures have been taken to ensure that the Member State gets its fair share of the “global tax cake”. Some Member States have found themselves in a situation where they had no other choice than to also

introduce documentation requirements etc., the alternative being that tax would instead be paid in those countries with stricter documentation requirements, stricter penalties etc. There is a risk that this will lead to a kind of race to the top between Member States, where business, the Internal Market and international trade in general can only be the loser.

The following box illustrates the increased interest that governments have taken in the issue in the last 5 years.

<table>
<thead>
<tr>
<th>Box 39:</th>
<th>The development of transfer pricing documentation rules in national legislation and practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1995</td>
</tr>
<tr>
<td>USA</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td></td>
</tr>
<tr>
<td>S.-Korea</td>
<td></td>
</tr>
</tbody>
</table>

Another problem is the different application of transfer pricing rules in Member States. The Guidelines therefore do not eliminate all the differences between transfer pricing rules in the Member States.

Based on this analysis there is little doubt that transfer pricing currently constitutes an obstacle to exploiting the full benefits of the Internal Market as it represents a significant compliance burden which does not arise in the domestic context. The following section analyses the various technical features of this obstacle in more detail.

**High compliance costs in relation to transfer pricing**

*The lack of comparables as reason for difficulties in the application of the arm's length principle*

**Practical difficulties in finding "comparables"**

One of the most essential aspects of transfer pricing is that of the need for comparables for benchmarking - the arm's length concept as such is based on the existence of such comparables. As indicated above in part I, it was generally assumed in the mid 1990s that 60% of all global trade took place intra-group. The increased globalisation, which has led to an increase in the number of mergers and acquisitions, implies that this figure is now even higher. This trend will also be fuelled by the typical changes of business organisations from horizontal to vertical structures, with fewer (but) bigger production units. In the past, local subsidiaries carried out all the business functions (purchases, production and sales etc). This is no longer the case to the same extent. Therefore the volume of intra-group trade will have increased. On this basis the assumption must be
that the scope for finding transactions between independent parties is not large and is diminishing.

Another aspect is that multinational groups can conduct business in ways which independent companies cannot and this can give rise to problems in finding comparables. A standard example is the use of certain types of intangibles, e.g. know how, where companies are normally not willing to allow independent parties access to these intangibles which constitute business secrets. Other standard examples are headquarter services (e.g. administrative and technical services), which by definition are not relevant for independent companies, and cost sharing. Numerous other examples exist, for instance the use of contract manufacturers and companies that perform contract R&D – who carry few risks and therefore can be remunerated on a cost plus basis. These are much more commonly used within multinational enterprises than outside by independents. When the whole business structure of multinational enterprises differs so fundamentally from that of independent parties it can reasonably be assumed that it is difficult to find comparables. In sum, the fact that intangibles are becoming increasingly important makes it more difficult to find comparables. Increased reliance on intangibles (both production and marketing intangibles) is caused by the new business structures, new technologies (Intranet etc.) and because products are becoming more complex.

All these structural constraints affect the search for comparables and the quality of (any) comparables which are identified. As mentioned above transaction methods are generally preferred to profit methods and they rely to a great extent on multinational enterprises having internal comparables. It is often the case that a multinational enterprise does not have transactions with independent parties, other than when the product etc. is sold to the ultimate end user, or that if it does, these transactions might not actually be comparable, for instance because the sales to independent parties only take place on marginal markets, because of low volume etc.

Pragmatic solutions for the lack of "comparables"

As a result multinational enterprises in practice often have to search for so-called external comparables, i.e. comparables between two independents parties available from commercial databases. Apart from the fact that commercial databases in principle also suffer from the problem that most global trade is intra-group, it is generally recognised that their use can be problematic. Firstly because information obtained from commercial databases is generally at a quite aggregated level, i.e. information on different product lines etc, is not available, and secondly because there is no common definition of the cost base within the Member States, i.e. what constitutes gross costs and operational costs.

Therefore in practice multinational enterprises will often have no other possibility than to use the profit comparables for benchmarking. This often gives rise to disputes with tax authorities either because they do not agree on when to use profit methods, or they do not agree on how to use them (including the choice between the various profit methods), or because a particular tax authority does not accept the profit method which has been applied (which is often the case for CPM). Obviously, another problem with

66 For instance Amadeus, GlobalVantage, Kompass, Moody’s Company Data and Worldbase.
the use of commercial databases is the costs of obtaining access to the databases and the costs of performing the searches.

In short, it is difficult for business to find comparables and that the comparables available generally are not the internal comparables at the transactional level which tax authorities generally prefer to see. Often only external profit comparables from commercial databases are available which then often give rise to disputes with and between tax authorities.

"Comparables" and transfer pricing methods

It is often maintained that TNMM is much more widely used than generally expected, for instance by multinational enterprises. In this context it is noteworthy that some tax administrations – which tend to be Anglo-Saxon OECD members who are quite experienced in the transfer pricing area - hold that business, via commercial databases, has easy access to some of the information necessary to apply the TNMM, but that they often do not apply the method in accordance with the Guidelines opting for a more simplistic approach. Compared to transaction methods, TNMM therefore can be an easier (cheaper) solution. The method is sometimes chosen even when transactional methods (subject to necessary adjustments) actually could be used. Another reason mentioned for using TNMM is its similarity with CPM, which is often used in the USA.

There are, however, good reasons to believe that the particular situation in the EU Member States is still different from the USA in this respect and that profit methods are not used. The Ernst & Young survey indicates that in practice transaction methods - especially CUP and CP - are in fact the most commonly used methods for all transaction types in clear preference to profit-based methods. It therefore seems that business in general has, up until now, managed to overcome the theoretical problems of finding and applying internal (or external) transactional comparables for setting transfer prices. It should nevertheless be noted that the survey does not reveal the quality of these transactional comparables. For instance it cannot be ruled out that in applying the CP, business often apply a “standard mark-up” of for instance 5-15% without any support from independent transactions or companies. More importantly, the tax problems relating to transfer pricing can be expected to grow in the future. The debate on the applicable method and the conditions for its use will become increasingly important in the EU.

Different application of the OECD Guidelines and transfer pricing principles

The OECD Guidelines provide the overall transfer pricing framework in all Member States. The new set of transfer pricing guidelines forms a common set of ‘rules’ and these Guidelines are generally applied. However, the Guidelines are a compromise between the 29 Member Countries and are neither clear in all aspects, thus leaving considerable room for different use and interpretation by Member States (and business). Transfer pricing regimes in Member States are not identical and business therefore is subject to 15 different transfer pricing systems. As transfer pricing by definition is a “two-way” exercise, different transfer pricing rules will cause disputes between Member States, potential double taxation for business and a negative effect on business compliance costs.

There are a number of examples of where Member States apply the Guidelines differently. Furthermore, a number of Member States have not issued their own
guidelines or statements of practice stating their particular position in areas where the Guidelines are not clear. One example of different treatment is intra-group services and the question of whether the service provider shall earn a profit on the services or just have his expenses covered. In practice a cost plus based approach is often used for intra-group services and especially for management services by the headquarter. The question therefore often arises whether the service provider (often the headquarters) must charge a mark-up on services provided to foreign affiliates (often subsidiaries). The OECD Guidelines deal with services in Chapter VII.

In paragraph 7.2. of the Guidelines it is mentioned that most multinational groups of enterprises arrange for a wide scope of services to be available for its members, in particular administrative, technical and financial services, and that such services also may include management, co-ordination and control functions for the whole group. The Guidelines address the issue of profit versus cost in paragraphs 7.33, 7.34 and 7.37. As a general rule the service provider must make a profit, as an independent party will not provide services at cost (7.33). However, there are exceptions (7.33 and 7.34), e.g. where the value of the service provider does not exceed the costs. For instance for headquarter services – provided to the whole group including the headquarters – it can often be asked whether the value of the services exceeds the cost of providing the service, or whether the “service” is in fact simply a sharing of costs.

Some Member States take the view that the service provider must make a profit, as an independent party will not provide services at cost. This is also the case, where the service provider itself also uses the services (which will often be the case for headquarters). Other Member States take the position that if the service provider itself use the services function, then the arrangement must be considered a cost sharing one to which no mark-up can be added. The argument is that all parties including the service provider will benefit from the services by reduced costs. The first approach does not seem any more correct than the second, and vice versa. Sometimes there are ways of getting around this problem, for instance by setting up a special entity, but these will lead to additional costs and unnecessarily complicated business structures.

There are some other important issues where the Guidelines are not clear and/or where they can be difficult to apply in practice. These concern, for instance intra-group services in general, cost sharing and cost contribution agreements, losses, the detailed application of profit methods and market penetration issues. In the context of this study, the question arises whether EU Member States should develop a common stance on these issues.

**Documentation requirements**

As indicated above, business representatives strongly express the view that the transfer pricing documentation requirements are increasingly onerous and create unduly high compliance costs. Generally, it is said that they often go beyond the requirements which can be met by management accounting, thus creating a substantial and growing compliance cost for businesses (and tax administrations) involved in cross-border activities. It is also maintained that some Member States do not follow the OECD guidelines and that there are significant differences in documentation requirements between Member States.
As illustrated above, documentation requirements overall have increased within the EU in the sense that some Member States either by legislation or by circular letters have introduced whole new documentation rules or tightened existing requirements. This trend will probably continue. The majority of the Member States have not (yet) taken such initiatives. However, this does not mean that documentation requirements have not increased in these Member States as such an increase also can take place via the audit process.

Concrete estimates of the resulting compliance costs

According to information given by business representatives the tax compliance costs of transfer pricing are quite material. This cost results from the obligation for enterprises to determine what prices could be regarded as arm’s length including finding comparables, assembling the related documentation and defending these prices in audits, etc. According to some estimates, medium sized multinational enterprises spend approximately 1 to 2 million € each year on complying with transfer pricing rules. Large multinational enterprises incur compliance costs related to transfer pricing of approximately 4 up to 5.5 million € a year. These figures do not include the costs and risks of double taxation due to transfer pricing disputes. Other estimates by representatives of the manufacturing industries indicate even higher figures.

Quantitative information on transfer pricing

The views of the business community and of tax administrations on the crucial tax problems on transfer pricing appear to differ significantly. While business representatives maintain that double taxation cases and subsequent disputes are almost daily practice, tax administrations claim that real double taxation cases are relatively rare and always solved. According to tax practitioners this different perception can partly be explained by the fact that in view of the insufficient redress possibilities businesses often "give up" and accept double taxation which would be too costly and burdensome to remove, if there is prospect of achieving this at all. Moreover, the difference in perception may in part also stem from the fact that transfer pricing rules must be applied on a self-assessment basis. Even if only a small proportion of companies are audited for transfer pricing, every company must apply transfer pricing rules in computing profits and maintain the necessary documentation in case of audit. Thus the compliance burdens do not depend upon either an audit or (even if there is an audit) a dispute over transfer pricing policy.

The Commission services have tried to obtain as much neutral evidence as possible on this question. However, there is not much publicly available quantitative material on the transfer pricing issues relevant for the study. It is therefore difficult to obtain comprehensive hard facts on the link between transfer pricing and the smooth functioning of Internal Market and the analysis and the conclusions of this report must be read in that light. However, a recent comprehensive survey conducted by Ernst & Young provides some factual information about how business views the transfer pricing issue. In addition, to gain more information, the Commission Services distributed a questionnaire in mid 2000 to the EU Member States on dispute settlement mechanisms in the area of transfer pricing. The findings of both the survey and the questionnaire provide some relevant facts.
Ernst & Young published their latest survey on transfer pricing at the end of 1999\textsuperscript{67}. The 1999 survey includes 19 countries including 9 Member States: Argentina, Australia, Brazil, Canada, Denmark, Finland, France, Germany, Italy, Japan, Korea, Mexico, Netherlands, Norway, Spain, Sweden, Switzerland, the UK and the United States. The survey was conducted by Consensus Research International, a London-based Research Agency, and included interviews with the person responsible for international tax matters in leading multinational organisations. 582 parent company interviews were held, and telephone interviews were conducted with 124 subsidiaries of foreign-owned parents. This survey, which was commissioned by a private tax consultancy firm, represents the only available large-scale work in this area and its findings give valuable insights to business perception of the subject.

The survey reveals that business considers transfer pricing to be the most important international tax issue for the future. One of the reasons is that it sees a clear connection between transfer pricing and double taxation. Business reports that in 42\% of cases of adjustment this resulted in double taxation. This is primarily because firms do not generally refer cases to mutual agreement procedure, as they consider the procedures take too long and take up too many resources in relation to the exposure. Advance Price Agreements are increasingly considered as a possible solution to avoid double taxation.

Business, as in the 1997 survey, continues to identify maximisation of operating performance, not optimising tax arrangements (i.e. tax planning), as the most important factor in shaping transfer pricing policies; consequently the majority of companies do not consider transfer pricing to be a tax planning instrument, but instead largely a compliance exercise.

The survey also revealed that the number of transfer pricing audits has increased overall. Nearly two-thirds of the multinational enterprises headquartered in the 12 countries included in the 1997 survey, report in the 1999 survey that their transfer prices have been subject to tax authority examination (40\% of the multinational enterprises in the 7 new countries), and 75\% of multinational enterprises expect to face a transfer pricing audit somewhere in their organisation within the next two years.

As tax administrations increasingly focus on transfer pricing (including by introducing documentation rules, increased auditing etc.), companies are also recognising the advantages of a global approach to design and document transfer prices; however less than 20\% have actually managed to achieve global transfer pricing documentation. Intra-group services as in 1997 continue to be viewed by business as the transactions most susceptible to transfer pricing disputes, closely followed by the sales of finished goods.

Multinational enterprises, as in 1997, prefer the transaction based transfer pricing methods (CUP, RPM, and CP) to the profit methods (TNM, PSM and CPM). However there is still some confusion about the use of methods and quite a number of companies

\textsuperscript{67} Ernst-Young Survey: Transfer pricing 1999 Global Survey: Practices, Perceptions, and Trends for 2000 and beyond. Similar surveys were published in previous years. The 1997 survey included 12 countries.
still rely on historical practice or cost-methods (i.e. without profit element) as the price setting mechanism.

**Commission Services questionnaire on dispute settlement mechanisms in the area of transfer pricing**

In June 2000 the Commission Services circulated a transfer pricing questionnaire to the tax administrations of the Member States\(^\text{68}\). 14 out of 15 Member States responded to the questionnaire. In *part I of the questionnaire*, Member States were asked for information on their experience with the mutual agreement procedure (within the context of double tax agreements) from 1995-1999. The questions included: the number of the mutual agreement procedures their tax administration had been involved in, the number of these relating to other Member States, how many requests from taxpayers they had accepted, whether the mutual agreement procedures were initiated by the Member State itself or by the treaty partner, to what extent it was possible to reach an agreement, the length of the procedures (average, longest and shortest period), why the mutual agreement procedures were not successful and in which areas tax administrations tend to have the greatest difficulties in reaching agreement. Member States were asked to complete a table.

Similar questions were asked in *part II* with respect to the EU Arbitration Convention plus questions referring to the second phase (panel) in the Convention. *Part III* concerned administrative issues about co-operation with other tax administrations, the use of penalties and the possibilities of suspension of tax collection in cases of income adjustment.

The answers to part I and II are summarised in 3 tables at the end of this subsection. The tables reveal that 127 intra-EU transfer pricing adjustments cases have been referred to the mutual agreement procedures or to the EU Arbitration Convention from 1995-1999 (total number of cases, i.e. including third countries, is 413 cases). This gives an average of approx. 25 adjustments per year within the EU (83 including third countries), or approximately two adjustments per Member State. This does not seem to be an alarming number of adjustments. Furthermore, although the number of adjustments from 1995-1996 to 1997-1999 have gone up by more that 100%, this development seems to have stopped in 1998.

It is, however, important to note that the Commission Services transfer pricing questionnaire does not cover all transfer pricing adjustments, as adjustments accepted by the taxpayer or domestically appealed against are not listed. The Ernst & Young survey indicated that 42% of all adjustments led to double taxation, and the reason was mainly that business did not request the mutual agreement procedure. On this basis, one could argue that the figures mentioned above in general should be doubled.

The vast majority of the mutual agreement requests are being accepted by Member States and the success ratio, i.e. cases where double taxation is relieved, is calculated at 90%. However, the ratios of both accepted and successfully completed cases are probably less than 90%; an estimate of the success rate at about 85% does not seem unrealistic. Opinions will be divided on whether 85-90% is a satisfactory outcome. With

\(^{68}\) For details see annex 3.
respect to the length of the procedures, the calculated average duration of the mutual agreement procedure intra-EU is 20 months.

In the context of the EU Arbitration Convention hardly any cases are being rejected, and no Member States reports having used the so-called penalty-clause in Article 8. The questionnaire does not reveal the average duration within the EU Arbitration Convention, as it was expected that the vast majority of cases would be solved within 2-3 years. However this is not the case. Of the 1995-cases only 67% have been solved (1996; 48%, 1997; 48%), which must be considered to be quite disappointing. Furthermore, no case has so far – despite the fact that a number of cases are well over 2 years old - reached the second phase in the sense that no advisory commission has been set up to date (one Member State reported 3 cases where the second phase has been initiated). The material does not reveal to what extent the lengthy procedures are because businesses have appealed cases to the national courts etc. Despite that, it seems fair to conclude that the objective of maximum 3 years of duration has not been achieved, and that – for some reason – Member States do not initiate and progress the second phase after the end of the 2 year negotiation period.
Table 47
Mutual agreement procedures (MAP)\(^{69}\)

<table>
<thead>
<tr>
<th>Period</th>
<th>Total number Of new cases</th>
<th>Procedure initiated</th>
<th>Successful completion</th>
<th>Closed cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>1995</td>
<td>22 (74)</td>
<td>22 (73)</td>
<td>0 (1)</td>
<td>17 (60)</td>
</tr>
<tr>
<td>1996</td>
<td>15 (75)</td>
<td>15 (75)</td>
<td>0 (0)</td>
<td>12 (60)</td>
</tr>
<tr>
<td>1997</td>
<td>26 (76)</td>
<td>25 (75)</td>
<td>1 (1)</td>
<td>11 (40)</td>
</tr>
<tr>
<td>1998</td>
<td>41 (111)</td>
<td>40 (110)</td>
<td>1 (1)</td>
<td>12 (40)</td>
</tr>
<tr>
<td>1999</td>
<td>31 (85)</td>
<td>30 (84)</td>
<td>1 (1)</td>
<td>10 (38)</td>
</tr>
<tr>
<td>TOTAL I</td>
<td>135 (421)</td>
<td>132 (417)</td>
<td>3 (4)</td>
<td>62 (238)</td>
</tr>
<tr>
<td>TOTAL II</td>
<td>67(^{70}) (354(^{71}))</td>
<td>64 (350)</td>
<td>3 (2)</td>
<td>31 (119)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Period</th>
<th>Success-rate in %</th>
<th>Duration (in month)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Of new cases</td>
<td>Of initiated cases</td>
</tr>
<tr>
<td>1995</td>
<td>77 (82)%</td>
<td>77 (82) %</td>
</tr>
<tr>
<td>1996</td>
<td>80 (80) %</td>
<td>80 (80) %</td>
</tr>
<tr>
<td>1997</td>
<td>42 (53) %</td>
<td>44 (53) %</td>
</tr>
<tr>
<td>1998</td>
<td>29 (36) %</td>
<td>30 (36) %</td>
</tr>
<tr>
<td>1999</td>
<td>32 (49) %</td>
<td>33 (45) %</td>
</tr>
<tr>
<td>Total I/II</td>
<td>46% (57%)</td>
<td>47% (57%)</td>
</tr>
</tbody>
</table>

---

\(^{69}\) Figures in brackets are total cases. i.e. also with non-member States.

\(^{70}\) Total I EU cases / 2. To take into account that a MAP registered in two Member States is in fact the same case.

\(^{71}\) Total I new cases –Total II EU cases = 421 – 67 = 354.
### Table 48
The EU Arbitration Convention

<table>
<thead>
<tr>
<th>Period</th>
<th>Total number of new cases(^{72})</th>
<th>Procedure initiated</th>
<th>Number of cases Still in the first phase</th>
<th>End of the first phase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>18 (19)</td>
<td>18</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>1996</td>
<td>25 (26)</td>
<td>22</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>1997</td>
<td>40 (44)</td>
<td>39</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>1998</td>
<td>36 (43)</td>
<td>36</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>1999</td>
<td>47 (54)</td>
<td>47</td>
<td>0</td>
<td>38</td>
</tr>
<tr>
<td>Total I</td>
<td>166 (186)</td>
<td>162</td>
<td>4</td>
<td>96</td>
</tr>
<tr>
<td>Total II</td>
<td>83 (93)</td>
<td>81</td>
<td>4</td>
<td>48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Period</th>
<th>Second phase</th>
<th>Success-rate in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Initiated</td>
<td>In progress</td>
</tr>
<tr>
<td>1995</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1996</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1997</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1998</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1999</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total I</td>
<td>3(^{73})</td>
<td>0</td>
</tr>
<tr>
<td>Total II(^{74})</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

---

\(^{72}\) Cases in bracket include 20 cases from two Member States. The information given from these Member States was not detailed enough to be included in the rest of the table, e.g. no information is given on which 1995 cases have been solved/failed etc.

\(^{73}\) The same Member State reports the 3 cases. No other Member State reported cases having proceeded to the second phase.

\(^{74}\) To take into account that a case registered in two Member States is in fact the same case.
Table 49

Total Mutual Agreement Procedures (including EU Arbitration Convention) of Member States

<table>
<thead>
<tr>
<th>Period</th>
<th>Total number of new cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>30 (82)</td>
</tr>
<tr>
<td>1996</td>
<td>31 (91)</td>
</tr>
<tr>
<td>1997</td>
<td>52 (104)</td>
</tr>
<tr>
<td>1998</td>
<td>71 (141)</td>
</tr>
<tr>
<td>1999</td>
<td>68 (122)</td>
</tr>
<tr>
<td>Total I</td>
<td>254 (540)</td>
</tr>
<tr>
<td>Total II</td>
<td>127 (413)</td>
</tr>
</tbody>
</table>

Part I and II of the questionnaire also gave some indications about where Member States consider the application of transfer pricing rules to cause problems. These include: disagreement of use of comparables, transactions involving intangibles, the fact that the mutual agreements may concern periods in the past, for which enterprises didn’t have as detailed documentation as today, use of profit methods (especially in the case where the whole group is loss making) and lack of adequate information. One Member State requested a co-ordinated approach with respect to conducting functional analysis.

Part III revealed information about co-operation between tax administrations, penalty rules etc. With respect to co-operation between tax administrations, a number of Member States expressly stated that they do not perform simultaneous audits. Some Member States reported that they do co-operate (e.g. exchange information, perform simultaneous audits etc.) in the transfer pricing area. However, these answers were fairly general. The clear overall impression is that Member States are aware of the possibilities (and sometimes they might also have entered into working agreements etc.) but that the actual level of simultaneous audits etc. is modest.

Member States were asked to explain the principles for fixing penalties when transfer pricing adjustments are made, and explain whether penalties were automatically applied following the adjustment. Only four Member States seem to apply penalties in this strict

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75 Total I EU MAP + Total I AC – Total UK AC (as UK cases listed both as MAP and as AC cases) = 135 + 186 – 67 = 254.
76 Total MAP + Total AC – UK EU Cases = 421 + 186 – 67 = 455.
77 To take into account that a case registered in two Member States is in fact the same case.
78 Total I new cases – Total EU II cases = 540 – 127 = 413.
sense in transfer pricing cases. Most other Member States reserve the use of these types of penalties for cases which involve an element of tax evasion or gross negligence, and report that penalties are in practice not levied in transfer pricing cases.

With respect to the possibility of suspension of tax liabilities, it can – with care - be concluded from the answers that some Member States in principle provide for suspending of enforcement if the adjustment is appealed; however the practical application of these rules are uncertain. In cases of requests for mutual agreement suspension facilities are only rarely available.

**Double taxation and dispute settlement mechanisms**

*The need to avoid or at least swiftly remove double taxation in transfer pricing*

Double taxation is a serious obstacle to the Internal Market. Double taxation created by transfer pricing rules (even if legal) should be avoided in principle. If this is not possible in practice, then it is imperative to have appropriate dispute settlement mechanisms that relieve double taxation as quickly and efficiently and in as many cases as possible, and with the lowest possible costs for business and tax administrations.

When a tax administration makes an (upward) income adjustment (primary adjustment) the multinational enterprise is immediately subject to double taxation. This double taxation can be relieved if either the tax authorities of the other state accept a (downward) income adjustment (corresponding adjustment), or if the tax authorities making the primary adjustment subsequently reverse the adjustments.

There is the further problem that some tax legislation in order to make the actual allocation of profits consistent with the primary adjustment might assert a constructive transaction (as dividends, loans or equity contributions). The secondary transaction might lead to source taxation or influence the availability of loss relief claims. This secondary adjustment might not be accepted by the other tax jurisdiction involved.

It is fundamentally important that the double taxation is relieved, but other important issues in this context include:

- that double taxation be relieved within a reasonable time;
- that collection of tax liabilities can be suspended until the double taxation issue is solved;
- that interest costs (or similarly payments) on the additional tax arising from the primary adjustments is not higher than the interest payments etc. received on the tax refund via the corresponding adjustment;
- that the resources required by business to obtain the double tax relief are modest.

*Existing dispute settlement/avoidance mechanisms*

Generally, there exist four dispute settlement or dispute avoidance mechanisms to resolve transfer pricing double taxation problems. These are:

1. Litigation at national courts.
2. Mutual Agreement Procedures (MAP) which represent a special dispute settlement mechanism vested in the bilateral double tax treaties.

3. The EU Arbitration Convention (Convention)\textsuperscript{79} which is a special EU dispute settlement mechanism. The convention only covers transfer pricing, i.e. whether or not intra-group trade is at arm’s length.

4. Advance Pricing Agreements (APA). These agreements form a means for the taxpayer to request a ‘binding transfer pricing ruling’ from the tax administration(s) on the treatment of a future transaction involving the setting of transfer prices.

The suitability of the various approaches within the EU is very different.

Transfer pricing cases are not suitable for litigation in national courts. This is because transfer pricing is not a juridical discipline as it mainly focuses on economics ("fractional analysis") and because cases tend to be very fact specific with substantial amounts of background material. Litigation of transfer pricing cases in national courts therefore tends to be very lengthy. Furthermore, litigation is a one-sided approach that only deals with the problem from the perspective of one of the jurisdictions. Hence, litigation does not guarantee elimination of double taxation. On the contrary, if double taxation is not (fully) relieved in national courts the possibility of avoiding double taxation in a subsequent mutual agreement procedure will be reduced. Nevertheless, there are significant number of transfer pricing cases pending at national courts.

Moreover, litigation of transfer pricing cases is often very expensive for both business and tax administrations. Some indication of the costs of litigating transfer pricing cases is given in the context of OECD meetings. In any event, all available figures suggest that the costs for business (or for EU tax administrations) of preparing and litigating transfer pricing cases is substantial. The general dispute settlement mechanism is therefore unlikely to be litigation.

Advance Price Agreements differ from the other dispute settlement mechanisms as they aim to avoid any dispute arising at all. APAs are generally not yet very developed in the EU. They are considered in more detail below as a possible way forward.

A comparison of the Mutual Agreement Procedures within the bilateral double tax treaties (concerning transfer pricing cases) and the arbitration convention, which basically build on similar mechanisms, reveals that the arbitration convention is the preferred instrument in the EU context. The EU Arbitration Convention basically includes the same instrument as the MAP, notably the right for the taxpayer to initiate the procedure and a negotiation process between the competent authorities. However, in addition the Convention sets a deadline of two years for the negotiation process and lays down an arbitration procedure when competent authorities cannot agree how to solve

\textsuperscript{79} Convention on the elimination of double taxation in connection with the adjustment of profits of associated enterprises [COM(90/436/EEC]. The extension of the convention to Austria, Finland and Sweden [OJ C 26 of 31/1/1996] is still pending ratification in some Member States as does the prolongation of the convention via a protocol signed on 25/5/1999 at the Ecofin-Council [OJ C 202 of 16/7/1999]

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the case\textsuperscript{80}. Timely decisions and guarantee for relief of double taxation are the two most important objectives, and the EU Arbitration Convention should therefore be the prevailing dispute settlement mechanism within the EU.

Business generally recognises the implementation of the EU Arbitration Convention as a major improvement compared to the MAP; mainly because of the arbitration phase for cases where the competent authorities cannot agree upon a solution. However, the EU Arbitration Convention suffers from shortcomings as discussed below\textsuperscript{81}.

\begin{flushleft}
\textsuperscript{80} It should be noted, however, that in a few double tax treaties the mutual agreement article provides for the use of arbitration.

\textsuperscript{81} For a detailed discussion see: Confédération fiscale européenne, \textit{Opinion statement - Extension of the arbitration convention}, Bonn 1997
\end{flushleft}
**Box 40: The Mutual Agreement Procedure (MAP) According to Article 25 of the OECD Model Tax Convention**

<table>
<thead>
<tr>
<th><strong>Introduction – Legal basis</strong></th>
<th>Most double tax agreements include a provision equal or similar to Article 25 of the OECD Model Tax Convention providing for a mutual agreement procedure. It should be noted that the double tax treaties between Member States can deviate from Article 25 of the OECD model tax convention.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coverage of transfer pricing</strong></td>
<td>Member States generally recognise that the MAP covers transfer pricing cases.</td>
</tr>
<tr>
<td><strong>Right for taxpayer to request for MAP</strong></td>
<td>The taxpayer generally has the right to initiate the procedure.</td>
</tr>
<tr>
<td><strong>When can the taxpayer initiate the MAP?</strong></td>
<td>Taxpayer can initiate before the primary adjustment is made; it is sufficient that an adjustment is likely to take place. The taxpayer must request the procedure not later than 3 years after this time.</td>
</tr>
<tr>
<td><strong>Who does the taxpayer contact?</strong></td>
<td>The relevant authority is the so-called “competent authority”, which is appointed in the double tax treaty. The competent authority is typically a section of the central tax administration. The competent authority, does not normally, if ever, perform auditing activity.</td>
</tr>
<tr>
<td><strong>Description of the MAP procedure</strong></td>
<td>The MAP in principle comprises two phases/stages. In the <em>initial phase</em> the competent authority contacted by the taxpayer is required to reconsider the case. The second stage consists of the <em>negotiation phase</em> between the two competent authorities.</td>
</tr>
<tr>
<td><strong>Only obligation to negotiate – not to reach agreement!</strong></td>
<td>The MAP only obliges competent authorities to negotiate, not to reach a solution. Also, the MAP does not include any time limits within which agreement should be reached.</td>
</tr>
<tr>
<td><strong>Does internal time limit rules exclude implementation of an agreement?</strong></td>
<td>No, the MAP provides for any agreement under MAP to be implemented irrespective of national time limit rules. It should be noted however, that five Member States had made reservations to this rule.</td>
</tr>
<tr>
<td><strong>Link to proceedings at national courts</strong></td>
<td>The MAP is a supplement to the litigation at national courts, and MAP and litigation can be proceeded in parallel. However, some competent authorities are bound by court decisions. If a case at national courts is pending, the implementation of a mutual agreement will often be made subject to the taxpayer’s withdrawal of his lawsuit.</td>
</tr>
</tbody>
</table>
| **Box 41:**  
| **The EU Arbitration Convention – comparison with the Mutual Agreement Provisions in Double Tax Treaties** |

<table>
<thead>
<tr>
<th>Introduction – Legal basis</th>
<th>The EU Arbitration Convention is a convention between Member States. The legal basis of the EU Arbitration Conventions is Article 293 (ex 220) in the EC Treaty. The Convention is not yet applicable in Austria.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally the same instruments as in MAP – but an arbitration procedure on top</td>
<td>The EU Arbitration Convention to a very large extent includes the same instruments as the mutual agreement provisions in the double tax agreements. However – most importantly – if competent authorities cannot agree to solve double taxation then the case is referred to a so-called advisory panel (arbitration panel). Therefore, relief of double taxation is in general guaranteed. The remaining sections list the special features of the EU Arbitration Convention (compared the normal mutual agreement procedure).</td>
</tr>
</tbody>
</table>
| Four phases/stages | **Initial phase** - The competent authority contacted reconsiders the case  
**1st phase** - Negotiation between the competent authorities – competent authorities have 2 years to reach agreement. If they do not succeed they must set up an advisory panel (arbitration panel)  
**2nd phase** - Advisory panel considers the case – the panel must make a decision within 6 months  
**3rd phase** - When the advisory panel has made its decision competent authorities have another 6 months to reach an agreement. If they fail to do so the decision from the advisory panel becomes final and competent authorities must comply. |
| When does the 2-year period of the 1st phase start? | Member States hold different opinions on the precise starting point. If an adjustment is appealed to national courts/tribunals, the two-year period of the 1st phase does not start running until the date on which the judgement of the final court of appeal was given. |
| Penalty clause | Member States are not obliged to initiate the mutual agreement procedure or to set up the advisory commission if one of the enterprises concerned is liable to a serious penalty. If proceedings on the penalty issue are pending, the competent authorities may stay the proceedings until the penalty issue has been concluded. Member States have, in an annex to the Convention, individually defined what they consider to be liable to a serious penalty. |
| Other links to proceedings at national courts | The EU Arbitration Convention is, like the mutual agreement procedure, a supplement to the litigation at national courts. However, if the internal laws of a Member State does not permit the competent authority (of that state) to depart from decisions from their judicial bodies such Member State are not obliged to set up a panel, unless the enterprise of that state gives up its right of appeal. Some Member States have used this possibility. |
| The (advisory) panel phase | The EU Arbitration Convention includes rules on establishment of the panel and some procedure rules of the panel, e.g. information, taxpayers right to appear or be represented before the advisory commission, costs etc. No rules on how the panel organises its work are included. |
| Will decisions from the advisory panel be published? | Publication of decisions by the advisory committees is not mandatory, but require that both the competent authorities and the taxpayer agrees. |
| Can cases be referred to the ECJ? | No. Neither the ECJ nor any other EU Institution has been given any competence in the EU Arbitration Convention. |
Shortcomings of the arbitration convention

Suspension of tax deficiencies

Member States normally immediately enforce an income adjustment, i.e. collect any tax underpayment. The EU Arbitration Convention does not include rules on suspension of the collection of tax and neither does the MAP. Sometimes multinational enterprises can avoid having temporarily to finance the “same” tax burden twice by appealing to domestic courts or tribunals. However, this generates other problems. According to Article 7 (2), second sentence, when a case is referred to national courts/tribunals, the two year-period of the first phase does not start running until the date on which the judgement of the final court of appeal was given. Furthermore, as described below, in some cases the second phase of the EU Arbitration Convention cannot be initiated unless the enterprise gives up its possibility of a court appeal. In short, multinational enterprises are trapped in a dilemma of either having to give up their right to have the tax collection suspended or diminishing the possibility of having double taxation abolished.

Transfer pricing cases differ from other tax disputes in the sense that the question is not whether the tax payer (i.e. the multinational enterprises) should pay tax or not, but rather whether the tax should be paid in state A or state B. The OECD transfer pricing guidelines recognises the problem for business of having to (temporarily) pay the same tax twice. The Guidelines recommend that countries adopt rules allowing for the suspension of tax liabilities or underpayments:

“A first problem is that the assessed deficiency may be collected before a corresponding adjustment proceeding is completed, because of a lack of domestic procedures allowing the collection to be suspended. This may cause the multinational enterprises group to pay the same tax twice until the issues can be resolved. Countries that do not have procedures to suspend collection during a mutual agreement procedure are encouraged to adopt them where permitted by domestic law, although subject to the right to seek security as protection against possible default by the tax payer”82

Interest cost and supplementary payments

A problem closely linked to the issue of collection of tax liabilities is that of interest costs - or similar supplementary payments - on these liabilities. As also described in the OECD transfer pricing guidelines83, inconsistent interest rules (including different practices concerning which income year the primary and the corresponding adjustments are implemented) across two jurisdictions may result in an additional cost (or an overall benefit) for the multinational enterprise group. In case of very lengthy proceedings there is even a risk that the interest costs may exceed the income adjustment. Furthermore, some Member States charge a higher interest rate (or other supplementary payments) on tax liabilities than they pay out on a refund of surplus tax.

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82 Paragraph 4.64. It is noteworthy that some non-EU OECD countries have implemented such suspension rules. This is for example the case in the USA.

83 Paragraphs 4.65 and 4.66
The penalty clause

According to the so-called penalty clause in Article 8 of the Convention, Member States are not obliged to initiate the mutual agreement procedure or to set up the advisory commission where legal or administrative proceedings have resulted in a final ruling that the actions giving rise to the adjustment of profits renders one of the enterprises concerned liable to a serious penalty. If judicial or administrative proceedings are initiated with this in view (serious penalty) and are being conducted simultaneously with any of the proceedings of the Convention, the competent authorities may stop the latter proceedings until the judicial or administrative proceedings have been concluded.

According to the above-mentioned Commission Services transfer pricing questionnaire, Member States have not (yet) used this ‘serious penalty’ clause to refuse the use of the EU Arbitration Convention. This, however, does not imply that one can automatically conclude that the penalty clause does not restrict the use of the Convention. The question of whether an enterprise is subject to penalty or not will have been decided upon in parallel to the question of the income adjustment. Enterprises having their taxable income adjusted and being subject to serious penalties cannot request application of the Convention, and the competent authority therefore does not need to specifically deny the use thereof84.

Member States have in individual declarations annexed to the Convention listed what constitutes a serious penalty. The definitions of serious penalties differ among Member States. For instance some Member States only include cases of intent whereas others also include negligence. Another approach is to include cases where the enterprise has been subject to a fine exceeding a certain threshold.

The penalty clause is problematic because the issue of penalties should not be linked to the issue of the possibility of having double taxation abolished, as this has the effect that double taxation becomes a penalty. Member States are, subject to restrictions of the EC Treaty, free to penalise non-compliance with transfer pricing regulations. However, this should take place openly and transparently and not be hidden or disguised as double taxation. Furthermore, it is problematic that the definitions – and practices – of the penalty clause are inconsistent among the Member States, as this leads to unequal treatment among EU enterprises.

The starting point of the two year period

Business claims that Member States' interpretations of the starting point of the two-year period of the first phase differs significantly. Business also claims some Member States have taken a position that is not in accordance with the EU Arbitration Convention, as they hold the opinion that the two-year period does not start until the other Member State has formally notified that it does not accept the adjustment.

According to the Commission Services transfer pricing questionnaire only one Member State takes this position, whereas three Member States mention that the two year-period

84 Furthermore, the new transfer pricing rules in the UK introducing penalties for non-compliance with the documentation rules did not come into effect until 1999. The UK does not have a special transfer pricing penalty regime. The rules applicable are the general rules for non-compliance with tax rules.
starts when the tax authorities receive a request from the taxpayer. This is also the position of two other Member States which, however, express the view that a request cannot be made until the tax authorities have actually made the adjustment, as no double taxation will occur until this point. One Member State takes the position that the two-year period does not start until all necessary information has been provided to the tax authorities. The answers to the questionnaire thus confirm the differing views, and a substantial number of Member States further respond that they would like to have clarification on this point.

Interpretation issues

Apart from the question of when the two-year period of the first phase starts, there are other examples where the EU Arbitration Convention is not clear. For instance one Member State would like a clarification of whether thin capitalisation rules are covered, and another Member State would like to have a set of guidelines on the application of the panel phase, including the establishment of the advisory commission.

Furthermore, according to Article 3 (2) of the Convention any term not defined in the Convention shall, unless the context requires otherwise, have the meaning, which it has under the double taxation convention between the Member States concerned. Examples of terms not defined include “enterprise”, “permanent establishment” and when companies are “associated”. The Convention as it stands does not therefore guarantee relief of double taxation if Member States apply a different interpretation of these definitions. The following describes the concrete problems that can arise.

The treaty network between Member States is not complete. In a potential case where there is no double tax treaty between the Member States, it is therefore uncertain whether these terms will be interpreted in line with the OECD model tax convention or according to domestic legislation. Furthermore, key definitions in the double tax treaties are not always defined in the treaty itself, but refer back to the domestic legislation of each Member State. The term “enterprise” and the question of when companies are “associated” might therefore be defined according to each Member States internal legislation. This lack of definition of “associated” might be problematic as Member States apply different definitions in their domestic legislation. Some Member States require a fixed threshold of the direct and indirect holding of share capital and/or voting rights; the “normal” threshold is 25%, but in some Member States it is higher (e.g. 51%). Other Member States take into account the facts and circumstances of each case, and apply a kind of de facto control. If for instance a Member State (applying a threshold of 25% according to domestic rules) makes an adjustment in a case where a parent company holds 45% of the shares in the subsidiary, whereas the other Member State in its domestic rules applies a threshold of 51%, then there would be a risk that this second State would not consider the companies to be associated and would thus consider the Convention to be inapplicable.

According to Article 3 (2) of the OECD model tax convention, terms not defined in the convention, shall unless the context otherwise requires, be defined according to each states internal (tax) legislation. Generally, double tax treaties will include a provision identical to Article 3 (2) of the OECD model tax convention.
Lack of guidance on the panel phase

Only one Member State\(^{86}\) has (three) cases that have proceeded to the second Panel phase. In its answer to the Commission Services transfer pricing questionnaire this Member State suggested that the arbitration phase should be explained in more detail. Procedures for setting up the advisory commission, in particular the appointing of the chair\(^{87}\) could be included in a code of best practice. The EU Arbitration Convention includes some procedure rules, e.g. information, business rights to appear or be represented before the advisory commission, costs etc. It is also stated that the advisory committee must deliver their opinion “within 6 months from the date on which the matter was referred to it”. However, there are numerous other unresolved issues, some of which are outlined below.

One is the important question of when precisely the 6-month period starts running. The most obvious starting point would be the cut-off date of the two-year period of the first phase, leaving it up to the involved Member States to get the second phase process started quickly. However, it could also be argued that a case cannot be referred to an advisory commission until this has been (finally) established.

In that context it should also be noted that the Convention does not include rules on how the advisory commission organises its work. For instance who should call for meetings, what notice periods are required etc. The deadline of 6 months is very tight (but there are no consequences linked to non-compliance), and it therefore seems to be important to establish rules which would improve the likelihood of meeting the deadline.

The advisory committee is not a fixed one; a new committee is set up for each case. As different committees are not required to take decisions taken by other committees into account, and as publication of decisions by the advisory committees are not mandatory, there is a risk of different treatments. This could also mean that the possibility of establishing a common ‘jurisprudence’ and series of precedents in the transfer pricing area is missed.

Redress for the taxpayers

The EU Arbitration Convention provides business with a right to the procedures of the Convention to be initiated and proceeded. However, the Convention does not include provisions to deal with denial or undue postponement by Member States of business’s access to the procedures of the Convention. In the response to the Commission Services transfer pricing questionnaire one Member State reported that the main reasons for procedures failing in the first phase was that the other Member State did not reply within the two-year period (two cases). Another Member State that has been involved in four cases replied that they are still considering these cases in order to decide whether the procedure (first phase) should be initiated. Furthermore, it seems that the second phase is not automatically initiated and progressed by Member States, when the two-year period of the first phase elapses.

86 Surprisingly no other Member State seems to be the other party in these 3 cases.

87 The committee consists of 2 representatives appointed by each Member State involved plus an even number of independent experts, plus a chair appointed by the above mentioned persons. No rules exist for the situation that the commission cannot agree upon a chair.
As mentioned above, according to Article 7(3) of the Convention, Member States whose internal laws do not permit the competent authority to derogate from decisions from their judicial bodies are not obliged to set up a panel, unless the enterprise of that state gives up its possibility to court appeal. The UK and France in Declarations on Article 7(3) positively declared that they will apply this provision. Denmark and apparently Belgium also use the provision.

Ratification problems

Unlike an instrument of Community law, the Arbitration Convention needs to be ratified by the Parliaments of all Member States. As mentioned above, the Ruding report already referred to this problem and urged Member States to accelerate the sometimes lengthy ratification procedure. Interestingly enough, currently both the extension of the Convention to Austria, Finland and Sweden and the prolongation of the convention beyond its original expiry date 2000 are again still not ratified in all Member States. Therefore, transfer pricing dispute cases that have arisen since 2000 can currently not be dealt with under the Convention. This will only be possible retroactively when the prolongation has been ratified in all Member States. Evidently, this situation tends to increase the compliance costs and general problems of uncertainty by business operators. It should be noted, however, that the prolongation protocol contains a clause which in future provides for the automatic prolongation of the Convention when there is no timely objection raised by a Member State.

Conclusion

Transfer pricing is not only a major issue in the international tax arena but also a specific and important taxation problem within the Internal Market. The use of the arm's length principle is becoming increasingly difficult to apply, and transfer pricing rules and practices among Member States differ significantly. One common feature among tax administrations, however, is the increased focus on the issue, notably through increased documentation requirements and audit efforts.

The effects for business are double taxation and, most importantly, high compliance costs combined with penalty rules. Although, the EU Arbitration Convention constitutes a major accomplishment compared to the traditional mutual agreement procedures within the bilateral double tax treaties, it contains numerous technical difficulties and features certain provisions that are dissuasive to companies. In sum, many aspects of the tax treatment of transfer pricing constitute a complex obstacle for the Internal Market which hampers efficiency, effectiveness, transparency and simplicity.

88 The remaining Member States seem not to have used the clause.
89 OJ C 26 of 31/1/1996
DOUBLE TAXATION CONVENTIONS

The requirement to avoid double taxation in the Internal Market

Article 293 of the Treaty requires Member States ", so far as necessary, to enter into negotiations with each other with a view to securing for the benefit of their nationals [...] the abolition of double taxation within the Community". The purpose of this provision is to ensure that cross-frontier activities are not at a disadvantage compared with national activities. Generally, neither discrimination nor double-taxation resulting from the transnational character of an operation can be tolerated in the Internal Market. This marks an important difference in comparison to parties that are not linked in an integrated market and conclude a double taxation treaty. Double taxation treaties are designed to address double-taxation problems but in the case of divergent interpretations and similar problems no "higher" treaty forces them to find a solution. EU Member States must also however have regard to the Internal Market requirements concerning non-discrimination and the four fundamental freedoms, enshrined in the EC Treaty. The following box gives an overview about the relevant Treaty articles in this respect.

The existing network of bilateral tax treaties between Member States goes some way towards meeting these objectives. However, these existing tax treaties are far from sufficient to meet the requirements of the Internal Market. The following section analyses the tax obstacles and double taxation cases which remain intrinsically unsolved. Given the complexity and variety of the issues involved, it is not possible to present a thorough analysis of the technical details. However, the essential nature of the different obstacles to cross-border economic activity in the Internal Market that shortcomings in double taxation treaties within the EU create or fail to remove are identified.
**Box 42:**

*Articles of the EC Treaty which impose obligations concerning non-discrimination and the fundamental freedoms of the Internal Market*

- Article 10 requires Member States to take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations arising out of the Treaty or resulting from action taken by the institutions of the Community.
- Article 12 of the Treaty prohibits any discrimination on grounds of nationality.
- Article 39 guarantees freedom of movement for workers within the Community, including the abolition of any discrimination based on nationality.
- Article 43 prohibits restrictions on the freedom of establishment of nationals of a Member State in the territory of another Member State.
- Article 48 requires that companies formed in accordance with the law of a Member State and having their registered office, central administration or principal place of business within the Community are to be treated in the same way as natural persons who are nationals of Member States.
- Article 49 prohibits restrictions on freedom to provide services within the Community.
- Article 56 prohibits restrictions on the movement of capital between Member States and between Member States and third countries, subject to certain caveats contained in Article 58.
- Article 94 requires the Council to issue directives for the approximation of such laws, regulations or administrative provisions as directly affect the establishment or functioning of the Internal Market.
- Article 211 requires the Commission to take steps, including formulating regulations and delivering opinions, in order to ensure the proper functioning and development of the common market.
- Article 294 requires Member States to accord to nationals of other Member States the same treatment as they accord to their own nationals as regards participation in the capital of companies or firms.

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**The incomplete treaty network within the EU and its insufficient scope**

The network of bilateral tax treaties on income and capital between Member States of the European Union is still not complete. There are at present about 97 bilateral tax treaties on income and capital in force between Member States one of which is a multilateral convention involving three Member States. The total possible would be 105.

It is true that, even in the absence of tax treaties on income and capital, many Member States apply a system of double taxation relief under their domestic laws. Many, for example, apply the same system of credit for foreign tax to income from non-treaty countries as they do to income from treaty countries. However, some countries only apply a deduction in those circumstances (i.e. the income is taxed but the amount of income is reduced by the amount of the foreign tax paid), thus limiting the relief and discriminating against outward investment.

Furthermore, tax treaties are necessary not just to provide a system of credit for foreign taxation. They also prevent or limit source country taxes which, if high, may not be fully offset by a foreign tax credit, even if available. This is because source country taxes are typically levied on the gross amount of income, whereas the same income is taxed in the country of residence only on the net amount, after deductions.

Moreover, there are still only less than 30 tax treaties covering taxes on gifts and inheritances in force out of a possible 105. The Ruding report suggested that the lack of
agreements on inheritance and gift taxes is an impediment to the free movement of persons within the Community, especially owners of enterprises and companies, particularly of small and medium-sized enterprises. The members of the Panel that assisted the Commission services with this part of the study also highlighted this issue, pointing out that cross-border inheritance tax problems are increasing with the growing numbers of company transfers. As explained in more detail below, this problem primarily concerns small and medium-sized enterprises.

Generally, the absence of certain tax treaties can mean that substantial differences between the taxation in an EU Member State of taxpayers resident in other EU Member States with whom a tax treaty has been concluded compared with taxpayers of a third EU Member State with whom no treaty has been concluded yet. This can lead to instances of discrimination.

**Double taxation cases unresolved by double taxation treaties**

*Double-taxation treaties and Internal Market requirements*

Even where tax treaties are in place, there are a number of areas where they are inadequate to meet the requirements of the EC Treaty, in particular concerning respect for the four freedoms and the elimination of double taxation. It is self-evident that the fact that some of the treaties are quite old tends to exacerbate the problem. Of the 97 tax treaties on income and capital in force between Member States 36 are more than twenty years old. At least some of the old treaties do not reflect the current tax law of the two countries.

As already mentioned above as regards transfer pricing disputes, the Mutual Agreement Procedure in tax treaties does not oblige the two Contracting Member States to eliminate double taxation. While this procedure, which is contained in Article 25 of the OECD Model Convention and is included in most tax treaties, must be initiated in all cases of double taxation, it does not require the administrations concerned to reach an agreement. In practice, therefore, this instrument is incapable of resolving all cases of double taxation. This is incompatible with the Internal Market and effectively creates an obstacle to cross-border economic activity therein.

A more general problem is caused by the growing complexity of treaty provisions that often results in diverging interpretations of the treaty as well as uncertainty for enterprises. Complex clauses on treaty shopping, anti-abuse and exceptions to general rules on, for example, withholding tax exemptions and credit for foreign tax make it difficult for enterprises to determine precisely the treaty benefits to which they are entitled. Furthermore, the technological developments and the effects of globalisation described in Part I of this study are calling into question crucial concepts in double taxation treaties such as the definition of "permanent establishment". This matter is the subject of intensive discussions in the wider forum of the OECD. It generates high compliance costs for the companies concerned.

Moreover, the wording of the bilateral tax treaties does not always concur with the national treatment and equal treatment principles derived from the EC Treaty. The European Court of Justice has already established some consequences of the application of these principles. For instance, it is clear that the rules prohibiting discrimination contained in the Treaty are far-reaching and have an impact on many aspects of bilateral tax conventions. This holds in particular for the persons who must be given the benefit
of the conventions and the shaping of anti-abuse provisions such as limitation of benefits clauses and the provisions safeguarding the application of thin capitalisation and controlled foreign company rules.\(^91\)

Hence, it appears fair to say that the equal treatment principle enshrined in the EC Treaty will make it increasingly difficult to justify inequalities of treatment between resident and non-resident individuals or companies in a similar situation under one identical tax treaty. This should not be misread as meaning that any difference in treatment of EU residents under double taxation treaties is automatically violating basic Treaty rights. In many situations, however, this question may be legitimately raised.

**Triangular situations and third countries**

More specifically, the equal treatment principle can influence the extent to which Member States' tax treaties can differ not only from each other but also and notably the permissible extent of differences between treaties of Member States with third countries. In this context it is noteworthy that already the Ruding Report suggested, in an annex, that if capital-exporting Member States grant fictitious tax credits (tax sparing) on income subjected to a special tax incentive in one other Member State they should grant it to all Member States in approximately the same economic situation.

Moreover, bilateral tax treaties are not normally capable of addressing triangular situations which can cause double taxation to go unrelieved. An example would be where a corporation is incorporated in one Member State, managed and controlled in a second and derives income from a third. The difficulty arises because two tax treaties are involved - that between the first State and the third State and that between the second State and the third State. The third State may withhold tax at source on the basis of one of those two tax treaties which will not be credited by one of the other States because it applies the other tax treaty which does not provide for a withholding tax at source.

According to businesses representatives many of these complex (legal or practical) problems ultimately boil down to a very fundamental and simple question. Say, Member State A has, due to a strong negotiating position, reached an advantageous clause in its bilateral tax treaty with a given third state. Member State B, on the other hand, had to accept a less advantageous solution on this matter in its bilateral treaty with that third state. Is it really in line with Internal Market requirements that companies resident in A can benefit from this advantage whereas companies that are resident in B cannot? What is the situation of permanent establishments that B-companies might have in A? Despite their underlying legal complexity the basic relevance of these fundamental questions can hardly be denied as, after all, EU Member States adopt a single common trade policy on goods (and, according to the Nice-Treaty, also some services) towards the rest of the world\(^92\). Moreover, it is beyond doubt that the current situation in this respect strongly

\(^91\) For a more detailed and broader discussion see, for instance, Lehner, M., *Limitation of the national power of taxation by the fundamental freedoms and non-discrimination clauses of the EC treaty*, European Taxation, January 2000

\(^92\) It is true that the EU trade agreements and the common trade policy contain carve-out clauses for taxation but from a business perspective this is just one explanation, but no justification, for the problems described.
impacts on business behaviour and investment decisions, thus provoking economically sub-optimal and welfare-reducing decisions. The existence of typical "treaty shopping routes" for EU companies in designing their business relations with the USA is revealing in this respect.

**Box 43: The "Saint-Gobain" triangular case - far-reaching impact on tax treaties**

The "Saint-Gobain case" (case C-307/97) which concerned the justification for distinguishing for tax purposes between permanent establishments and subsidiaries is an example of an issue which was resolved by the European Court of Justice but where treaty practice still seems to be inconsistent.

Compagnie Saint-Gobain is the German branch of Compagnie de Saint-Gobain SA which is established, managed and controlled in France. German domestic law, and German tax treaties with the United States and Switzerland, allowed certain tax advantages to German resident companies receiving dividends from abroad which were not available to a permanent establishment in Germany of a corporate enterprise registered in another Member State. The Court noted that the position of companies not resident in Germany but with permanent establishments there, and companies resident in Germany was objectively comparable. Consequently, refusal to grant the tax advantages in question to the permanent establishments meant that the latter were being treated differently from resident companies and amounted to restricting the freedom of companies to choose the form of their secondary establishments.

Most commentators and scholars believe that this judgement will have a far-reaching impact on the tax treaties of Member States. The ruling implies that the freedom of establishment laid down in Article 43 of the Treaty must be interpreted as meaning that a distinction of any kind for tax purposes between subsidiaries and permanent establishments will no longer be acceptable. It has already been clear, since the "avoir fiscal case" (case 270/83), that Member States must grant permanent establishments situated in their territory the same tax benefits as those applicable to resident companies. But the Saint Gobain case goes a step further. It implies that a permanent establishment must be granted treaty benefits under tax treaties, including those with third countries, concluded by the State where the permanent establishment is located.

**The overriding effect of EU legislation**

The fact that EC Directives and the Arbitration Convention take precedence over the bilateral tax treaties but are not reflected in the provisions of the treaties also creates complications and difficulties of interpretation for taxpayers. As regards new EU proposals with an impact on company taxation, the proposed Interest and Royalties Directive and the proposed Directive on Mutual Assistance in recovery, once they take effect, should, for example, be reflected in bilateral tax treaties, as should the provisions of the Code of Conduct for business taxation.

Some commentators even suggest that the application of anti-deferral or abuse provisions to income from a source in another Member State which has been taxed at a low rate in that other Member State under an approved state aid regime is also illegal. Tax treaties often include a clause to permit the application of such anti-abuse provisions notwithstanding any clauses of the treaties that could otherwise be interpreted as preventing them. Again, however, this point has not yet been considered by the Court of Justice.

In general, while it is clear that, in any event, the Treaty and decisions of the European Court of Justice take precedence over bilateral tax treaties, there is a lack of clarity in this area which is not satisfactory if the Internal Market potential is to be fully exploited.
Finally, bilateral tax treaties based on the OECD Model Double Taxation Convention often do not resolve many of the instances of double taxation which have been described in other sections of this Part of the study. They do not normally provide a solution to the problem of cross-border loss compensation, or a definitive solution to the costs and risks of double taxation due to transfer pricing disputes. Some but not many tax treaties include a clause to provide tax relief for cross-border pension contributions paid by posted workers (see section 7.2 below), and the treaties do not normally include a provision to deal with the tax treatment of stock options (see section 7.3 below). The OECD Model and most double taxation treaties do not include procedures to ensure that the more favourable treatment applicable under bilateral agreements as compared to domestic rules is applied speedily and with the minimum of administrative complexity, so as to facilitate cross-border investment.

Conclusion

The analysis has shown that there are a significant number of issues of double taxation which are not currently being properly addressed by the bilateral tax treaties in place between Member States or by domestic tax provisions. This is because they do not cover all bilateral relations between Member States, they do not achieve complete abolition of either discrimination or double taxation and, in particular, they never provide any uniform solution for triangular and multilateral relations between Member States. The number and extent of the complexities and difficulties in this area will increase when the European Union expands. Furthermore, where tax treaties exist, there are many conflicts and inconsistencies between the provisions of these tax treaties and the provisions contained in the Treaty and in EC Directives in the tax field.

Business organisations have on many occasions urged a clarification of the conflicting rules in this area as well as the elimination of double taxation problems not addressed in bilateral tax treaties. Many commentators, including some Members of the Panel assisting the Commission services with the study, have gone so far as to suggest that differences between Member States' tax treaties with each other and between Member States' tax treaties with third countries create distortions and serious problems of treaty shopping. As a result of these problems, the economic behaviour of EU companies is unduly distorted, and overall, EU welfare is reduced.

TAX-RELATED LABOUR COSTS

Tax-related labour costs as a tax obstacle in the Internal Market

Cross-border economic activities often lead to an increase in the tax-related labour costs. In addition to the direct costs for keeping up to date and complying with the various requirements imposed on employers by Member States, the general diversity of the taxation systems both directly and indirectly gives rise to extra costs for companies in their capacity as employers:

- Directly, since they have to set up multiple arrangements etc. to comply with the tax legislation in each Member State where they have activities or employees.

- Indirectly, since companies wanting to move an employee from one Member State to another will typically be faced with demands for compensation for any extra
costs, including increased taxes, that the employee may incur following such a removal.

In addition, it is worth noting that any tax treaty issue facing the employee will normally result in compliance problems for the employer. Among the various tax-related labour costs connected with cross-border activities, the following two categories are worth singling out:

- **costs for occupational pension arrangements**, since they probably represent the single most important cost; and
- **costs for employee stock option plans**, since the use of such plans has become more and more common over the last few years.

Furthermore, both in the case of pensions and stock options, there are considerable risks that double taxation may occur.

There is only little empirical evidence on the relative importance of these problems but both the legal analysis and the indications of the representatives of the various parties concerned, i.e. employers, employees and tax administrations, support the view that the cost related to these problems is substantial. Given the relatively recent character of the phenomena underlying these problems, it is, moreover, only logical that the empirical economic data is currently somewhat limited.

**Costs for occupational pension arrangements in cross-border situations**

As more and more companies and employees strive to take full advantage of the Internal Market, resulting in an increased mobility of the work-force, the problems relating to occupational pension arrangements are growing in importance. Companies often complain that the diversity, complexity and specificity of the provisions developed over the years at national level are so great that they constitute a major obstacle to cross-border activity.

In many cases Member States’ tax laws de facto prohibit cross-border membership of occupational pension schemes. The result is that a company, or group of companies, operating in several Member States have to establish separate pension arrangements or pension schemes in each State where it has activities. The costs incurred may be substantial. Calculations presented by industry indicate that the cost of setting up and managing separate funds could amount to around € 40 million per annum for a large pan-European business.

The problems are far from being limited to big multinational enterprises; in relation to the resources to tackle the problems, they may be even more serious for small and medium-sized enterprises operating cross-border on a small scale. The problems mainly

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93 In the “Report of the High Level Group on Free Movement of Persons” - often referred to as the “Simone Veil Report” - presented to the European Commission on 18 March 1997 (page 4), it was estimated that at least 150,000 employees were on secondment to other Member States to assist with the setting up or running of branches or subsidiaries. According to other estimates from the same time the number of seconded persons was around 300,000 persons. Current statistics show that around 5.1 million European citizens aged 15 years and over reside in a Member State other than their Member State of origin (source: Newcronos database of Eurostat, domain Labour Force Study).

94 The figure refers to a calculation made by British Petroleum.
stem from the difficulty to obtain tax relief for employer and/or employee cross-border contributions to supplementary occupational pension schemes.

In certain Member States there exist pension schemes that only accept members who are resident in the State where the scheme is established. Even disregarding the tax aspects, employees may therefore in practice not be able to remain affiliated to their old scheme when moving to another Member State on a more or less permanent basis.

In this context it is worth recalling that through Council Directive 98/49/EC, which is to be fully implemented by 25.7.2001, posted workers (as defined in Regulation 1408/71) will have the legal right to remain within their old scheme in the home State. Still, a vast majority of Member States do not grant cross-border contributions paid by or on behalf of posted workers the same tax privileges as for domestic contributions.

The inconsistent interplay of national tax arrangements will often lead to double-taxation, since the employees may end up being taxed for pension contributions made by them and/or by the employer on their behalf, while the pension benefits are also taxed, although at a later stage. Companies frequently have to compensate their expatriates for the extra taxes incurred (even if they are levied at different points in time). They may also have to pay compensation where pension rights are lost due to long vesting periods or because the employees cannot stay within their old scheme.

Employers involved in cross-border activities are faced with the problem of keeping up to date and complying with a variety of obligations imposed on them in that capacity by Member States. These typically include the liability to pay social security contributions and uneartmarked payroll taxes as well as the liability to withhold and pay wage taxes. To determine the liability in respect of wage taxes the employer must in fact also have a clear picture of where the employees are liable to pay income tax on their salaries. To get a better understanding of the difficulties facing an employer in the above respects, short summaries of the various rules applicable are presented below.

**Social security contributions**

Council Regulation EEC/1408/71 provides rules at Community level on the application of social security schemes to workers moving between Member States. The main rule is that the place of employment (activity) governs which scheme is applicable. In this way it makes no difference for the employer if he hires people of one nationality or the other. Normally, the same rules will thus apply to all workers employed at a certain work-place. Under Regulation 1408/71 frontier worker means any employed person (or self-employed person) who pursues his occupation in the territory of a Member State and resides in the territory of another Member State to which he returns as a rule daily or at least once a week. Such a frontier worker will normally follow the main rule but has some additional rights in the Member State where he/she is resident.

However, in the case of workers who are posted to another Member States under the conditions laid down in Article 14(1) of the Regulation special rules apply: Posted workers will remain affiliated to the social security scheme of the Member State from which they are posted, i.e. the Member State where they are normally employed. The time limit laid down in Article 14(1) may, pursuant to Article 17, be extended through an agreement between the Member States involved. In practice, these so called Article 17 agreements are often concluded for up to 60 months. The liability to pay social security contributions follows indirectly from these Community rules; the contributions are thus payable to the Member State whose scheme is applicable to the worker in question. Some Member States have very strict requirements for the payment of these contributions. Although these are the same for domestic and foreign businesses, the latter are faced with the additional problem of handling two or more systems. They may thus be forced to bring in specialist advisers at an additional cost.

**Uneartmarked payroll taxes**

“Social security taxes” are levied in a number of countries. They constitute a non-negligible part of non-wage labour costs and could thus affect one-off localisation decisions.
Determining the Member State in which the employee is liable to pay tax on his/her salary and consequently the employer’s liability to withhold and pay wage taxes

Normally the division of taxing rights between Member States will be governed by double taxation agreements: Out of 105 possible bilateral relations, 98 are presently covered by such agreements. Generally, the division of taxing rights in respect of dependent activities (i.e. salaries and other remuneration stemming from employment) follows the OECD model tax convention. Where the employee is attached to a permanent establishment in the other Member State, as will normally be the case, his/her remuneration will be taxable in that Member State (to the extent that it derives from activities exercised/ performed there). In the exceptional case where the worker is not attached to a permanent establishment in the other Member State, the 183 days rule found in the OECD model tax convention could come into play. Where the work lasts no more than 183 days, the worker (who would be regarded as posted under the social security legislation) would remain liable to tax in his/her State of residence (origin). In new tax treaties the counting of days is normally done on any twelve months basis, but there still exist a number of treaties where the counting is per calendar year. Where the posting, due to unforeseeable events, is extended beyond 183 days, the taxing right would normally, with retroactive effect, pass to the Member State where the activity is exercised (the Member State of posting). Problems will then often arise for the employer with respect to wage taxes due. All Member States except one (France) oblige employers to withhold and pay wage taxes. The amounts will vary with the tax burden on labour.

If the taxing rights move from France to another Member State, following such a prolongation of the stay, a situation might arise where the employee will be able to claim reimbursement of taxes paid by him/her in France, while the employer will be faced with an obligation to pay wage taxes in the other Member State.

Whereas the division of taxing rights in respect of seconded workers is relatively similar under the existing tax treaties, the taxation of workers crossing the frontier on a regular basis vary considerably. Neighbouring countries, when concluding a double taxation agreement, often provide for special provisions for such workers. Generally these provisions are linked to geographical notions such as where the worker is living and where he/she is working; there are conditions relating to how often (daily or, sometimes, weekly) the worker must return to his/her State of residence for the special rules to be applicable etc. These workers are often referred to as frontier workers but, when referring to double taxation agreements, the concept of frontier worker will more often than not be different from the one used in Community acquis on social security (see above).

In the future, completely new questions may arise in the light of developments in communications technologies (internet, e-mails, teleworking, video conferences, etc): How will the traditional cross-border movements evolve and what criteria will be used to categorise "virtual" frontier work?

Employee Stock Option Plans

The tax problems linked to employee stock option plans have come more and more into focus during the last few years. This is due to

- the increased use of employee stock options as a means of recruiting and/or motivating staff while at the same time providing companies with venture capital;
- the introduction of specific tax legislation in Member States and
- the lack of explicit regulation under double taxation conventions.

The granting of stock options creates a bond between the staff and the company while ensuring that they have a stake in the company and can benefit directly from the company’s success. An additional advantage for the company is that it can save money in the early stages of growth which can be subsequently converted into profits.
Companies making use, or wanting to make use, of employee stock option plans are in practice faced with tax problems at two levels:

- *first*, there is the tax treatment of costs of the company for the employee stock option plan itself
- *second*, there is the tax treatment of the stock options in the hands of the employees, which, indirectly, could have a significant bearing on the costs incurred by the employer company.

**Different rules in Member States**

A majority of the fifteen Member States have special rules in place (January 2001) as regards the taxation of stock options. These may relate to the tax treatment of the costs for setting up and running an employee stock option plan and/or the tax treatment of the stock options in the hands of the employee. Some Member States make a distinction for taxation purposes between approved and non-approved stock option schemes. In most cases, these rules have been introduced or changed during the last three years. Those Member States without special legislation tend to rely on their general tax rules relating to earned income as regards the taxation of the stock options in the hands of the employee.

The accounting costs, financial and legal costs etc. for setting up and running the employee stock option plan do not normally constitute a problem with regard to the right of deduction, at least not where the company incurring the costs is identical to the employer.

However, practices seem to vary more as regards whether the employer is allowed to deduct an amount corresponding to the benefit taxed in the hands of the employee. It may, for instance, be decisive whether the shares granted under the plan are being issued specifically for that purpose or whether they have been previously acquired, but, whichever is the case, the picture seems to be far from clear-cut. In addition to the compliance problems that could result from this, the deductibility or non-deductibility of the benefits could have a bearing on the application of double taxation conventions; this is especially the case where the stock options are issued to employees of a permanent establishment.

Finally, where the benefits are deductible, there may be timing mismatches between the granting of the deduction for the employer and the taxation of the benefit in the hands of the employee.

The tax treatment of stock options in the hands of the employees may vary depending on whether the options are offered to a wide category of employees or used on a more selective basis.

Although stock options often are for shares in the employer company or another company in the group, they may in some cases also be granted for other shares held by the employer company or the group. The taxation provisions may vary depending on the shares covered by the option. As stock options gain in importance as part of remuneration policies and employees move more frequently from one Member State to another, double or non-taxation is likely to arise, because almost every Member State treats stock options differently. This is a serious concern for European business and industry, in terms of both cost and hindrance to the free movement of employees. The
variation in tax treatment is largely due to the fact that Member States identify (i) different taxable events and (ii) different measures of income, although other factors also play a role.

**Box 45: Example on stock options**

X and Y are granted stock options by their employer, company Z, which has plants in Belgium, Finland and Sweden. There are certain conditions linked to the stock options: the vesting period is two years, meaning that the options cannot be exercised until two years after they are granted. Furthermore, X and Y have still to be employed by Z when actually exercising the options, i.e. when acquiring the shares.

At the moment the options are granted, X is working and living in Sweden, and Y in Belgium. Towards the end of the vesting period X moves to Finland, while Y goes to Sweden to replace X. After three years both X and Y decide to exercise their options, at which point in time X is working and living in Belgium, and Y in Finland. After yet another year (without change of residence) both X and Y sell their shares, which have increased considerably in value.

X could escape taxation completely: When being granted the options X is living in Sweden, which normally taxes when the options are exercised, but in cases of inbound or outbound transfers of residence, taxes if the person was resident there when the options could first have been exercised, i.e. at the vesting. At the vesting, X is however living in Finland, which taxes when the options are actually exercised; when exercising the options, X is living in Belgium which taxes at the time the options are granted. Finally, the sale of the shares may not trigger any tax since Belgium does not tax capital gains.

Y on the other hand risks being taxed three times: in Belgium since it taxes when the options are granted; in Sweden since the options could have been exercised while Y was residing there; finally, Y may be taxed in Finland, since it taxes when the options are actually exercised. However, Y should get at least some relief since the gain will be time-apportioned, i.e. Y should only be taxed on the value accrued during Y's stay in Finland. Finally, Y will be subject to tax on capital gains when selling the shares.

Y's situation of course raises the question whether no alleviation could be achieved under the double taxation conventions between the Member States concerned. The problem then arises that there are no specific provisions on the taxation of stock options in the conventions. In addition, there is the timing problem.

Since there are conditions of continued employment linked to the stock options, it could be argued that the benefit of the stock options refers not only to current or past employment but also to the vesting period of two years or possibly to the whole period until the options are exercised. Furthermore, under Article 15, Dependant personal services, of the OECD Model Convention, the taxation rights of the source country are not formally restricted to income that arises during the time the employee is present in the source State but refer to “remuneration derived from employment exercised in a State”.

Both under the credit method and the exemption method, crucial questions arise, such as how to take account of (part of) a benefit, probably calculated under other rules, that will be taxed a later year, or that has been taxed an earlier year, in another Member State.

**The taxable event**

There are various possibilities. One is to tax employee stock options at the point at which they are granted. Where there are conditions linked to the option, taxation may be postponed until these are fulfilled, i.e. until the vesting of the options. Another approach is to tax the options first at the moment of exercise, i.e. when the option is actually used to acquire shares. Moreover, taxes may be imposed only on the sale of the
shares acquired under the option. Finally, countries may consider the leaving of the country by an employee holding stock options as a taxable event.

In practice, it seems that none of the EU Member States (at least none of those having special provisions in place) treats the sale of the shares acquired under the option as the one and exclusive taxable event. In other words, where the option as such is deemed to have a value, this will be taxed at an earlier stage. In this context it is worth noting that the UK tax rules are designed in such a way that, where the conditions for favourable tax treatment of the employee stock options are fulfilled, no benefit is deemed to have arisen, and that for that reason taxation will only take place when the shares are sold.

In most Member States it is thus the exercise of the option that triggers taxation. Where, however, the option is tradable or unconditional, or where the vesting period is very long, taxation would in some of these States be brought forward to the granting. In one Member State (Belgium) the granting is the main taxable event. Furthermore, a few Member States, e.g. Denmark, the Netherlands and Sweden have special rules relating to transfers of tax residence, inbound as well as outbound (January 2001). On this basis, the risk of non-taxation currently seems to be somewhat more frequent than that of double-taxation.

The measure of income

The measure of income used is necessarily linked to the definition of the taxable event and will thus also vary. If the options are taxed at the moment they are granted, the value would normally be estimated on basis of the value at that time of the underlying shares (minus any amount paid for the options). For options not quoted on the stock exchange the evaluation could pose considerable difficulties. Taxation at this point in time may be advantageous where the value of the shares increases, but it also involves a risk from the tax payer’s point of view, as he/she cannot be certain that it will ever be favourable to actually exercise the option.

If the options are taxed at the moment of exercise, the taxable benefit may be determined as the value of the shares acquired (minus any amount paid for the options, i.e. the strike price).

If taxation takes place when the shares are sold, the amount received for the shares are taxed (minus the strike price or any amount taxed before as earned income in respect of the options). In this context it is worth noting that the EU Member States normally distinguish between the taxation of the value of the option and the taxation of the sale of the shares themselves.

Social contributions

Where, under the tax rules of a Member State, the option itself is deemed to have a taxable value, this value seems without exception to be taxed as earned income. Social security contributions may or may not be levied on this income.

When the shares acquired under the options are sold, capital gains taxation may be triggered in those Member States that tax such gains. Of the Member States that have a capital gains tax, some exempt the capital gain where the shares have been held for a certain period of time.
Double taxation conventions

The division of taxing rights in respect of employee stock options has so far never been expressly regulated under any double taxation convention concluded. Therefore, current double taxation agreements are no guarantee against double taxation or non-taxation of share options received by employees in one country and exercised in another.

First, there are the problems linked to the timing of the taxation under the various systems applied by Member States as described above. Second, there are problems linked to the categorisation of the income under double taxation conventions:

Generally, it would be looked upon as remuneration for services rendered. As such it would normally fall under Article 15, Dependent personal services, of the OECD model convention (or, in the case of board members, under Article 16, Directors’ fees). Another possibility is that the advantage of (gains from) the stock option could be viewed, wholly or partly, as capital gains falling under Article 13; the argument would be that the holding of the option and the exercise constitutes an investment.

If categorised as remuneration for dependent personal services, the question could arise, for someone moving (or having moved) from one country to another, whether the advantage refers to past services, to future services (to be carried out by the employee during the lifetime of the option), or, possibly, to both. This could be decisive for the division of taxing rights between the contracting states.

Given the various factors involved, it is conceivable that one employee moving between Member States may completely escape taxation while another could, in extremis, be taxed three times (or, if taking into account capital gains taxation, even four times) for the same stock options. Furthermore, there is no guarantee whatsoever that a Member State taxing the stock options at some stage, would take account of taxes paid earlier or later, in other Member States, in respect of the same stock options.

Conclusion

The incompatibility of Member States’ taxation systems, both as regards occupational pensions and employee stock option plans, constitutes a serious barrier to cross-border economic activities. The situation is aggravated by the risks that double taxation may be incurred. Furthermore, in the occupational pensions area, the difficulty to get tax relief for cross-border contributions can be questioned from an EC law point of view; unless justified, discriminatory tax treatment would be contrary to the free movement of workers and thereby to the right of establishment; in addition, from the pension provider’s point of view, the freedom to provide services would be set aside.

Small and medium-sized enterprises

The analysis of tax obstacles in the Internal Market has to consider the particular situation of small and medium-sized enterprises from three different angles. First the mere size of small and medium-sized enterprises means that obstacles may have a different or stronger effect on them. Second, small and medium-sized enterprises are often run under the legal form of a partnership, thus mostly falling outside the scope of corporation tax. Third, the importance of the tax obstacles for small and medium-sized
enterprises can only be properly assessed by examining the cumulative effects resulting from the current structure of value added tax (VAT).

The particular situation for small and medium-sized enterprises

There is no common Community tax definition of small and medium-sized enterprises. At EU level, small and medium-sized enterprises are generally defined as an enterprise which has fewer than 250 employees and an annual turnover not exceeding 40 m. € or an annual balance sheet total not exceeding 27 m. €, and in which no enterprise or enterprises which themselves are not small and medium-sized enterprises own 25% or more of the capital or of the voting rights. In 1998, more than 99.8% of the 17.9 million enterprises in the EU were small and medium-sized enterprises under this definition, employing 66% of the private-sector workforce and generating 56.2% of total turnover.

"Small and medium-sized enterprises" include a broad variety of businesses, ranging from traditional craftsmen doing occasional business abroad to international start-up companies created by big multinationals (although the latter are not really covered by the above EU definition in the strictest sense). Small and medium-sized enterprises are often run as non-incorporated companies that are not subject to corporation tax (this aspect is considered separately below). As alluded to in Part I of the study, in comparison to the situation at the beginning of the 90s, small and medium-sized enterprises today need to "go international" much earlier, thus accentuating their possible specific cross-border tax problems.

All the various tax obstacles considered above also concern small and medium-sized enterprises with cross-border activities. Their relative importance and assessment may, however, differ. Due to the smaller business size, some tax obstacles may be more relevant than others. The often specific nature of their business activities means it that some of the cross-border tax obstacles are particularly felt by small and medium-sized enterprises (and in particular technology-driven start-up companies). Moreover, in the domestic context most Member States apply special tax arrangements for small and medium-sized enterprises that need to be taken into account. These arrangements essentially concern the determination of the tax base, flat-rate arrangements and other simplified methods of profit determination. Some Member States also grant specific lower rates. The combination of both effects - the particular importance of cross-border obstacles for small and medium-sized enterprises and relief for domestic tax problems - may even increase the hurdle for starting cross-border business for small and medium-sized enterprises.

The cross-border company tax obstacles that have been identified above are generally more burdensome for small and medium-sized enterprises than for big companies. This is simply due to the limited size of the business and the related shortage of economic and human resources which inherently limits the possibilities to avoid some obstacles.

Generally, small and medium-sized enterprises have particular difficulties in meeting the compliance costs resulting from the need to deal with up to 15 different taxation systems. This will sound obvious to most tax practitioners. However, this is also supported by scientific and quantitative evidence because, as indicated above, all available studies suggest that compliance cost are regressive to size and put a disproportionately higher or even prohibitively high burden on small and medium-sized enterprises compared to bigger companies\textsuperscript{98}.

More specifically, particularly burdensome compliance costs relate to the lack of transparency and the variety of domestic tax laws (including on other taxes than company taxation), administrative structures and administrative requirements, including differences in accounting and bookkeeping rules, as well as frequent changes to those same laws, etc. Moreover, many administrative aspects of company tax law directly impact on the cash-flow of the enterprises. The costs of timing differences between the receipt of income and the payment of the taxes levied thereon as well as time lags in the reimbursement of tax paid are important examples. Similar refund problems arise with the wrong levy of taxes which are not due or the amount of which has been assessed incorrectly by the tax authorities. The same holds for taxes which have to be refunded because of jurisprudence. Given their limited reserves, small and medium-sized enterprises are particularly hit by these delays in general tax reimbursements and the recovery of wrongly levied taxes (including VAT). The Commission services are aware of concrete cases in which national tax administrations refuse to accept the deductibility of business expenses unless the complete bookkeeping of the foreign enterprise and all relevant documents are presented in a certified translation into the language of the Member State in question. For small and medium-sized enterprises such costs can be extremely difficult to bear and put into question the commercial rationale of doing business in that state.

The effects of tax competition, as outlined above, appear in most cases to put small and medium-sized enterprises at a relative disadvantage as they are often not in a position to exploit the opportunities opened by appropriately designed tax schemes. Generally, small and medium-sized enterprises do not have tax planning possibilities which match those of big companies\textsuperscript{99}. This can be illustrated with regard to dividend taxation: Usually, under imputation systems, the tax credit applies only to dividend distributions within the Member State concerned. Big foreign shareholders can circumvent this disadvantage by means of relatively complicated practices which are often not in reach for small and medium-sized enterprises (e.g. "dividend stripping").

Among the priority issues in the analysis of tax obstacles to cross-border economic activity in the Internal Market, the cross-border offsetting of losses is no doubt the most important from the perspective of small businesses. Given their usually limited capital cover, it is particularly important for small businesses to be able to carry back losses. Moreover, losses often occur at the beginning of an activity in a foreign country, i.e., precisely when these activities are typically still run in a smaller enterprise. Again, bigger companies are usually in a position to make sure that all losses are eventually

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\textsuperscript{98} see Annex 2.

\textsuperscript{99} In specific cases, however, it may precisely be small businesses which, on the basis of good tax advice, are in a position to take flexible and inconspicuous advantage of tax breaks which large companies open to public scrutiny are unable to benefit from.
offset against profits. This is far from being true for small and medium-sized enterprises. In this context, it is important to remember that business start-ups are almost by definition small- and medium-sized enterprises.

Last but not least, small and medium-sized enterprises face specific cross-border problems relating to other taxes than company taxation. For instance, VAT is a problem of particular relevance to small and medium-sized enterprises. It should also be noted that the transfer of small and medium-sized enterprises, often family businesses, entails a number of tax problems that are often more difficult and onerous than for big publicly quoted companies. Cash-effective gift and inheritance taxes are a prominent example. There is anecdotal evidence of small and medium-sized enterprises relocating to other Member States mainly to ensure that the later succession of the business to the family heirs takes place without a tax burden that is perceived as being disproportionate if not confiscatory. These problems fall outside the scope of the mandate for this study and are therefore not considered in detail. They should, however, not be overlooked\textsuperscript{100}.

In short, the assessment of the tax obstacles is to some extent different for small and medium-sized enterprises. It may be recalled, however, that the Ruding report found that EU corporate tax systems are mostly neutral with respect to the size of the business. Specific tax incentives for small and medium-sized enterprises do not alter these findings. The above reflections do not provide any reason to question this analysis.

\textbf{Company tax obstacles and partnerships}

The importance of partnerships varies considerably between Member States. For instance, in Germany, \(+/-\ 85\%\) of all businesses, some of which are large multinational enterprises, are run under one of the various legal forms of 'partnership' available under German company law whereas in other Member States only small groups of individual entrepreneurs or very small businesses choose this legal form. Recently, partnerships are becoming increasingly important as legal form for business start-ups in the "new economy" and/or for joint ventures of large multinational enterprises involved in R&D, telecommunications, e-business and similar commercial fields\textsuperscript{101}. There the intention is, among other things, to spread the burden of initial losses (between companies in different jurisdictions) as such 'joint branches' allow losses to be shared with another partner and for cross-border loss compensation\textsuperscript{102}. More traditionally, temporary 'ad-hoc partnerships' are often established for the co-operation of building companies on big construction sites. In all Member States, partnerships (of various forms) are a common legal form for intellectual and liberal professions (which are not directly covered by the mandate for the study).

Generally, 'partnerships' can be defined as economic entities formed by more than one entrepreneur and in which at least some partners have unlimited liability. The various legal forms vary substantially within Member States and between Member States. The definition of 'partnership' in the various Member States is very complex and far from

\textsuperscript{100} Reference is made to the FEE Survey on the Fiscal Treatment of the Transfer of Small and Medium-Sized Enterprises; Fédération des Experts Comptables Européens, 2000.

\textsuperscript{101} Obviously, these businesses do not comply with the above-mentioned EU definition of small and medium-sized enterprises in the strict sense.

\textsuperscript{102} On the condition that a 'partnership' is chosen that is recognised as such also in the country of the parent company.
being homogenous. Frequently, what is considered a 'partnership' in one Member State would be considered a 'company' by another. For instance, it is unimaginable under, say, Italian law that a hybrid legal form like the 'GmbH & Co KG' in Germany is a partnership (which is its legal status under German company law). Agreement on a precise definition seems almost impossible as these terms are embedded in deeply rooted cultural, company law and civil law traditions. Whereas stock corporations and other forms of incorporated limited liability companies can relatively easily be defined, it is generally possible to distinguish on an EU-wide basis:

- **CIVIL LAW PARTNERSHIPS** - in some Member States with a civil law tradition, any gathering of a group of people for a common purpose which is not organised in a specific legal form constitutes such a partnership which may, dependent on the nature of its activities, generate taxable business income;

- **GENERAL OR ORDINARY PARTNERSHIPS** - like an individual entrepreneur, all partners have unlimited liability;

- **LIMITED PARTNERSHIPS** - some partners have unlimited liability, some have limited liability only; in some countries it is not uncommon that the partner with limited liability is a limited liability company;

- **SILENT PARTNERSHIPS** - the enterprise does not act as such towards third parties; at least one partner has unlimited liability; the other partners have either unlimited or limited liability;

- **SLEEPING PARTNERSHIPS** - the 'sleeping' partner is not made known to third parties;

- **EUROPEAN ECONOMIC INTEREST GROUPING (EEIG)** - a Community law instrument for facilitating co-operation between firms established in a number of Member States.

In most countries, 'partnerships' are treated as 'transparent' entities, i.e. they are not taxable entities but used for the purpose of computing taxable income to be attributed to the partners. The profit share attributed to the individual partners is then subject to personal (in most cases progressive) income tax, or corporate income tax when the partner is an incorporated company. In some Member States, however, (e.g. Belgium, Spain, Portugal) partnerships engaged in a business are subjected to corporate income tax and in France they have the possibility to opt for either one or the other.

The domestic taxation of 'partnerships' is complex and varies significantly between Member States in the details. For instance, sometimes, the tax return is filed by the entity, sometimes by the partners. The tax may be assessed on the income of the entity itself or on the income arising to the partner. The partner's income can be classified differently: as investment income, business income or other. The applicable rate can be determined on the basis of the entity or on the basis of the situation of the partners. The entity's income can be taxed (or not) when distributed to the recipient (as dividends or

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104 However, the capital gains realised on the disposal of partnership shares are not 'transparent'.

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another form of profit-distribution). Those are only some criteria for categorising the tax treatment of partnerships in Member States.

In cross-border situations, this gives rise to a significant risk of double taxation. Member States may or may not consider a 'partnership' to be a company for the purposes of their tax treaties. And even when the classification of a 'partnership' is the same in the residence country and in the source country, as shown above, the tax treatment can be different. Member States' qualification of partnerships as resident for treaty purposes may also be different as either the residency of the entity or that of the partners can be relevant. As regards the taxation of non-resident holders of partnership interests, again whether the partnerships is 'transparent' or a taxable entity is decisive and can lead to double-taxation in a cross-border situation (taxation of the income both at the level of the partnership and the partner). Similarly, double taxation can arise in transactions between the partnership and its partners. A good example of this is the treatment of cross-border interest payments on a loan from a partner to the partnership: in principle the interest is taxable in the hands of the partner and should be deductible while computing the income of the partnership; without deductibility, double taxation occurs. Other problems relate to the granting of tax credits.

It clearly follows from the foregoing that partnerships need to be taken into account when considering possible targeted or comprehensive remedial measures to the various tax obstacles. It is noteworthy that the OECD is considering these questions with a view to possible changes of the OECD model tax convention. In this context, it has published a comprehensive report on the subject.

**The cumulative effects of VAT difficulties for small and medium sized enterprises**

Strictly speaking, value added tax (VAT) falls outside the scope of an analysis of company tax obstacles in the Internal Market. Some of the basic problems encountered by enterprises are however similar and/or linked to company tax issues. Moreover, it would look somewhat odd to neglect VAT, the application of which is so closely linked to the technical functioning of the Internal Market. In particular, the impact of difficulties encountered especially by small and medium-sized enterprises in the field of direct taxation can only be evaluated properly if seen in the context of the cumulative effects resulting from the current structure of VAT. Generally, indirect taxes are relatively more important for the service industry and for retail trade. But all companies are subject to VAT and thus confronted with any problem that the application of the tax might give rise to resulting from cross-border economic activity within the EU. However, small and medium-sized enterprises are particularly hit by such problems.

Unlike large multinationals, small and medium-sized enterprises usually do not have permanent establishments or any other stable business activity abroad. So their export activities regularly imply particular VAT obligations in "foreign" Member States. Many international activities by small and medium-sized enterprises are undertaken under the

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105 See, for instance, Confédération fiscale européenne, Letter submitted by the C.F.E. to the European Commission concerning tax treatment of partnerships in an international context, Bonn 1999

106 OECD, Issues in International Taxation No.6, The Application of the OECD Model Tax Convention to Partnerships, Paris 1999
form of sub-contracts requiring the application of specific (complex) VAT rules. Generally, the fixed cost caused by VAT obligations constitutes a larger share in the relatively small turnover of small and medium-sized enterprises as opposed to larger companies. Therefore, this section focuses on the specific VAT problems of small and medium-sized enterprises. This does not mean that large companies do not face the same or similar problems, they can build on a bigger infrastructure to deal with them in practice.

As already suggested in the case of direct taxation, for VAT purposes, small and medium-sized enterprises are not confronted with a single market but - despite the degree of harmonisation achieved in the VAT field - 15 different jurisdictions and 15 different sets of rules. However, in respect of VAT, the difficulties for small and medium-sized enterprises begin even earlier, since almost all cross-border supplies of services and goods are governed by VAT rules. The complexity of the VAT rules, generating high expenditure on specialist tax advice and high compliance costs, create access barriers for small and medium-sized enterprises to setting up business in or with another Member State.107

Small and medium-sized enterprises when considering supplying services or goods into another Member State, must first identify the correct jurisdiction in order to determine the applicable VAT rules. The jurisdiction is determined by the place of taxable transactions108. Under the current VAT system, there are some 25 rules applicable to determine the place of supply of taxable transactions. The various thresholds for the application of specific rules that are provided in the 6th VAT Directive are also implemented differently in various Member States.

Thus, this is the moment when small and medium-sized enterprises realise that they are about to enter a tax jungle of complex and complicated rules in which they need professional tax advice. At this early stage and long before any profit is realised, small and medium-sized enterprises already have to invest considerable financial resources for the acquisition of special tax know-how, creating an access barrier to doing business in or with another Member State. This barrier is substantial, because the expense at acquiring this specialised tax knowledge is also considerable.

Mail order deliveries to non-taxable persons established in another Member State, such as private buyers and public authorities expose small and medium-sized enterprises to a considerable risk of non-compliance, because of the special distance selling rules. Indeed, the administration of the “supply threshold”, which varies according to the Member State concerned, is virtually impossible to deal with.

If more than one Member State is involved, the cost of specialist tax advice can easily double or triple. Indeed, where the nature of the supply changes (e.g. more maintenance, less supply of goods), the place of taxable transaction may also change, making further tax consultation necessary. Once the place of taxable transactions is established, the

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107 See Verwaal, Ernst and Cnossen Sijbren, "Europe's New Border Taxes", OCFEB Research Memorandum 0008, 2000, which indicate that the compliance cost resulting from the requirements of the EU VAT system of 1992 represent on average 5% of the value of intra-EU trade of Dutch businesses.

108 TITLE VI and XVla of the 6th VAT Directive.
obligations under the rules of the jurisdiction of establishment have to be understood (tax representation, invoicing, declarations, payments, deduction or reimbursement procedures, etc.). And even then, in practice many technical questions will be handled differently by the tax administrations of the different Member States concerned, leaving the small or medium-sized enterprise with a substantial risk of non-compliance.

**Box 46:**

*Difficulties for small and medium-sized enterprises to live up to the requirements of the present EU system of VAT*

A small but expanding Dutch business (A) decides to explore other Member States for supplying remote controlled alarm and surveillance systems, their maintenance, and also for supplying technical and legal advice for making best use of these systems (negotiation with insurance companies, trade unions, etc).

If A presents his goods and services to a potential client in another Member State, he may incur business expenditure (fuel, food, hotel accommodation) there. The VAT on this expenditure can only be recovered by means of a lengthy and complicated procedure.

If A succeeds in finding a client in another Member State, he will have to find out where the place of VAT taxation of his own supplies is. He may have to register in one or even more Member States and/or pay a fiscal advisor to obtain a clear picture on the rules to be applied.

Where his supplies turn out to be taxable outside the Netherlands, he may - at least currently - have to nominate a fiscal representative in the country/countries of supply. Even if A can escape that obligation, the complexity of the rules will force him to pay a fiscal advisor to comply with his fiscal obligations in the country of supply (invoicing, tax declaration, tax payments etc.).

It is here that the access barrier to cross-border trade becomes fully visible to small and medium-sized enterprises. Where fiscal representation is obligatory (e.g. building services or building related services, including the setting up of stands for exhibitions and fairs, an area in which many small and medium-sized enterprises are doing business), the costs of that tax representation usually cover or even exceed the profit which could be gained from doing business in another Member State. This obligation, still applicable in some Member States, will however disappear shortly\(^{109}\).

Even where fiscal representation in another Member State is not obligatory, the costs of supplementary requirements for documentary proof related to business with persons established in other Member States are huge. Member States require considerable documentary proof for exemptions on intra-Community supplies of goods; small and medium-sized enterprises are confronted with considerable additional record keeping and declaration requirements (own ID-no., listings, client-identification no., dispatch, transport or movement of goods over intra-Community borders must be provided, Intrastat, supplementary invoicing requirements, etc.), increasing administrative costs for this kind of operation. Indeed, the isolation of certain data relating to business with other Member States usually requires sophisticated software solutions for the record-keeping and well-trained staff to operate them. These additional administrative costs often equal or exceed the expected profits.

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\(^{109}\) On the adoption of directive 2000/65/CE of 17/10/2000, this obligation will be abolished by 01/01/2002.
Similarly, the costs of documentary proof for intra-Community acquisitions of goods are huge (returns, id.-no, supplier-id., Intrastat, etc.) and often equal or exceed the benefits of lower prices for imports from other Member States.

The conditions and requirements of proof demanded for reclaiming input taxes under the 8th VAT Directive create another costly barrier for small and medium-sized enterprises. The procedural requirements differ from Member State to Member State, there are long processing times and considerable language barriers for claiming back input taxes. This often leads to additional need for tax advice and increases costs as well as cash flow problems. In particular, small and medium-sized enterprises have considerable cash flow problems when VAT is charged on the basis of estimates and payment is due prior to receipt of payment from the customer.

Conclusion

Due to their size and limited resources, small and medium-sized enterprises are particularly hit by the various company tax obstacles that have been identified so far and suffer from disproportionately high compliance costs for cross-border economic activities. The overall welfare losses implied by the need to deal with a multiplicity of tax jurisdictions are strongly felt by small and medium-sized enterprises which are indeed often deterred from entering the Internal Market, although the economic pressure on them for doing precisely this is constantly growing. Administrative burdens and problems in relation with cross-border loss-offset are the most important obstacles in this context.

VAT problems are a particular concern for small and medium-sized enterprises and these significantly exacerbate the overall impact of cross-border company tax obstacles. In an international context, the use of partnerships can cause numerous complex tax problems. This is particularly true with regard to the application of double-taxation treaties. Moreover, the question arises as to whether specific EU arrangements for corporations should also be accessible for partnerships and if so, under which conditions.
PART IV: REMEDIES TO THE COMPANY TAX OBSTACLES IN THE INTERNAL MARKET

IV.A The framework for possible remedies

3. THE CASE FOR STUDYING BOTH TARGETED AND COMPREHENSIVE REMEDIAL MEASURES

There are in principle two types of measures to address the above tax obstacles. The first possibility would be, on the basis of the separate analysis of the obstacles one by one, to try separately finding a targeted solution for each specific problem. Thus, a number of specific actions for improvement can be identified to minimise individual obstacles. The second possibility would be to devise more comprehensive, all-embracing approaches which could eventually minimise, or remove altogether, the obstacles in a more unified manner. This approach would also, at least in principle, be more in line with the philosophy of a Single Market. In this perspective the underlying idea of such comprehensive approaches represents a legitimate ambition and ultimate goal for the development of company taxation in the EU. These two basic approaches are not mutually exclusive but priorities will have to be established. There are numerous concrete suggestions put forward in the literature under both approaches.

On the one hand, there are good reasons to believe that some of the targeted measures appear to be important regardless of whether or not comprehensive solutions are introduced. Some of the above obstacles are, for various reasons, of a nature that makes it almost impossible to address them by means of comprehensive schemes (e.g. those relating to stock options, partnerships). Therefore, some targeted measures appear to be necessary in any event. Moreover, as will be explained, most of the comprehensive approaches may be conceptualised as optional schemes and would thus be operated as a parallel system on top of the traditional domestic company tax system. Thus, the non-participating companies would still be faced with at least some of the obstacles. It also seems that certain types of companies, for instance in specific industries, would by definition be excluded from comprehensive schemes. Finally, it is likely that any comprehensive scheme would, at least to a certain extent and in a transitional phase, create problems of its own and, possibly, fail to address the interplay of companies operating under comprehensive but different schemes (e.g. mergers). These considerations by no means put into question the value and potential benefits of comprehensive approaches. It only underlines that accompanying targeted measures will still be necessary even if comprehensive schemes are realised.

On the other hand, even if all the targeted measures were implemented, the EU corporate tax system would still suffer from several basic shortcomings. In particular, the fundamental problem and endemic cost of having to deal with 15 different tax systems remains unsolved. Moreover, some of the targeted measures could perhaps be seen as potential "building blocks" for the comprehensive strategic approaches.
It follows from the foregoing that it is necessary to analyse both basic approaches and the various detailed technical ideas and suggestions behind them in this study. The final assessment of which approach is better or whether a combination of both is appropriate can, of course, only be made after having carried out this analysis. However, it is also clear that only a truly comprehensive approach can eventually match the requirements of the Internal Market.

Before starting to consider the two basic approaches for devising remedial measures in detail, two important general issues are explored: the role of the European Court of Justice in and the possible impact of financial accounting rules on remedying tax obstacles in the Internal Market.

**THE ROLE OF THE EUROPEAN COURT OF JUSTICE IN REMEDYING TAX OBSTACLES IN THE INTERNAL MARKET**

Regardless of the basic approach to remedies, it is important for a proper assessment of possible solutions to look first into the guidance given and limitations indicated by the jurisprudence of the European Court of Justice. In the absence of political solutions taxpayers have been compelled to have recourse to the legal process to overcome discriminatory rules and other obstacles. In consequence, the European Court of Justice (ECJ) has developed a large body of case law on the compatibility of national tax rules with the Treaty. National courts are also increasingly being asked to give rulings in this area. As repeatedly referred to in the analysis so far, since the publication of the Ruding report, the law on direct tax matters in the EU has developed at an unprecedented rate, and today the jurisprudence of the ECJ strongly influences almost all aspects of company tax law. There is good reason to believe that this influence will continue to increase. While the ECJ has unquestionably made a significant contribution to the removal of tax obstacles for companies, it is unlikely that the interpretation of the Treaty is sufficient to address all tax obstacles to cross-border activity.

These recent developments have two implications for this part of this study. First, any possible solution to the existing tax obstacles must take account of the existing judgements of the ECJ. Secondly, it is necessary to analyse to what extent the European Court of Justice jurisprudence calls for further co-ordination between Member States, i.e. beyond the mere correction of a Treaty infringement.

It should be noted that unavoidably this section contains a certain number of "overlaps" with other sections of this study which include references to specific rulings by the European Court of Justice.

**The particular position of Community law and the European Court of Justice**

In attempting to understand the role of the European Court of Justice, whether it is in the process of removing obstacles to cross-border economic activities or in any other context, a natural starting point is to consider how its role and jurisdiction are defined in the EC Treaty. Community law is a separate legal system which is distinct from, albeit
closely linked to, both international law and the legal systems of the Member States. Since the creation of the European Communities this hybrid nature of Community law has required clarification by an independent and non-political institution. In the Treaty this role is assigned to the Court, which under Article 220 has the primary tasks of interpreting Community law and ensuring its uniform application throughout the Community.

By carrying out these tasks the Court has actively contributed to the development of Community law. In addition to the questions of law on which it has ruled, the Court has acknowledged and confirmed that a number of general principles of law are inherent in the Community legal order. By far the most fundamental of these general principles are the supremacy and the direct effect of Community law. The principle of supremacy ensures that Community law has primacy over conflicting national law, while the principle of direct effect means that individuals can invoke their Community rights directly before national courts.

These two principles, derived by the Court from the Treaty, are essential elements of the *acquis communautaire* (the state of Community law to date) and the reason why the role of the Court in the Community legal order has been and continues to be so important. They provide for full and effective protection of Community rights and have established a framework for review by national courts of all national measures that fall within the purview of Community law. Without them, Community law would be of greatly less significance.

The role of the Court can be observed from many different angles, but this section focuses on its case law, particularly that which has tested the compatibility of national tax rules with Community law. As the Court actively contributes to the development of Community law and the interpretation of Community law falls, in the last resort, within the exclusive competence of the Court, its role has often been assimilated with that of a supreme or constitutional court within national legal systems. Its jurisprudence has established a number of precedents which are not only referred to and followed by the Court itself, but also provide guidance to national courts when they, in accordance with the principle of supremacy, apply Community law and set aside conflicting national rules.

An important part of the Court’s jurisprudence is concerned with the provisions of the Treaty which establish the Internal Market: “the four freedoms” (free movement of goods, services, persons and capital). Between them, the four freedoms cover all forms of cross-border activity and investment and, in conjunction with another principle central to the *acquis communautaire*, the principle of equal treatment, they impose a prohibition on tax provisions which may pose obstacles to cross-border economic activity within the Internal Market. The four freedoms take precedence over conflicting national law (including double taxation conventions) and they also have direct effect.

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110 See Van Gend en Loos, Case C-26/62, where the Court held that the treaties establishing the European Communities had created a new legal order of international law. Also Costa v. ENEL, Case C-6/64, in which the Court held that, unlike ordinary treaties, the Treaty created its own legal system.

111 Van Gend en Loos, Case C-26/62, where the Court held that Member States had limited their sovereign rights, albeit within limited fields, and that Community law is intended to confer rights on individuals which become part of their legal heritage. Community law therefore not only imposes obligations and confers rights on Member States, but can also be relied upon before national courts by individuals.
The tangent at which Community law and national laws on direct taxation meet is a result of the combined application of the four freedoms and the principle of equal treatment. In 1986, the Court extended its case law on the four freedoms to the sphere of direct taxation when it gave judgement on Case C-270/83 *Commission v France*, commonly known as “avoir fiscal”. The Court held that a national tax law which refused a dividend imputation tax credit to permanent establishments of foreign (non-resident) companies, whilst granting it to resident companies, was contrary to Community law. Unsurprisingly, this decision caused a great deal of confusion among practitioners of international tax law at the time as for them it was practically unheard of that non-residents and residents could not be subjected to different treatment.

Since the decision in *avoir fiscal*, the jurisprudence in this area has developed rapidly and it is perhaps fair to say that of all the Community institutions, the Court has so far proved to be the most efficient at removing tax obstacles to cross-border economic activities within the Community. The reminder of this section thus extracts recurrent themes from the Court’s case law in order to establish what progress it has made, and to consider how this progress could be furthered and reinforced.

**The principle of equal treatment and the four freedoms**

*Non-discrimination*

The principle of equal treatment, which the Court has derived in part from the Treaty but also from the national laws of Member States, has had a decisive influence on the interpretation of the Treaty itself. It is of particular importance to, and forms a fundamental element of, the provisions of the Treaty which establish the Internal Market. As pointed out repeatedly above, violations of the equal treatment principles generate tax obstacles to cross-border economic activity in the Internal Market.

In general, discrimination can be defined as treating similar situations differently, or different situations alike. This definition is used in both Community law and international tax law but the notion of discrimination in Community law differs from that of international tax law. Under Community law it is sufficient that situations are materially similar, whereas international tax law rules are based on the assumption that residents and non-residents are in a different situation and can therefore legitimately be subject to different treatment. The difference between these two approaches results from the difference between the principal objectives of the relevant Community law provisions and international tax law, respectively. While the four freedoms provisions aim at removing the borders between the Member States, in as much as possible, for intra-Community economic activities, the very starting point of international tax law is the existence of these borders.

*The "four freedoms"*

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112 The principle of equal treatment finds expression in a number of provisions of the Treaty (see for example Articles 12, 34, 39, 43, 49, 56 and 58).

113 See, for example, Case C-279/93 Schumacker, in which the court said that discrimination only arises through the application of different rules to comparable situations or the application of the same rule to different situations.

114 Unless specifically prohibited by virtue of a double tax treaty provision.
In Community law prohibition of discrimination is a common thread for the four freedoms provisions (the free movement of goods, persons, services and capital, and the right of establishment). They give specific expression to the prohibition of discrimination on grounds of nationality in Article 12 of the Treaty, itself a manifestation of the general principle of equal treatment. Nationality is a concept commonly attributed to natural persons but Article 48 of the Treaty includes as beneficiaries of these provisions also companies constituted in accordance with the law of a Member State and having their registered office, central administration or principal place of business within the Community. Accordingly, a company is considered a national of the Member State in which it has its seat.

Thus Article 43 of the Treaty prohibits a Member State from imposing discriminatory restrictions on the freedom of companies of other Member States to establish themselves within the territory of the first Member State through a branch or subsidiary. Restrictions on the freedom to provide services are prohibited under Article 49. Article 56, in conjunction with Article 58 prohibits discriminatory restrictions on the free movement of capital and payments. So far the Court has found cases in the area of direct taxation to be within the scope of the four freedoms provisions of the Treaty and the prohibition of discrimination as reflected in them has therefore been sufficient. To date the Court has not examined Member States’ tax laws directly in the light of Article 12 of the Treaty, the general prohibition of discrimination in Community law.

In a tax context, differences in treatment include increasing the tax burden (due to a higher rate or wider base) and procedural disadvantages, for example in the way the tax is assessed or collected. In its case law the Court has acknowledged that residents and non-residents may be in materially dissimilar situations because of the differences in taxing rights exercised over them. Nevertheless, it looks closely to see whether the differences are in fact material. In accordance with the objectives of the Treaty the Court has adopted a narrow interpretation of derogations from its fundamental principles of free movement and thus has taken the view that it is sufficient that the situations of the resident and non-resident individuals or undertakings are substantially the same. For example, the advantages commonly refused to permanent establishments under domestic rules and double taxation conventions have been considered discriminatory even though there are differences in the treatment of permanent establishments and subsidiaries. It is sufficient that both are subject to tax on profits115.

Overt and covert discrimination

The notion of discrimination in Community law encompasses not only overt discrimination on the grounds of nationality, but also covert discrimination116. This dimension of the prohibition of discrimination in Community law is of particular importance to its relation to direct taxation rules. This is because, in principle, none of the Member States imposes its taxing rights by reference to the nationality of the taxpayers but operate with the concept of residence. Under Community law special treatment of a certain group which is not defined according to nationality, but is likely to

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115 See Case C-270/83 Avoir Fiscal, and Case C-307/97 Compagnie de Saint-Gobain.

116 See Case C-152/73 Sotgiu in which the Court held that the Treaty provisions establishing the four freedoms not only forbid overt discrimination on the grounds of nationality but also all covert forms of discrimination which, by application of other criteria of differentiation, lead in fact to the same result.
be comprised of a high proportion of foreign nationals constitutes covert discrimination as it has in fact the same effect as a measure overtly targeted at foreign nationals. In a tax context this means that, at least in principle, differences in the treatment of non-residents, being mainly foreign nationals, are likely to be considered discriminatory.

Justifications

The principle of equal treatment can only be overlooked if the discriminatory national rule can be justified on the ground of “imperative requirements of public interest” (objective factors other than nationality) and the adverse treatment is proportionate to the objectives pursued by the rule\textsuperscript{117}. In order for the adverse treatment to satisfy the proportionality test it must be necessary in the sense that there would be no other, less restrictive means to protect the public interest in question. An insight into the case law concerning national rules on direct taxation shows that the Court has enforced the principle of non-discrimination very strictly. In line with general principles developed outside the tax field, the Court has rejected a number of justifications for discriminatory measures advanced by Member States and many of them repeatedly. These include for example:

- the need, in the absence of harmonisation, to take account of differences between national tax rules;
- the fact that a non-resident could have avoided the discrimination e.g. by setting up a subsidiary company rather than a branch;
- economic aims or the protection of tax revenue;
- the absence of reciprocity;
- the existence of discretionary or equitable procedures to ensure appropriate fiscal treatment.

The Court has expressly refused to accept arguments based on the factual overall treatment of a non-national taxpayer as compared with nationals of a Member State. For example, in \textit{avoir fiscal}\textsuperscript{118} the Court held that adverse treatment (non-availability of tax credit based on dividends received) cannot be justified by the fact the tax system could be considered to contain other benefits offsetting the disadvantages due to the discriminatory rules. However, when considering whether adverse treatment can be justified, account can be taken of the taxpayer’s position in both (or all) of the Member States concerned. Thus, for example as held by the Court in \textit{Schumacker}, (full) personal reliefs granted to resident taxpayers of the Member State may be refused from a non-resident taxpayer if he/she is entitled to such reliefs in the Member State of which he/she is a national.

\textsuperscript{117} Some of the imperative requirements protecting public policy interest are expressly mentioned in the Treaty provisions. For example, Article 46 of the Treaty states that the provisions in the Chapter concerning the freedom of establishment and the measures taken in pursuance thereof shall not prejudice the applicability of provisions laid down by law, regulation or administrative action providing for special treatment for foreign nationals on grounds of public policy, public security or public health. Some others have been developed by analogy, on the basis of the Treaty provisions, by the Court in its jurisprudence.

\textsuperscript{118} Case 270/83, cited above.
The Court has generally been reluctant to accept justifications put forward on the basis of the administrative difficulties involved in ensuring efficient fiscal supervision or the prevention of tax avoidance. It has taken the view that Member States should, if need be, provide each other with mutual assistance to overcome such difficulties. In two earlier cases (one of them commonly known as Bachmann) the Court did hold that a discriminatory provision could be justified by the public interest in preserving the fiscal coherence of a Member State’s tax system. In these cases concerning Belgian tax rules the proportionality test was considered to be met and the justification was accepted on the ground that there was a need to ensure that a tax deduction granted in respect of pension or life assurance premiums was matched by ultimate taxation of the benefits paid out under the relevant policy.

These two cases have, however, been widely criticised and the Court has indeed shown great reluctance to accept the fiscal coherence type of justification argument ever since. The Court begun to limit the scope of the fiscal coherence as an imperative requirement since 1995 and many commentators now question whether the scope of that principle remains good law. As also more recently demonstrated by the opinions of Advocate General in Verkooijen and Advocate General in Guipúzcoa the applicability of the Bachmann defence is limited to situations where a discriminatory rule refusing a deduction for a payment is justified by inability to tax the recipient of the payment. Hence, a justification of a discriminatory measure on the grounds of “fiscal coherence” requires the existence of a direct link between deduction and taxation within the same tax system and as expressed by the Court in Eurowings when referring to Bachmann, a “tax disadvantage … [must be] compensated for by a corresponding tax advantage for the same person”.

In national rules, there is rarely a strict correlation between deductions and benefits. This is even less so if one takes account of bilateral conventions. As the Court noted in Wielockx, “the effect of double-taxation conventions which follow the OECD model is that the State taxes all pensions received by residents in its territory, whatever the State in which the contributions were paid, but, conversely, waives the right to tax pensions received abroad even if they derive from contributions paid in its territory which it treated as deductible”.

**Examples from the jurisprudence**

The archetypal form of discrimination that the Court has found unlawful arises in situations where the tax treatment of nationals of a Member State is less burdensome than that to which non-nationals of that Member State are subjected. For example, the Court has in several occasions found that less favourable tax treatment by a Member

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119 See Case C-204/90 Bachmann; Case C-300/90 Commission v Belgium.
120 C-80/94 Wielockx; C-279/93 Schumacker; C-484/93 Svensson; C-107/94 Asscher; C-264/96 ICI.
121 Case C-35/98.
122 Joined Cases C-400/97 and C-402/97.
123 C-294/97 Eurowings.
124 C-80/94, cited above.
State of a permanent establishment of a company established in another Member State is discriminatory and incompatible with the Treaty freedoms\textsuperscript{125}.

Although much of the case law is concerned with non-residents who are nationals of another Member State, the Treaty also protects individuals from measures adopted by their own Member State which restrict the exercise of Treaty freedoms. Thus, for example, the Court has confirmed that tax measures designed to allow groups of companies to be taxed in broad terms as single entities in a Member State (group reliefs and tax deductible transfer of assets between group companies) may not be construed so as to discriminate against group structures that involve companies having their legal seats in other Member States\textsuperscript{126}.

Moreover, Member States have, within the framework of Community law, the competence to conclude double tax treaties. However, as demonstrated by the decision of the Court in \textit{Compagnie de Saint-Gobain}\textsuperscript{127}, this competence does not mean that the Member States would be entitled to impose discriminatory restrictions against nationals of other Member States.

Against this background, among others the following national measures have been found to be incompatible with the Treaty freedoms:

- a dividend tax credit granted to companies resident in France but refused to the branch of a company having its seat in another Member State;
- a refund of overpaid income tax granted by Luxembourg to permanent residents but refused to taxpayers moving to another Member State during the tax year;
- personal reliefs granted by Germany to residents but refused to non-residents even where they could not benefit from such reliefs in their State of residence;
- a business relief (a tax deduction for transfers of funds to a pension reserve) granted by the Netherlands to residents but refused to non-residents;
- limitation by France of the deductibility of research expenditure to research carried out within its territory;
- refusal by the UK of loss and other relief for consortia whose subsidiaries were predominantly located in other Member States;
- heavier taxation imposed by Germany on a company leasing goods from an Irish company on the ground that the leasing company was subject to a low rate of tax in the Republic of Ireland;
- dividends received exemption refused by the Netherlands with respect to dividends received from a company having its legal seat in another Member State whilst

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{125} See, for example: Cases 270/83 Avoir fiscal, C-307/97 Compagnie de Saint-Gobain, C-311/97 Royal Bank of Scotland,\textsuperscript{128}
\item \textsuperscript{126} See Cases C-264/96 ICI and C-200/98 XAB and YAB
\item \textsuperscript{127} See Case C-307/97.
\end{itemize}
\end{footnotesize}
granted in cases where such dividends have been derived on the basis of domestic shareholdings;

- refusal by Belgium to set off losses from a previous tax year because of profits arising in a permanent establishment located in another Member States that same year.

- refusal by Germany of dividends received related double tax treaty benefits (deriving from treaties with third countries) to a branch of a company having its seat in another Member State.

Beyond discrimination?

The provisions regarding the Treaty freedoms refer generally to “restrictions” to the exercise of the freedoms guaranteed by them. In its non-tax case law the Court has repeatedly held that non-discriminatory restrictions to the free movement of goods, are unlawful unless justified by defined imperative requirements of public interest. As early as in 1974, in its decision in Dassonville\(^{128}\), the Court held that all trading rules which are capable of hindering directly or indirectly, actually or potentially, intra-Community trade are in contradiction with Article 28 of the Treaty.

In the widely cited decision in Cassis-de-Dijon\(^{129}\), the Court qualified the compatibility of such restrictions with the Treaty freedoms (because of their negative effect on trade) to situations where they are necessary for the protection of certain public interests, such as fiscal supervision, public health and consumer protection. Thus, for example, domestic product regulations cannot be applied to products imported from other Member States, even though they did not discriminate against imported goods, unless such restrictions can be justified on imperative grounds such as fair trading, consumer protection, environmental protection. In Säger\(^{130}\), the Court transposed this “restriction based approach” to cover the free provision of services.

In the direct tax sphere the Court has so far only applied this analysis unequivocally to compliance issues (such as accounting records required of a branch to substantiate losses\(^ {131}\)). However, there are hints of a broader approach and the tendency in the Court’s analysis can be interpreted as being towards a restriction based approach. This tendency could arguably be extracted from the generally narrow interpretation of justifications for restrictive national rules but it is reflected more clearly in the relatively recent decision in Safir\(^ {132}\). In this decision the Court found as unlawful restriction to the free provision of services:

- national (Swedish) rules that had the effect of making the provision of services between Member States (from UK) more difficult than the provision of services exclusively within one Member State (Sweden).

\(^{128}\) Case 8/74
\(^{129}\) Case 120/78
\(^{130}\) Case C-76/90 Säger.
\(^{131}\) See Case C-250/95 Futura Participations.
\(^{132}\) Case C-118/96, cited above.
It remains to be seen how far the Court is willing to go in adopting such analysis in the field of direct taxation but if it were unequivocally transposed to this area, the removal of the need to show discrimination would certainly broaden the range of obstacles falling within the scope of the Treaty provisions.

**Unresolved issues**

As discussed above a generally important question to which clarification is still awaited is that of the extent to which non-discriminatory restrictions to the exercise of the Treaty freedoms will be considered unlawful. A particularly delicate area in this respect is the interpretation of the free movement of capital and payments as provided for in Articles 56 and 58 as the latter makes an express reference to permissible non-discriminatory restrictions whilst at the same time it prohibits arbitrary discrimination and disguised restrictions.

More specifically there are a number of questions to which the answers depend on the development of the restriction type analysis in the area of direct taxation. Further guidance could be expected in such areas as restrictions on certain cross-border services, Member States’ rights to retain their taxing rights following cross-border reorganisations, compatibility of withholding taxes on interest and royalty income and taxation of cross-border dividends.

As to the issue concerning tax treatment of cross-border dividends under systems which integrate the tax treatment of direct investment both at the company and the shareholder levels (but only as regards domestic situations), some light has been shed on by the recent ruling in *Verkooijen*\(^\text{133}\). At issue in this case was the legality of Dutch rules exempting (up to certain thresholds) dividends received from Dutch companies. The Dutch Government argued that the exemption was intended to reduce economic double taxation and that the limitation of the exemption to dividends from Dutch companies was justified by the necessity of coherence of its tax system.

In the light of the development of the Court’s case law since the decision in *Bachmann*\(^\text{134}\), it was not particularly surprising that the Court did not accept the coherence argument. In its decision the Court expressed the view that coherence must be examined for one and the same taxpayer: coherence based on different taxpayers (shareholders and companies) cannot justify discrimination as shown by the clear and consistent case law of the Court. This ruling can have profound consequences for any system of tax integrating the tax treatment of direct investment both at the company and the shareholder levels. It certainly supports the argument that eliminating wholly or partly economic double taxation domestically but allowing it to persist in respect of cross-border situations a Member State imposes (discriminatory) restrictions to cross-border intra-Community direct investment.

Another potential issue is the extent to which EU Member States are obliged to accept the tax systems applicable in other Member States as being adequate and thereby abstain from the use of anti-abuse measures aimed at countering the use of base and conduit companies. In order for such rules to be compatible with the principle of freedom of

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133 Case C-35/98

134 See discussion on this issue above.
establishment provided for in Article 43 of the Treaty, they must be shown to be justified and proportionate to the aims sought by them.

Another set of open questions centre on issues traditionally dealt with in bilateral or multilateral double tax treaties between independent tax jurisdictions. A general question in this area is whether a failure of a Member State to prevent double taxation entails discrimination or restriction contrary to the Treaty freedoms. Another undecided issue is to what extent the Treaty limits the Member States’ external competence to conclude double taxation treaties with other member States or third countries. There is as yet no decision concerning the extent to which a Member State can offer differing privileges to nationals of other Member States under its bilateral treaties with other Member States or whether indeed the Treaty imposes an obligation to the Member States to offer nationals of other Member States the most favoured nation treatment as offered under their treaties with third countries.

Some recent case law comes close to these questions\(^\text{135}\) but it nevertheless remains unclear whether all differences between tax treaties will be incompatible with the equal treatment principle. In particular it is arguable that the equal treatment principle does not allow reciprocal concessions which go beyond mere allocation of taxing rights, such as differences in concessions to avoid economic double taxation (refunds of imputation credits).

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\(^{135}\) See Cases Gilly and Compagnie de Saint-Gobain. In Gilly the Court was asked whether the different allocation of taxing rights under the Franco-German convention for different categories of workers was compatible with Article 39 of the Treaty. The Court replied that, in the absence of any unifying or harmonising measures at Community level, the Contracting Parties were competent to define the criteria for allocating their powers of taxation as between themselves with a view to eliminating double taxation. In Compagnie de Saint-Gobain, the Court found impermissible the refusal by Germany of double tax treaty benefits (based on double tax treaties concluded with third countries) to a branch of a company having its seat in another Member State.
Conclusions

Notwithstanding that direct taxation largely remains part of the national sovereignty of the Member States, national tax provisions may be incompatible with the requirements of the EC Treaty and thereby void. This is because of the impact of provisions of Community law and the general principles of law derived from it and from the national legal systems of the Member States. It is not unprecedented that the Court, whilst being mindful of the consequences of its decisions in respect of established patterns of international tax law, dares to interpret Community law in favour of European integration.

The Court has adopted a very narrow interpretation of derogations to the fundamental principles of free movement of persons and capital, freedom of establishment and free provision of services in the area of direct taxation. The relatively robust approach in the recent case law is reflected in the Court’s decisions in which it has defined the limits of the applicability of the "fiscal coherence" justification. The evolution of this view has, however, taken some time and caused considerable uncertainty as to the meaning of the prohibition of discrimination in the area of direct taxation. There is also a suggestion of a tendency towards restriction type analysis by the Court in its case law concerning direct taxation rules of the Member States.

Despite the significant potential of the Court for the removal of existing obstacles to cross-border economic activities it is clear that tackling such obstacles exclusively through judicial process before the Court cannot be sufficient. ECJ rulings are confined to the particular case put to it and may therefore relate solely to individual aspects of a more general issue, the implementation of ECJ rulings is left to Member States, who often fail to draw the more general consequences which flow from them.

Moreover, case law in the area of direct taxation has not reached maturity and the full consequences for national tax rules remain uncertain. There are many reasons for this but perhaps the most significant is the limitations inherent in the jurisdiction of the Court. Case law concerning direct taxation results most often from actions begun in a national court from which references for preliminary rulings are made to the Court as provided under Article 234 of the Treaty. Only a few cases have been brought to the Court as direct actions against the Member States. The potential incompatibilities of national tax laws with Community law have therefore not been systematically detected and tested. Equally, the jurisdiction of the Court does not permit it to rule beyond the specific questions of law that have been posed to it.

Many important questions related to direct taxation lack guidance by the Court and, partly due to this, the full implications of the case law have not been coherently and uniformly implemented into national legislation. The shortcomings of the judicial process as an exclusive means of promoting the integration of the Internal Market by removing obstacles to cross-border economic activity within the Community would therefore suggest a need for co-ordination at a political and at a technical level in order to further and to reinforce the progress already made by the Court. There therefore seems to be scope for introducing a Community framework for exchanging views of the implications of significant ECJ rulings. The Commission, in addition to performing its role as guardian of the Treaty by instituting infringement proceedings in appropriate cases, could promote more uniform application of the law by issuing guidance on the conclusions which it considers should be drawn from important rulings in the form of
communications or recommendations. This approach seems to be necessary in order to stop, from a Member States' perspective, the Court from dismantling domestic tax systems. Positive legislation in Member States in advance of Court rulings is therefore the only constructive way forward. Areas of particular importance in this respect are discussed in more detail in the following sections of this part of the study.

THE IMPORTANCE OF FINANCIAL ACCOUNTING FOR REMEDYING TAX OBSTACLES IN THE INTERNAL MARKET

One basic finding of the analysis of the tax obstacles was that many of them relate to the multiplicity of the rules of 15 tax systems which, in turn, is - to a varying degree - linked to different systems of financial accounting. At the same time, for many non-fiscal reasons accounting harmonisation is still on the international agenda. Before devising tax solutions, it is therefore necessary to consider these links in detail and to examine if and how accounting harmonisation must or can contribute to remediying the tax obstacles, before tax-specific remedies are considered.

In all Member States, the provisions for determining the corporate tax base and financial accounting rules are linked to some extent. Accounting rules are based on the same principles across the EU, but the details vary significantly from one Member State to another. Formal bookkeeping requirements also differ. Since the Ruding report important new developments have taken place in this area.

Generally, it is important to distinguish "financial accounting", i.e. the statutory accounts that companies have to produce and publish regularly for informing the public, and internal "management accounting", i.e. the continuous elaboration of cost information for price-calculation, etc. In practice, both are to a large extent based on identical data and in company practice the compiling of the accounts may be based on similar procedures and carried out by the same persons. "Tax accounting" is required for producing the accounting data that is needed for determining the statutory tax liability of a company. Thus, the basic accounting approach to identical transactions can be very different in different Member States. Transfer prices are a good example.

Fundamentally different approaches in Member States

Generally, for taxation purposes, the economic incentive is to minimise income in order to minimise or postpone a tax liability, whereas for accounting purposes the economic incentive is often to maximise or smooth earnings in order to satisfy the investors. Member States traditionally deal with this dichotomy in different ways. Within the EU, one can distinguish two essentially different structures of relationship between accounting and taxation. The first structure can be labelled “independence”, the second structure “dependence”.

136 For an elaboration of this distinction and a general discussion of the relation between tax accounts and commercial accounts, see Hulle, K. Van, Convergences in accounting rules and income tax legislation - A European point of view, in: "Tax Policy and the Impending Economic and Monetary Union, Abraham, F., Stuyck, J. and Vanistendael, F. (Eds.), Leuven Law Series 12, Leuven University Press (pp. 117-126), 1999
Independence means that income determination for accounting purposes is in principle independent from income determination for tax purposes. Companies may choose different accounting policies for tax and for financial accounting purposes and the use of special tax facilities is not linked to applying these facilities in the financial accounts. However, the "independence" is never total: Accounting rules will take into account structures which may have been set up for tax purposes and the other way round. The separation of tax accounts and financial accounts is somewhat typical for common-law countries applying an "over-riding principle" of a "true and fair view" in accounting law.

Dependence means that either the financial accounts follow the tax rules, or that income determination for tax purposes is determined by the choices made in financial accounts. This means that the computation of income for tax purposes has generally to follow financial accounting standards and the financial principles of proper bookkeeping\textsuperscript{137}. The linkage between accounting and taxation can go even further by insisting that an accounting treatment available under tax law can only be exercised to the extent that the same treatment has been followed in the financial accounts\textsuperscript{138}. The linkage between tax accounts and financial accounts is somewhat typical for civil-law countries. The underlying idea is to prevent companies presenting different truths to different parties (i.e. a big profit is shown to shareholders and potential investors and a low profit or even a loss is presented to tax authorities), especially where companies have been able to benefit from special tax facilities.

Normally, dependence only exists in individual accounts, because the consolidated accounts are not usually the basis for the assessment of income tax. However, companies may choose to apply the same accounting policies in individual and in consolidated accounts. Consolidated accounts may therefore be influenced by tax rules in those countries where dependence is prevalent. Generally, however, parent companies tend to prepare consolidated accounts in a manner which takes out as much tax influence as possible.

Within the EU, independence between accounting and taxation is prevalent in Denmark, Ireland, the Netherlands and the United Kingdom, while dependence is prevalent in varying degrees in the remaining Member States, with the strongest link between accounting and taxation to be found in Germany. Given the enormous pressure to go to global accounting standards there has recently been a trend in many Member States to loosen this link but there are also recent developments in the opposite direction.

Against this background, the early EU accounting directives essentially represent a compromise between the Anglo-Dutch and the continental-European and German concepts of financial accounting. Taxation was not the primary concern when they were adopted\textsuperscript{139}. Although there are a number of articles on tax consequences in the 4\textsuperscript{th} directive on individual accounts\textsuperscript{140}, tax problems are the major reason why it has not

\textsuperscript{137} Reference is often made in this context to the German principle of “Maßgeblichkeit” (authoritativeness) and the “Grundsätze ordnungsmässiger Buchführung”.

\textsuperscript{138} This is often referred to as the principle of “umgekehrte Maßgeblichkeit” (reverse authoritativeness).

\textsuperscript{139} For a detailed analysis of the relation between accounting and taxation in the EU accounting directives see the above-mentioned publication by Prof. Karel Van Hulle.

been seriously amended. The changes would have impacted on the tax revenues of many Member States. The basic approach in the 7th directive on consolidated accounts was similar: Member States have the option to reflect "tax coloration" in the financial accounts. For instance, accelerated depreciation is accounted for in the parent-company individual account but normal depreciation in the consolidated account.

**Box 47: How do multinational companies deal with differing requirements for financial accounts in 15 Member States and beyond?**

According to business representatives in the panel of experts, matching the tax accounts and financial accounts in a group of companies is just one practical problem among many in dealing with 15 tax authorities. Solving it however generates considerable compliance cost. ICI, for instance, applies solely UK accounting standards. Local accounts are then adapted according to local rules. The biggest problem in this respect is not other EU countries (here overall differences are relatively limited) but the USA. An UK accounting result of 150 may correspond to an US accounting result of +/- 110.

Unilever is a company whose headquarters are in two Member States and consequently faces both the NL and UK accounting system. Being listed on the NYSE, the US accounting arrangements also need to be taken into account, but Unilever still works with a single set of internal financial accounting rules. The financial data are used to compile the accounts according to UK standards. Apart from minor differences (e.g. treasury stock) which are accounted for separately, these accounts are used for both the UK and the Netherlands. For the USA, however, a complete restatement of the balance sheet and the profit&loss account is made.

**New developments since the publication of the Ruding report**

In the mid-90s, the Commission came forward a new accounting strategy which aimed at incorporating European harmonisation within a broader international harmonisation. In its Communication on the issue, the Commission proposed to the Member States to make it possible for "global players" to prepare their consolidated accounts in conformity with International Accounting Standards (IAS). In its general communication on accounting matters and the proposal for a regulation on the application of international accounting standards, the Commission takes the strategy chosen in 1995 one step further. It proposes that all listed companies would prepare their consolidated accounts according to IAS-rules.

Given the global dimension of the issue, there is no point in developing a separate EU accounting concept. As a matter of fact, the international development is to a significant extent determined by the USA which represented until Economic and Monetary Union.

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142 Art. 29 of the Directive allows a parent-undertaking to use in its individual accounting rules which are different from those in the consolidated accounts. This is a Member States option.
the biggest single capital market in the world. This market attracts many EU multinational companies seeking new equity. However, in the USA and in many other English-speaking countries preference is given to an investor-driven conceptual framework of financial accounting which emphasises potential future profits of the enterprise. The stakeholder tax authorities are neglected.

Similarly, the IAS have been drawn up in a manner which is neutral from a tax point of view. The application of those standards in individual accounts would, however, not normally be possible in most Member States as it could result in adverse tax consequences.

In the EU, the relation of tax accounting and financial accounting will be significantly influenced by the creation of an EU-wide capital market resulting from the set-up of Economic and Monetary Union. As long as different accounting rules are followed, the publication of financial statements by companies from the euro-zone in the same currency might give a wrong impression of harmonisation. Markets clearly exercise pressure to further harmonise the accounting rules. This trend will be reinforced by the imminent creation of pan-European stock-exchanges for the +/- 7000 stock-listed companies in the EU. There is good reason to believe that these developments will increase the pressure towards a more investor-driven accounting framework (with subsequent effects on tax accounting). However, it must be clearly said that the decision to separate commercial from tax accounting is no foregone conclusion and that the pros and cons are still being weighed.

The Council has recently adopted a directive allowing Member States to permit or impose "fair value accounting" for certain financial assets and liabilities. This new approach will essentially remove the traditional realisation principle (i.e. profits are only accounted for when they are "realised" in a clear transaction). Instead of transactions simple value changes would constitute the accounting base; financial instruments are thus valued at market value (instead of historic cost). Thus, the linkage between financial accounts and tax accounting becomes virtually impossible.

In the literature, there is even a growing trend to apply "fair value accounting" to other assets and liabilities. Some scholars suggest that the traditional profit/loss-account does not reflect the true economic operation of the enterprise. Investment properties, for example, are held for investment purposes but are not accounted for at the market value. Investment properties value changes could be mixed with transaction-based income and results in the profit/loss-account or they could be separated but in any event then the question arises, how do you measure the profit - excluding or including the value changes? It is suggested that a new "statement of financial performance" is introduced to

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146 Of course, those Member States, in which there is no linkage between accounting and taxation might find it useful to allow the application of IAS also in individual accounts. At domestic level, seven Member States already allow certain companies (primarily listed companies) to depart from the national rules on consolidation in order to prepare their consolidated accounts in conformity with IAS or with US Generally Accepted Accounting Principles (GAAP).


148 Currently, views still differ substantially within the EU on how the realisation principle is to be applied in practice. Foreign currency translation is a good example.
address these problems. These views are of course not undisputed. In particular, reference is made to the volatility of market values, especially for stocks. Moreover, "fair value accounting" is said to influence what should be a purely financial business decision which is generally a negative development.

Conclusions and practical examples

Generally, it is clear that there is no prospect of fully matching tax and financial accounting in the future. To the contrary, "fair value accounting" and recent developments in capital market regulations constitute steps which are likely to alienate the two worlds further. "Fair value accounting" will most probably play a role for consolidated accounts of EU multinationals and there are good reasons to assume that the investor-driven IAS will become the basic standard for these consolidated accounts. Generally, the need for more harmonisation to ensure greater comparability of EU financial statement implies a severing of the link between tax and financial accounting, at least unless Member States were prepared to change drastically their tax accounting. Interestingly enough, however, recent developments in some Member States also show that the separation of financial and tax accounting does not necessarily alienate the two. IAS standards are sometimes also used for tax accounting purposes.

The effects of these developments are first and foremost felt in the consolidated accounts but, at some stage, they will also have consequences for the individual accounts (e.g. through the subsidiaries of multinational companies) which in most Member States also provide to a varying degree tax-driven accounting information. The dependence of financial accounts and tax accounts in many Member States will thus continue to be challenged as the strong linkage between tax and financial accounting makes it extremely difficult to change and modernise the accounting rules (because of the implicit tax consequences).

There are two conclusions to be drawn for the analysis of possible company tax obstacles in the Internal Market. First, inasmuch such obstacles are linked to the tax base, i.e., the various components forming the taxable income, it becomes clear that accounting harmonisation will not contribute towards approximation of company tax bases in the EU. Second, there is good reason to believe that the number of options, including tax options, will increase further in the future. This is because despite the above trend most Member States appear to wish to keep some sort of linkage between tax accounting and financial accounting.

Finally, with a view to the tax obstacles identified in Part III of this study it is important to note that even when independence of financial accounting and tax accounting became the prevailing pattern in the EU, factual links and problems remain. For instance, the tax treatment of intangibles in all Member States follows the basic qualification for accounting purposes. Another example is the tax treatment of leasing that is generally based on the distinction between operating leasing and financial leasing which is different between Member States. As illustrated in the box below, this impacts strongly on the (tax-effective) depreciation.

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149 It is however noteworthy that leasing is subject of a new debate in the accounting world and that the current distinction between operating leasing and financial leasing will maybe replaced by an approach under which all rights are put on the balance sheet. The lessee and lessor will put their respective rights on the balance sheet.
Box 48:  
The tax treatment of leasing contracts

The differing tax treatment of intangibles (namely goodwill, trademarks and know-how) is a major obstacle to cross-border business restructuring, in particular in situations in which intangibles are sold/acquired in the framework of an asset deal. In some Member States, tax depreciation of acquired intangibles is allowed, in others it is not. When accepted, different depreciation systems are provided in different Member States. Furthermore, in most Member States capital gains upon the disposal of intangible assets are taxable. As moving an intangible asset from a Member State where a capital gain on an intangible is taxed to one where it cannot be depreciated is sometimes prohibitively expensive, the difference in tax treatment is an issue that needs to be addressed.

Similarly, the tax treatment of leasing is not uniform across the EU, ranging from ordinary assets' depreciation rules to immediate full deduction of payments. Thus, cross-border problems arise essentially because of the differing qualification of contracts as financial leasing or operating leasing in the country of the lessor and the country of the lessee. Thus, localisation as well as financing decisions are affected. Companies may sometimes use the co-existence of differing rules of an identical leasing-situation for tax planning purposes (namely concerning the leasing of aeroplanes or of big plants and machinery in general) but generally leasing is a genuine cross-border tax problem. Leasing is becoming increasingly important for infrastructure and big high-tech equipment and differences in the tax treatment can be decisive for concluding or not a contract.

Another practical example of how financial accounting impacts on company tax issues is the treatment of mergers and acquisitions.
Box 49:
The influence of accounting rules on business decisions: mergers and acquisitions

The accounting treatment of mergers and acquisitions can be decisive for the tax treatment and financial decisions in this area. The choice between the "acquisition method" and the "pooling of interests method" for business combinations is a good example. This is because the "pooling method" is accepted for tax purposes in some Member States whereas others allow it only in financial accounting. It may also be noted that some EU companies apparently even only list at the NYSE because this allows them to acquire US companies and apply the "pooling method".

Under the "acquisition method" the subsidiary (i.e. the acquired company) is integrated into the consolidated accounts of the parent company (i.e. the acquiring company) as if the various assets and liabilities of the acquired company had been purchased individually. They are valued at 'fair market value' and the sum is confronted with the own equity according to the book value of the subsidiary. A possible difference is attributed to the various posts of the balance sheet or it is put as "goodwill" or "badwill" on the balance sheet. The cost of the merger are activated on the balance sheet.

Generally speaking, "pooling" is a merger of two companies in which the future parent company exchanges at least 90% of the shares of the subsidiary against (mostly) newly issued own shares. Under the "pooling of interests method" the participation at the subsidiary is valued only at its nominal value. In the consolidation the book-value of the participation of the parent is simply compensated against the equity of the subsidiary. All other assets and liabilities are valued at book value and simply added. A possible difference between the consideration and the book value of the participation changes the reserves. The cost of the merger can be immediately deducted.

As the "hidden reserves" are not made visible under the "pooling" method, it avoids subsequent taxation at market values. Interestingly enough, there appears to be a strong lobbying in the USA to abolish "pooling" domestically and to no longer accept it internationally.

The impending debate on the separation of tax accounting from financial accounting, to be conducted at the European level, presents an opportunity for further approximation of the tax bases of the Member States. To the extent that tax accounting will develop independently from financial accounting, Member States will be obliged to find autonomous rules for tax accounting purposes. In looking for such rules there is an opening for co-ordination and co-operation to start with common base rules, instead of each of the Member States trying to pursue individual solutions.
IV.B
Targeted actions in specific areas

**MONITORING OF THE UNIFORM APPLICATION OF EU COMPANY TAX LAW**

The analysis in Part III of this study has clearly shown that many of the tax obstacles concerning mergers and acquisitions and in the area of dividend taxation boil down to the differing implementation by Member States of the Merger Directive and the Parent-Subsidiary Directive. Such differences are of course to some extent intrinsic to the legal instrument of a "Directive" but the analysis has revealed a number of issues that merit further consideration.

While a limited degree of divergence of implementation and interpretation of a Directive by Member States in drafting their national laws is inevitable, significant differences in the conditions under which the benefits of the Directive are applicable give rise to problems. Moreover, the substantially different implementation of EU law in Member States increases further the compliance cost resulting from the existence of 15 tax systems within the Internal Market. A more uniform application of (existing and future) EU company tax law could be an important step in order to reduce these compliance costs and to make sure that where EU tax law is relevant comparable situations are treated in a comparable manner. At the same time, the need for litigation would be reduced.

One way of achieving these objectives and to tackle the various problems relating to the divergence of the application of (both existing and future) EU taxation Directives across Member States would be the introduction of some kind of collective monitoring of the implementation of Directives. This would involve the creation of a mechanism for the exchange of best practice and/or some form of peer review. After discussion with Member States, the Commission could issue guidance on the interpretation of important provisions of the Directives.

In this context, it is important to note that differences in the implementation of Directives are often related to different legal traditions and concepts. In the two direct tax Directives, for instance, many cross-border difficulties boil down to a varying understanding of "tax avoidance" and anti-abuse practices. The suggested mechanism would give the opportunity to develop a more common understanding of these and other important concepts in EU systems of company taxation. In the long run, the elaboration of, for instance, binding guidelines, e.g. on minimum holding periods in the Merger Directive, could help to find solutions to obstacles that respect the justified interests of tax administrations in all Member States.

In view of past experience, one might consider involving a working party formed by the heads of national (direct) tax administrations in this work. The former working group of the Heads of Tax Administrations (HOTA) is a possible precedent. Another possibility

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150 For a detailed discussion of these problems see Michelutti, R., *The anti-avoidance provisions in the merger directive and the parentsubsidiary directive*, IFA 2000 and Tiberghien, S. C., *The EU dividend and merger directives with emphasis on the anti-abuse provisions*, IFA 2000
would be to follow the approach of the 6th VAT directive which explicitly provides for a VAT Committee as an interpreting body\textsuperscript{151}.

Given the importance of the underlying problems, "collective monitoring" appears to be a particularly appropriate means to deal with these sorts of company tax obstacles in the Internal Market. Some possible elements of such an exercise are considered in more detail below during the discussion of other targeted remedial measures.

**REMEDIAL MEASURES IN THE AREA OF DIVIDEND TAXATION**

**The classical system vs. the imputation system**

The analysis in Part III of the obstacles in the area of dividend taxation demonstrated that differences in the tax treatment of resident and non-resident shareholders as well as foreign and domestic investment need to be removed, as such differences entail an incentive towards domestic investment.

The classical system avoids this difference in treatment but leads - for both domestic and foreign shareholders - to economic double taxation of the company profit at company and shareholder level. There are, however, several possible ways to at least significantly mitigate the effects of this double taxation, e.g. the application of a reduced rate on dividend income or partial taxation of dividend income only. In any event, this form of double taxation is not a cross-border tax problem.

The imputation system eliminates, via an appropriate tax credit, the double taxation problem but usually only for resident shareholders. Most commentators maintain that this difference in treatment infringes the free right of establishment and the free movement of capital. Regardless of the future development of the jurisprudence in this respect, the best solution for the Internal Market would be, if imputation systems are maintained, for Member States to extend imputation tax credits also to, on the one hand, non-resident shareholders or, on the other hand, foreign income. Given that most Member States do not apply imputation systems this could, however, not be done on a strict reciprocity basis. Generally, imputation systems tend to become rather the exception than the rule in the EU.

The choice between the imputation system, the pure classical system or shareholder relief systems involves a number of additional technical and political considerations (e.g. the inter-relations with the applicable tax rate, the treatment of "small" shareholders and the precise design of the system). However, from the Internal Market perspective under consideration in this study, it can be concluded that the current design of imputation systems creates tax obstacles to cross-border economic activities which only a fundamental change of the system can remedy.

In this context, the framework for discussion of the implications of relevant ECJ jurisprudence outlined in section IV.A 2 above could play a particularly fruitful role in tackling this problem of the bias in favour of domestic investment of certain systems of company taxation, notably imputation systems. The case law of the Court has particular significance in this area. Recent rulings, in particular Verkooijen, suggest that tax

\textsuperscript{151} Title XVII, Art. 29 of the 6th VAT directive.
systems which provide a disincentive to cross-border activity or investment may be contrary to the Treaty provisions on the fundamental freedoms. Such rulings raise important issues for the design of Member States’ tax systems for which more guidance at EU level would be desirable.

Remedial measures concerning the Parent-Subsidiary Directive

Desirable changes to the Directive

Scope of the Directive

On the basis of the analysis in Part III, the Parent-Subsidiary Directive’s double taxation provisions do not need to be radically recast. Though the Directive could be improved, the system for preventing double taxation of dividend payments between associated companies in different Member States works relatively well and enjoys widespread approval. Nevertheless, a number of other improvements would help to remedy the tax obstacles identified in Part III and would assist cross-border business restructuring operations. Given the importance of the underlying problems, it appears that measures to improve the effectiveness of the Directive should be pursued as a matter of urgency.

The Commission remains convinced of the merits of its 1993 proposal for a Directive encompassing all companies subject to corporation tax, whatever their legal form. It would help greatly if the Council were to resume discussions for the adoption of this proposal, which were interrupted in June 1997 to make way for the high-priority “tax package”. Admittedly, a majority of Member States would currently rather see the list of company forms covered by the Directive updated than have the Directive extended to all companies subject to corporation tax. But even if this solution were adopted, there would still be a pressing need to resume discussions of the issue. In its meeting of 26-27 November 2000, the ECOFIN Council cited updating the list as a priority. The agreement reached at the Nice European Council concerning the European Company Statute also entails updating the list, if only to include the new European Company (Societas Europeae).

Triangular situations

The Directive could also define the law applicable to triangular relationships involving permanent establishments. As in the proposal for a Directive on interest and royalty payments, the Parent-Subsidiary Directive could, by applying the same principles, govern situations in which the shares covered by the Directive are held by a permanent establishment located in a Member State other than that in which the company has its registered office. Such a solution would dispel the current uncertainties and overcome divergent approaches across Member States.

The participation threshold

As indicated above, the Parent-Subsidiary Directive currently applies where companies have a direct holding of 25% or more in the capital of the company located in another Member State that is paying the dividends. Taking account solely of direct holdings may adversely affect the internal organisation of groups and hamper restructuring operations. Moreover, some Member States already apply much lower thresholds. There are two options for improving the Directive’s working and resolving these problems.
The first would be to broaden the definition of the holdings taken into account when calculating the 25% threshold to include indirect holdings. This would solve the problems affecting the organisation and reorganisation of groups, but national tax administrations would then have to identify and calculate indirect holdings. The second would be to continue taking account of direct holdings alone but to lower the 25% threshold considerably. This would have the merit of not complicating the Directive’s application by the national tax administrations while eliminating most of the difficulties involved in the organisation of groups. In the interests of simplicity, the latter solution seems preferable. It must be borne in mind that several Member States already apply the Parent-Subsidiary Directive with lower thresholds of 5 or 10% of the subsidiary’s capital, in order to mitigate the double taxation of dividends received.

Methods for eliminating double taxation

The existence of two methods of eliminating double taxation (exemptions and tax credits) results in much complexity. Abolishing this optional system to leave just one method of avoiding double taxation would simplify the Directive’s application within the Community. Many commentators argue that the Internal Market philosophy pleads for the exemption method, which is said to represent Capital Import Neutrality. If the EU were really, from a tax point of view, one Internal Market the CEN-CIN discussion as presented in Part II would become theoretically irrelevant, and turn into an internal debate on the regional allocation of new investments. In this sense, one might argue that the credit method creates an obstacle that is against the spirit of the freedom of establishment. The home state levies additional tax up to its own tax level, as a result of which companies operating in the state by means of a permanent establishment pay more tax than locally operating companies. From this standpoint, "capital import neutrality" as reflected in the exemption method should become the general rule within the Internal Market. Tax would then be levied at the rate of the permanent establishment state and a level playing field created for non-resident companies and local companies as far as taxation is concerned.

However, certain Member States almost always provide for the use of tax credits in their bilateral double taxation treaties, whereas others almost always provide for exemption. This will make it even harder to reach agreement on a common method. What is more, the equations "CEN = credit method" and "CIN = exemption method" seem to be oversimplified and do not correspond to the complex functioning of both methods, which in any event could both be improved.

The Member States may opt to exempt management costs relating to holdings and exclude these from taxable profits. Such management costs may be fixed as a flat rate, but the fixed amount may not exceed 5% of the profits distributed by the subsidiary (Article 4(2) of the Directive). The advantage of a flat-rate system is its simplicity. However, companies should be allowed, provided they can provide justification, to use the actual management costs relating to holdings rather than the fixed amount if the former can shown to be lower than the fixed amount.

In the above-mentioned 1993 proposal, the Commission suggested that Article 4 of the Parent-Subsidiary Directive be amended so that the tax credit accorded to the parent company include the tax paid by sub-subsidiaries where they themselves pay dividends covered by the Directive to the subsidiary company. The Member States gave a
relatively favourable reception to these particular provisions of the 1993 proposal. Renewed discussion of the proposal should also help settle this point.

**Closer monitoring of the implementation of the Directive**

The analysis in Part III suggests that the conformity of national implementing legislation needs to be checked in more depth, especially provisions based on the Directive’s tax-evasion/avoidance clause. This review would (mainly but not only) focus on countries whose law deems the holding of shares in a Community company by non-Community shareholders to be a presumption of tax evasion or avoidance.

As mentioned in section III 3.3.1 above, in its judgment in Case C-28/95 (*A. Leur-Bloem v Inspecteur der Belastingdienst/ Ondernemingen Amsterdam* 2), the Court of Justice ruled that tax-evasion/avoidance has to be determined on a case-by-case basis. Though this case-law concerns the Merger Directive, the Court’s analysis seems applicable to the Parent-Subsidiary Directive.

Firstly, setting aside the Directive where companies paying or receiving dividends are controlled by one or more non-Community companies, without allowing taxpayers to present evidence to the contrary, does not, at first sight, seem consistent with the Directive.

Furthermore, with regard to the creation of a presumption of tax evasion/avoidance, the *Leur-Bloem* judgment does allow Member States to consider certain operations to constitute a presumption of evasion or avoidance as long as the taxpayer has the opportunity to present evidence to the contrary. However, a blanket presumption of evasion or avoidance seems excessive. Such a presumption would lead to a situation in which any shareholding in a Community company by non-residents constituted a presumption of evasion or avoidance. Accordingly, the mere fact of having non-Community shareholders cannot be sufficient grounds for a presumption of tax evasion or avoidance.

**Remedial measures to the tax obstacles hampering cross-border business restructuring operations**

**Relaunching the work on the adoption of Community legislation on company law**

The lack of progress in adopting Community-wide legislation on company law is regrettable. Work on the tenth proposal for a Council Directive on cross-border mergers of public limited companies should resume so that Community law can at last permit company mergers and divisions throughout Europe. The agreement reached on the European Company Statute should facilitate the resumption of work to make cross-border mergers and divisions legally possible. Only the adoption of such legislation will give full effect to the 1990 Merger Directive. The agreement on the European Company Statute could also provide an opportunity to re-launch the planned discussions on transfers of registered offices from one Member State to another.
Remedial measures concerning the Merger Directive

Desirable changes to the Directive

Part III of this study set out a number of shortcomings in the existing Merger Directive. The Commission remains convinced of the merits of its 1993 proposal for a Directive encompassing all companies liable for corporation tax, whatever their legal form. Moreover, although it is not, in the Commission’s view, legally imperative that the Directive be amended to cover the conversion of branches into subsidiaries, the issue could usefully be clarified in the course of a future amendment of the Merger Directive.

To avoid the risk of double taxation, it would make sense to amend the Merger Directive so that, in the case of the disposal of shares received following a transfer of assets, the taxable capital gain was calculated on the basis of the real value of the shares received on the date of the transfer of assets. This would in particular prevent the taxation of capital gains from effectively precluding such operations. There would be no charge to tax on the disposal if the capital gains on securities received in exchange for a transfer of assets could be calculated on the basis of their cost price on the date of the transfer of assets rather than the book value of the assets transferred.

Likewise, in the case of exchanges of shares, the capital gains on the acquired company’s shares received by the acquiring company should be calculated on the basis of the real value of the acquired company’s shares on the date of the exchange.

The Directive could usefully be amended to oblige Member States - in the event of mergers, divisions or transfers of assets - to transfer the transferring company’s unused losses to the company receiving the assets. In this case, it would need to be considered in more detail whether and to what extent Member States could, on the basis of Article 11(1)(a) of the Directive, refuse, on a case-by-case basis, the ability to transfer losses where the restructuring operation clearly is carried out in order to evade or avoid tax. The Court’s judgement of 17 July 1997 on Leur-Bloem (Case C-28/95) provides some arguments in this respect.

Clearly all the above amendments would have to be drafted to ensure that they do not create any new tax avoidance possibilities (e.g. the potential for selling losses between unassociated groups).

Closer monitoring of the implementation of the Directive

The Commission will examine the Member States’ transposition of the Merger Directive in depth. Although in the context of this study it is not possible to produce an exhaustive list of the national measures transposing the Merger Directive, two points are worth raising here.

On the basis of the “anti-abuse” clause in Article 11(1)(a), some Member States make the Directive’s application subject to, for example, an obligation to retain securities received at the time of the transfer of assets or exchange of shares. These provisions have to be carefully examined in the light of the Court’s ruling in Leur-Bloem (C-28/95). Admittedly, the rapid disposal of shares received following a transfer of assets or an exchange of shares could in principle fall within the scope of Article 11 of the Directive. This article may allow Member States to deem, on the basis of certain criteria, specific operations as constituting a presumption of “abuse”. However, the Leur-Bloem
ruling requires that “abuse” be determined on the basis of a case-by-case examination. A blanket refusal to apply the Directive to the disposal of shares received before a given period has elapsed, without granting the taxpayer an opportunity to show that the disposal is above board, would not appear to be consistent with the Directive. Nor do particularly long embargoes of five to seven years on the disposal of shares appear to be inherently compatible with the possibility of presuming tax evasion or avoidance when shares received are sold so long after the original transfer of assets or exchange of shares.

Box 50: 
Judgement of the Court of 17 July 1997 (Case C-28/95 Leur-Bloem)

Summary of the issue
Dutch legislation does not apply the Merger Directive’s provisions on exchanges of shares where the acquiring company does not itself carry on business or where a natural person who is both the sole shareholder and director of the company acquired becomes the sole shareholder and director of the acquiring company. The Dutch authorities argued that this was intended to prevent abuses.

Response by the Court
Even in the above scenario, the operation in question still has to be treated as a merger by exchange of shares. With regard to the arguments concerning the risk of abuse, Article 11 of Directive 90/434 is to be interpreted as meaning that in determining whether the planned operation has as its principal objective or as one of its principal objectives tax evasion or tax avoidance, the competent national authorities must carry out a general examination of the operation in each particular case. Such an examination must be open to judicial review. Under Article 11(1)(a) of the Directive, the Member States may stipulate that the fact that the planned operation is not carried out for valid commercial reasons constitutes a presumption of tax evasion or tax avoidance. It is for the Member States, observing the principle of proportionality, to determine the internal procedures necessary for this purpose. However, the laying down of a general rule automatically excluding certain categories of operations from the tax advantage, on the basis of criteria such as those mentioned in the second answer under (a), whether or not there is actually tax evasion or tax avoidance, would go further than is necessary for preventing such tax evasion or such tax avoidance and would undermine the aim of the Directive.

‘Valid commercial reasons’, within the meaning of Article 11 of the Directive, must be interpreted as involving more than the attainment of a purely fiscal advantage such as horizontal off-setting of losses.

In some Member States shareholders exchanging shares in the acquired company for shares in the acquiring company are taxed before selling shares received in the acquiring company, especially if shares in the acquired company are disposed of by the acquiring company before shareholders dispose of shares in the acquiring company.

This approach does not seem to be compatible with Article 8 of the Merger Directive, which does not, in principle, provide for any form of taxation before a shareholder sells shares in the acquiring company received in exchange for shares in the acquired company.
**Box 51: Article 8 of the Merger Directive**

1. On a merger, division or exchange of shares, the allotment of securities representing the capital of the receiving or acquiring company to a shareholder of the transferring or acquired company in exchange for securities representing the capital of the latter company shall not, of itself, give rise to any taxation of the income, profits or capital gains of that shareholder.

2. The application of paragraph 1 shall not prevent the Member States from taxing the gain arising out of the subsequent transfer of securities received in the same way as the gain arising out of the transfer of securities existing before the acquisition.

**Remedial measures concerning structuring operations not covered by the Merger Directive**

"Freezing" the tax liability on the cross-border transfer of assets

The cross-border restructuring operations that are not covered by the Directive are mainly those which do not involve the creation of a permanent establishment in the Member State in which the assets were located before the restructuring procedure. This situation occurs essentially in two cases:

- Mergers and divisions of companies that do not imply the creation of a permanent establishment in the Member States of the transferring company, as for instance in the case of mergers or divisions of holding companies.

- Certain cross-border operations involving the transfer of goodwill against "cash" between companies of the same group, notably in the case of concentrations accompanied by the closure of sites in one or more Member States and the recovery of the goodwill by a company in another Member State.

The present text of the Directive does not cover these situations as it is difficult to guarantee the financial interest of the Member State of the transferring company (i.e. the company which is absorbed or divided) when no taxable activity or asset is left in that State after the operation.

It should, however, be possible to deal with this problem by deferring the taxation of the capital gains under the conditions put by the directive and keep, at the same time, the financial claim of the Member State in question. This would of course imply amending the Directive in order to take into account the fact that all taxable activities or assets literally disappear in the State that defers taxing the capital gains. Such a new, innovative scheme could include specific declaration requirements. These could be certified by the authorities of the Member State receiving the assets in question and show that the assets bear the tax liability and have not been sold.

Thus, a transfer of assets implying the deferral of capital gains taxation would require appropriate mechanisms of mutual assistance in the administration and the recovery of the tax claim in order to make sure that the Member State of the originally transferring company effectively collects the tax when the assets are sold or transferred. It is
acknowledged that this idea could be perceived as "radical" and, in a sense, breaking a "taboo". Further technical discussions with Member States will, however, help to refine it and avoid misconceptions.

Implications of the reorganisation of companies for the Capital Duty Directive

In its judgment in Case 1/93 Halliburton, the Court of Justice ruled that the freedom of establishment precluded a Member State from restricting exemption from the tax on transactions relating to immovable property, which is normally payable in connection with a reorganisation within a group of companies, only to cases where the company benefiting from this exemption acquires immovable property from a company constituted under national law, thus denying the exemption where the transferor is a company constituted under the law of another Member State.

However, where there is no such discrimination, and insofar as both cross-border and domestic operations are taxed according to the same conditions, the collection of such taxes is not contrary to Directive 69/335/EEC of 17 July 1969 (the Capital Duty Directive).

The existence of capital duties and transfer taxes, which can amount to as much as 10% of the immovable property’s value, is nevertheless a significant obstacle to corporate reorganisation. It would therefore make sense, at least in the case of mergers, divisions and transfers of assets covered by the Merger Directive, to automatically exempt from all such duties and taxes transfers of immovable property from one company to another in the course of a restructuring operation.

Remedial Measures Catering for Cross-Border Loss-Compensation

The tax problems that were identified in Part III in connection with the absence of effective cross-border loss compensation represent an important obstacle to cross-border activities in the Internal Market. According to the panel of experts assisting the Commission services with the study these problems are a crucial (sometimes prohibitive) impediment to cross-border business activities and directly run against the basic principles of the Internal Market. From a business perspective, EU groups of companies should generally be taxed on their consolidated EU-wide profits. This would automatically include the offsetting of losses but at the same time tackle a number of tax obstacles.

The following section considers more targeted solutions only to the specific loss-offset problem and discusses whether these form sensible and promising ways forward. First it presents the technical solutions put forward in the Commission proposal for a Directive of 1991. It then considers the various fundamental issues that need to be decided for devising (targeted) cross-border loss-offset schemes.

In 1991 the Commission put forward a proposal for a Directive concerning the imputation of foreign losses\(^{152}\) that addresses many of the above-mentioned problems. However, this proposal has been discussed only once by Member States in the responsible Council working group. It is still on the table of the Council.

The Directive would apply to all enterprises which are resident in a Member State and which are subject to corporation or (personal) income tax in another Member State. Generally, Member States would be obliged to recognise and relieve the losses incurred by permanent establishments and subsidiaries situated in another Member State. For the definition of "enterprise" the proposal refers to the internal legislation of Member States. Permanent establishments are generally defined as a fixed place of business through which an enterprise of a Member State carries on all or part of its activities. For "subsidiary", there are two requirements: minimum holding of 75% (an indication of sufficient influence on the management of the subsidiary) and majority of voting rights. If Member States extend the Directive to permanent establishments and subsidiaries located outside the EU, the conditions should not be more favourable than within the EU.

The proposal provides for two methods for loss-offset for permanent establishments: the credit (or imputation) method and the method of deducting losses and reincorporating subsequent profits (deduction/reintegration method). These methods, which were explained in detail in Part III, are already now current practice for permanent establishments in most Member States. For subsidiaries, the proposal allows, in principle, only the latter method, but Member States can introduce other methods in addition, e.g. the consolidation method. If there has been a change in the level of ownership, a subsidiary's losses and profits are computed in proportion to the lowest holding of the tax period. The choice of method is generally binding and any provisions for depreciation by the parent relating to the asset value of the subsidiary are not deductible. The income of the permanent establishment or subsidiary is calculated according to the rules of the Member State where it is located. Where the permanent establishment or subsidiary is sold or transformed into a subsidiary or permanent establishment respectively, or when the holding in the subsidiary falls below the limit, loss recapture is possible. Member States may require the clawback of any loss relief which they have given when profits equal to the losses are not made subsequently within 5 years.

From today's perspective and in view of the fundamental developments described in Part I of this study, it might be appropriate to review some of the technicalities of the proposal\(^{153}\). Given the experience with the Merger Directive, it would for instance be

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desirable to bring the definition of "enterprise" in line with that of the Merger Directive
and to include specific safeguard measures (aimed at avoiding the possibility of non EU
resident subsidiaries offsetting losses against EU parent companies). As indicated
above, general anti-avoidance measures have not proven very successful either in the
Merger Directive or the Parent-Subsidiary Directive and may be subject to judicial
criticism on the basis of jurisprudence by the Court of Justice. Moreover, the issue of re-
incorporation of losses when the permanent establishment or subsidiary is sold, wound
up or, in the case of a permanent establishment, transformed into a subsidiary could also
be addressed more precisely.

Furthermore, the proposal does not indicate how the loss is to be calculated in the
situation where an enterprise has (i) both a permanent establishment and subsidiaries or
(ii) several subsidiaries in another Member State. Currently, this needs to be determined
according to Member States' detailed rules on the elimination of double-taxation (i.e.
credit or exemption method). Finally, the proposal is silent on whether the loss
deduction can be claimed on an overall basis or per country. How are differing tax
periods between Member States dealt with? How is the exchange rate to be determined
while translating losses into the currency of the country where the enterprise is resident?
Finally, the order of set-off could be specified under which profits of the permanent
establishment are to be re-incorporated into the taxable income of the enterprise.

**Fundamental issues for cross-border loss-compensation schemes**

The following section refers in places to the above-mentioned Commission proposal but
the issues under discussion are all of a general nature. Some of these issues are only
touched upon, and require further analysis.

*Ownership threshold and indirect ownership*

As regards subsidiaries, it is necessary to determine which subsidiaries of a parent-
company could benefit from cross-border loss-compensation.

The threshold of 75% direct shareholding in subsidiaries fixed in the proposal for a
Directive is often considered too high, particularly given the explanatory memorandum
of the proposal identifies the majority of the voting rights as the decisive criterion. It has
thus been suggested fixing the threshold at 50% plus one share. Others consider the
threshold is too low, as the appropriate thresholds for groups of resident companies in
national legislation are mostly higher\(^ {154} \). One might make the adoption of the draft
Directive easier by providing a higher threshold which could then be gradually lowered.
Thus, the revenue implications for Member States would be limited in the beginning.

Moreover, the proposal does not specify how the loss deduction, if any, is to be effected
in the case of indirect shareholdings (although the proposal only covers the immediate
parent company), i.e. the treatment of the losses in subsidiaries of subsidiaries. Industry
pleads for both direct and indirect shareholdings to be taken into account in computing
the qualifying ownership threshold, be it 75% or 51% or something else. In this context,
it is however most important to make sure that identical losses are not deducted twice.

\(^ {154} \) DK 100%; I and NL 99%; F 95%; E, P, FIN, S 90%; UK, IRL, A 75%; D 51%.
Generally, it appears that the imposition of relatively high thresholds and the refusal to take indirect shareholdings into account are motivated by Member States' concern about revenue losses and abusive behaviour. Tax administrations sometimes claim that indirect shareholdings are difficult to control and audit. They thus wish to build safeguards into any proposal on cross-border loss-compensation, in particular to avoid "double-dip" situations (i.e. for example the deduction of an identical loss in two different jurisdictions). Therefore, from a pragmatic perspective the political acceptability of any such proposal has to be balanced against a more economic-based reasoning (seeking to determine effective control or voting right majority).

Recapture of losses

Another general problem relates to the recapture of losses which have been relieved when the company becomes profitable. It is important to make a clear distinction between cases where the permanent establishment or subsidiary starts to make profit and cases where it does not. From a political point of view, it is fair to say that the Member State of the subsidiary or permanent establishment should, provided that the business becomes profitable, "finance" the loss. As regards subsidiaries, the technical method for achieving this is, as indicated above and provided for in the proposal for the directive, the deduction/reintegration method. The way this works is explained in Box 52 below.

In other cases, it seems legitimate to ask why there should be any recapturing in the State where the head office is located. Clearly, the deduction of capital losses should be matched by a corresponding taxation of capital gains.
Box 52: Recapture of losses - which Member State should bear the tax-reducing effect of the loss of a subsidiary?

Under the proposal for a Directive, the losses incurred in a certain period by a subsidiary of a company are credited. In the subsequent years, the profits of the subsidiary are also included in the taxable income of the parent company but the subsidiary can now carry over the loss that was previously transferred to the parent-company (which now adds it back). Alternatively, in year 2 when the subsidiary becomes profitable again no adjustments are made. In the first case, it is the country of the subsidiary which ultimately bears the tax-reducing effect of the losses (Member State B), in the second it is the country of the parent-company (Member State A).

Moreover, the proposed Directive allows Member States to oblige companies to reincorporate profits by the end of the fifth year following the year in which the loss became deductible, if subsequent profits do not exceed these losses. This 5 year period seems rather arbitrary, as the carry forward compensation of losses permitted by the domestic tax laws differ very much among Member States. A reference to the carry forward period allowed internally might avoid discrimination between foreign and domestic subsidiaries and/or permanent establishments. This reference to domestic legislation could, where it exists, include the carry back compensation too. Such an approach would, however, imply a lack of homogeneity. This would be regrettable in the sense that good legal and economic reasons can be found in favour of unlimited domestic loss carry forward. Anyhow, it seems that this feature is not decisive for cross-border loss-compensation. It is important that fundamentally the (sufficient) carry over

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155 Unlimited in B, D, IRL, L, NL, S and UK; 10 years in E and FIN; 7 in A; 6 in P and 5 in DK, EL, F and I.
of losses is possible. Generally, the recapture of losses is not a common feature of Member States' domestic tax systems.

**Horizontal vs. vertical offsetting of losses**

Industry regrets the exclusion of the horizontal offset of losses (e.g. the losses of one subsidiary are offset against the profits of another subsidiary), but it should perhaps also be noted that not all Member States provide for horizontal offsetting of losses domestically. It is nevertheless true that arrangements that only allow the up-stream loss-compensation at the level of the parent imply the risk of "losing" losses when the parent-company has not enough profits for full absorption.

One can therefore find strong arguments for including also the situation of profits in the Member State of the permanent establishment and losses in the Member State of the subsidiary. Up-stream vertical loss-compensation only is said to put smaller Member States implicitly at a disadvantage, as larger Member States obviously offer more room for the immediate compensation of losses in the home market of the subsidiary. However, the revenue effects of horizontal cross-border loss-offset would hit Member States with a relatively high number of subsidiaries in a particularly strong way.

Moreover, horizontal cross-border offsetting of losses creates new problems *sui generis*. If, for instance, a multinational enterprise having its head office in one Member State and one subsidiary in seven others, suffers losses in three subsidiaries which cannot be absorbed by the head office, the question arises as to which of the other four subsidiaries shall then absorb the surplus loss, and how it should be recaptured. A general problem of cross-border loss-compensation is particularly acute for horizontal loss-offset: the targeted "creation" or "shifting" of losses may open undesirable possibilities of tax avoidance (or even evasion). These questions also illustrate the inherent difficulties in any solution in this area which falls short of full consolidation of profit and loss at EU level.

**Which rules apply in computing the losses?**

A general problem that was singled out above concerns the question as to which country's rules apply for determining the deductible loss.

While the proposal for a Directive indicates that the losses should be fixed on the basis of the rules of the country in which they occur, many suggest applying the parent-company country's rules for calculating the quantum of loss deduction (or the income to be reincorporated) of the foreign subsidiary or permanent establishment. This would contribute to a more consistent approach and it would avoid Member States having to accept that in certain situations the calculation of foreign losses was more generous than that of domestic losses. Moreover, it should not be overlooked that computing the losses under the rules of the country in which they occur would open tax planning opportunities as multinational groups might try to ensure that expenses were always incurred in a jurisdiction in which they were deductible.

Notwithstanding these objections of principle, the approach of applying the rules of the home country of the parent-company or head office looks appealing from a more practical standpoint. Moreover, it is noteworthy that in applying the credit method for permanent establishment income generally Member States tend to re-calculate foreign (losses and) profits according to their own rules and limit the credit given for foreign tax
paid to the amount that would have been due while applying their tax rate to the profits calculated under their laws. Hence, their wish to avoid calculating foreign losses in a more favourable way than domestic losses is consistent with current practice.

Related problem areas

There are a variety of other problem areas to cross-border loss compensation, which deserve a brief mention. First, the arrangements in double taxation treaties, particularly in relation to permanent establishments. As explained above, the differences between existing double taxation treaties can create problems, especially in triangular situations. Possible remedial measures in this respect are considered in section IV. B 9 below.

Secondly, it needs to be examined whether partnerships can be treated in the same way as companies in comparable situations of cross-border losses. Although in principle highly desirable, the technical complexities do not allow for a clear-cut conclusion. For instance, the proposal for a Directive explicitly includes "partnerships" in its scope while this study provides some arguments to be cautious in this respect. Given the current situation, it appears justifiable to concentrate first and foremost on losses of subsidiaries and permanent establishments and consider partnership losses separately.

Finally, as mentioned above, the treatment of pre-acquisition or pre-merger losses needs to be kept in mind. The idea of "freezing" the theoretical tax liability at the moment of the merger and its deferral until the related items are sold or a de-merger operation takes place seems to provide a promising way forward. This idea was further elaborated above, in the section on possible remedial measures to tax problems relating to cross-border restructuring operations.

Possible ways forward

On the basis of the above analysis it is possible to consider the fundamental direction that a targeted initiative in the area of cross-border loss-offset might take. First, it is logical to re-assess the existing Commission proposal for a Directive. Second, ideas based on different approaches that build on the current experience in (some) Member States should be explored.

Re-assessment and completion of the proposal of 1991

After ten years on the table of the Council, the current Commission proposal for a directive would clearly need to be technically refurbished and up-dated.

However, one might have doubts about the ultimate feasibility of such technical improvements. Many of the difficulties relating to the proposal for a directive of 1991 boil down to the different definitions and concept of "loss" in the various Member States. Therefore, it might be argued that before introducing cross-border loss-compensation some approximation or harmonisation is required in this area. What is more, without such approximation or harmonisation the revenue consequences for Member States, both due to the desired effect of cross-border loss relief and the undesired effect of drastically increased opportunities for profit/loss-shifting and appropriate tax planning, would be substantial.
One possibility to address this problem would be to look at an earlier Commission proposal for a Directive of 1984 which proposed three years carry back and unlimited carry forward of losses in the domestic laws of Member States. It might be appropriate to revive this proposal, devise harmonised rules on the definition of losses and the timing of compensation and, once adopted, to build on this base the second step of cross-border loss-compensation as put forward in the 1991 proposal. However, the Commission has withdrawn this proposal and argued that the domestic loss-compensation arrangements fall under the institutional sphere of competence of Member States (subsidiarity). It is also doubtful whether it is technically and politically possible to approximate only the definition of losses at EU level. This is because the definition of losses cannot be separated from all other components of the tax base.

Consequently, a more fundamental rethinking of key elements of the proposal may be needed. It is in particular the arrangements for deciding on which country's rules should apply for determining the losses that creates problems. Applying the rules of the parent-company or head office country would remove many of Member States' concerns and resolve a number of practical problems. Moreover, such an approach could contribute to finding a pragmatic solution to the other problems mentioned above, such as determining the participation threshold. Without common rules one could consider applying differing home state rules.

Generally, Member States' diverging approaches and definitions in this area should be manageable for the companies involved as most multinational companies already work with these and re-calculate profits and losses as required under tax and accounting rules. Therefore, it is true that the compliance cost resulting from the co-existence of 15 tax systems in the Internal Market would persist, but the advantages of cross-border loss-offset seem to outweigh this disadvantage.

More general EU loss-consolidation

The problems relating to the (lack of) cross-border offset of losses boil down to the basic question on whether or not a 'group' of companies could and should be recognised as such for taxation purposes at EU level. If the basic reply to this is yes, and the Internal Market strongly presumes this reply, thought should be given to the technical means of achieving this. Regardless of varying terms of art and different systems, consolidation of profits and losses at the level of the parent-company is an essential feature of all company tax regimes. Clearly, from a business perspective the ideal solution to the problem of cross-border loss-offset (among other things) would be to provide EU businesses with a common consolidated corporate tax base for their EU activities.

As indicated above, two EU Member States operate cross-border consolidation schemes which in practice focus on the tax treatment of losses. France offers a system of consolidated world-wide corporate income taxation which is applied very restrictively and subject to approval by the Minister of Finance. The rules of this regime are generally considered to be very complex and in practice only a few big French groups

156 COM(84)404; proposal for a directive on the harmonisation of the laws of Member States relating to tax arrangements for the carry-over of losses of undertakings, OJ C 253, 20.091984, p.5 [withdrawn 20.11.1996 (OJ C 2, 04.01.1997, p.6)]
obtain the formal agreement to implement it. Denmark applies a comparable system which appears to be less complex and more accessible. Business circles appear to consider the Danish approach a promising way forward\textsuperscript{157}.

The Danish system was originally intended to accommodate several concerns but after numerous changes to the regime its advantages now mainly relate to cross-border loss-offset. In a cross-border context, it effectively provides for loss-compensation of subsidiary losses. It only applies Danish rules, i.e. the tax rules of the country of the parent-company, for defining and calculating the losses, determining ownership thresholds etc. This is a major difference to the Commission proposal for a Directive of 1991. That proposal, however, would also cover losses from permanent establishments which the Danish joint taxation system does not\textsuperscript{158}. On the other hand, the Danish system, unlike the Commission proposal, gives the country of the parent-company the possibility to tax the profits of the subsidiary.

The Danish 'joint taxation' system is described in the following box.

\textsuperscript{157} See: Luther, S., \textit{Unternehmensbesteuerung im Binnenmarkt - Behinderung von grenzüberschreitenden Aktivitäten europäischer Unternehmen}, contribution for the CFE Forum 2000, Brussels

\textsuperscript{158} This does not mean that there is no offset of losses in permanent establishments at all. Such offset just follows the general rules and is not includ
Box 53:
Basic features of the Danish 'joint taxation' system

A Danish parent company may apply for joint taxation with its wholly owned Danish and foreign subsidiaries. Under the scheme, the net total of each company’s taxable profits, computed in accordance with Danish tax rules, constitutes the Danish parent company's taxable profit. The most important conditions for obtaining permission for joint taxation are as follows:

- Danish subsidiaries must be wholly owned by the parent company directly or together with other subsidiaries.
- The parent company must directly or together with other subsidiaries own 100% of the shares in a foreign subsidiary or the maximum percentage allowed under the legislation of the foreign country.
- All companies included under joint taxation must have the same financial year.
- The shares in subsidiaries included under joint taxation must have been owned for the entire financial year. Newly incorporated companies may be included under joint taxation from the date of incorporation.
- Application for joint taxation with a foreign subsidiary will, however, be disallowed if more than 50% of the share capital in the foreign subsidiary has been acquired from a related company. Similar rules apply to subsidiaries which have been foreign but are now considered resident in Denmark, because the effective management has been moved to Denmark. However joint taxation will be allowed if the Danish parent company directly or indirectly has owned more than 50% of the share capital of the foreign subsidiary in the whole period during which the company has been related.
- All subsidiaries in a group do not have to be included under joint taxation. It is also possible to exclude from joint taxation in any given year a subsidiary which has previously been jointly taxed. Subsequent re-inclusion of the subsidiary is normally not possible.

The net total of each company's taxable profits, computed in accordance with Danish tax rules, constitutes the tax base of the companies included in the joint taxation scheme. The tax is charged to the Danish parent company. Foreign taxes paid by subsidiaries included under joint taxation can be set off against Danish taxes using the credit method. This applies irrespective of possible exemption provisions in a double tax treaty. Jointly taxed companies are jointly and severally liable to taxes relating to the years in which they have been jointly taxed. The main benefits of joint taxation are that tax losses in Danish companies and foreign subsidiaries can be set off against profits of other profitable Danish companies.

In order to ensure that the use of tax losses arising from foreign jointly taxed subsidiaries only has effect as a deferred tax, complex rules on claw back of tax losses exist. Generally withdrawal of foreign subsidiaries from Danish joint taxation will result in full claw back of deductions for tax losses corresponding to the total tax losses which have been set off against positive taxable income in other companies included under the joint taxation and which do not correspond to profit in later income years, unless:

- the joint taxation ceases due to a sale of shares to a non related company;
- the joint taxation ceases due to bankruptcy or liquidation without transfer of the assets to related companies.

In these cases the claw back is limited to the capital gain on a fictitious sale of the assets at market value increased by the tax-exempt dividends and tax-exempted capital gains on the sale of shares in the subsidiary during the past five years. If the Danish parent subsequently receives tax-exempt dividends or capital gains, claw back will be effected until the total tax losses have been recaptured. Full claw back of tax losses will also apply if the activities of the foreign subsidiary (or part of it) are sold to related companies, if the Danish parent company becomes a resident in another country, or if it regains control within 5 years. Claw back of tax losses will be eliminated in case of a merger of two jointly taxed subsidiaries or a merger of the Danish parent company and another Danish company provided certain conditions are met. Finally, there is a rule which, in the case where a foreign subsidiary can be included in a foreign domestic group taxation scheme, prevents the double use of a loss.

One could devise an EU scheme pursuing the Danish approach on the (profits and) losses of subsidiaries and complete that by appropriate rules on permanent establishment losses. Here, as demonstrated above, loss-compensation is already
immediate when the credit method is used. However the 100% participation requirement forms an important restriction to this possibility.

As also indicated above, there may be a specific problem concerning the other side of the coin, the profits of the permanent establishment. When the foreign tax credit available in relation to these profits cannot be tax-effective in a given period as the headquarter company is in a loss situation (and does not pay tax) or when its tax liability is smaller than the credit, the tax credit would be "lost". This problem could be overcome when foreign tax credits are generally made available for carry forward. This solution would be consistent with the possibility of carrying forward losses in permanent establishments and ensure that similar domestic and international situations are treated similarly. For many Member States the effects of such an approach would be less dramatic than one might expect at first sight. Many Member States already apply the credit method to permanent establishments. If they do not have it already, they would have to introduce the carry forward of tax credits.

Granting the tax credit also to subsidiaries, implicit in the Danish system, is much less revolutionary than one might think at first glance. The "revenue sharing" between Member States on that basis would be "fair" in the sense that no Member State would have to give up its right to levy tax locally. Generally, this idea does not provide for general horizontal offset of losses. This should comfort the general fear of revenue losses due to manipulation. Clearly, "low-tax countries" would not feel drastic revenue effects. It should be observed that, generally, enhanced possibilities for cross-border loss-offset should go hand in hand with more intense co-operation of national tax administrations in order to prevent abuse.

Under this approach, which clearly needs to be further elaborated, EU companies would effectively be permitted to establish a complete up stream vertical offset of losses cross-border and thus resolve at least the basic "losses" problem. It would fall short of addressing other group-related tax problems. There might even be some additional compliance cost involved: the subsidiary could effectively have to run two sets of accounts (according to the requirements of the two Member States involved). Moreover, many technical details would have to be sorted out.

Regardless of the precise technicalities of the solution ("traditional" loss-transfer under the Commission proposal vs. "innovative" joint taxation of losses and profits) the basic issue should be followed up since it concerns one of the most important company tax obstacles in the Internal Market.

Finally, it is noteworthy that the United States have chosen another radically different approach to deal with the problems created by the differing rules on loss-compensation for subsidiaries and permanent establishments. This - much-disputed - approach of granting the enterprises concerned a simple option is described in the following box. In the panel consulting the Commission services on this part of the study these arrangements met with wide support. Some members of the panel suggested that this procedure could be a practical answer to requests by business in the EU for cross-border loss-compensation. The fact that companies have the incentive to run a loss-making foreign start-up for, say, the first 3-5 years as permanent establishment and as subsidiary in the subsequent profit-generating phase is very illustrative in this respect. Such situations could indeed be overcome by a procedure under which the taxpayer would have the possibility to elect for five years that the subsidiary is treated for taxation
purposes as if it was permanent establishment. This less ambitious solution could help to eliminate many of the problems if Member States are not prepared to adopt the Commission’s proposal for a Directive.

**Box 54:**
"Check-the-box" - how the USA ensure that losses of foreign subsidiaries are offset as if they stemmed from foreign permanent establishments - an example for the EU?

According to a regulation that entered into force beginning of 1997, US partnerships and limited liability companies can elect for qualification for tax purposes either as a corporation or partnership. In principle, this election is also open to foreign companies, but a number of foreign companies are listed for obligatory qualification as corporations. For instance, a German Aktiengesellschaft is always necessarily qualified as a corporation according to US law (as it forms part of the list) whereas a Gesellschaft mit beschränkter Haftung, i.e. a corporation subject to German corporate income tax, can elect for the status of a partnership and thus be treated as a branch of a US-parent for US taxation purposes. The basic idea of the election is to avoid the multiple classification problems of 'partnerships' and/or 'corporations' in various jurisdictions. However, it effectively enables US parent companies by a simple tick in an appropriate box on the tax return to make sure that foreign losses are taken into account in their profit determination. The fairly complex standard practice of "check-the-box" can thus eventually result in an effective global consolidation for US companies. It may be noted that this "generous" feature is embedded in an environment which is generally considered as extremely anti-abuse-conscious.

**REMEDIAL MEASURES FOR ADDRESSING THE TRANSFER PRICING TAX PROBLEMS IN THE INTERNAL MARKET**

In Part III, it was established that the tax problems relating to transfer pricing in the Internal Market mainly relate to (i) high compliance cost and (ii) the risk of double taxation. Given the significant complexity of the problems the various possible targeted solutions should be considered in some detail and because of the importance of the issue this section attempts to explore all possibilities, regardless of their relative prospect of success.

This section starts by considering the intense activities of the OECD in this area which form a framework for the search for solutions at EU level. It then considers various possibilities to remove first, the obstacles giving rise to compliance costs and second, those giving rise to double taxation. The latter also discusses mechanisms for settling transfer price disputes between Member States.

At various points, this section refers to the transfer pricing surveys of business organisations carried out by Ernst & Young in 1997 and 1999, and a questionnaire on transfer pricing produced and sent to companies by the Commission Services in 2000. See Part III for further details of these.
The relationship between the OECD and possible EU activities on transfer pricing tax problems

The work of the OECD

The OECD agreed a comprehensive set of new transfer pricing guidelines in 1995. These represent a compromise reached by all OECD member countries and serve as a common basis for governments, tax administrations and multinational enterprises. They are also applied in a number of non-OECD countries.

Their high level of acceptance means that the Guidelines are a major tool for avoiding both double taxation and unintentional ‘non-taxation’. They thus contribute to the promotion of international trade and investment in a global context but also of course within the Internal Market. It is therefore important that any targeted solutions take into account the Guidelines and do not apply divergent solutions without carefully considering the implications this could have for Member States’ relations with third countries. For resource and timing reasons it is of course also important not to duplicate OECD work.

Box 55: The OECD transfer pricing guidelines – including future working areas

The Guidelines include the following main chapters:

- Chapter I: The Arm’s Length Principle
- Chapter II: Descriptions of the Traditional Transactions Methods
- Chapter III: Other Methods
- Chapter IV: Administrative approaches to avoiding and resolving transfer pricing disputes
- Chapter V: Documentation
- Chapter VI: Special Considerations for Intangible Property
- Chapter VII: Special Considerations for Intra-Group Services
- Chapter IX: Cost Contribution Agreements
- Appendix 1: Guidelines for Monitoring Procedures on the OECD Transfer pricing Guidelines and the Involvement of the Business Community
- Appendix 2: Examples to Illustrate the Transfer Pricing Guidelines
- Appendix 3: Guidelines for Advance Price Agreements (APA)

The Guidelines are not static, but are constantly being updated, amended and supplemented. Current work focuses on the following areas:

159 The OECD Council approved for publication on 13 July 1995 new OECD transfer pricing guidelines for Multinational Enterprises and Tax Administrations. The Guidelines are a revision and compilation of previous reports by the OECD Committee on Fiscal Affairs (CFA) and replaces the previous report by CFA addressing the transfer pricing issue. These are “Transfer Pricing and Multinational Enterprises” (from 1979), “Transfer Pricing and Multinational Enterprises – Three Taxation Issues” (from 1984) and “Thin Capitalisation” (1987).
First, providing guidance on how to apply the general principles of the Guidelines to complex situations, such as permanent establishments, financial services, and global trading and thin capitalisation. This is expected to lead to the introduction of new chapters.

Second, monitoring the practical implementation of the Guidelines and amending and updating the existing guidance given in the light of this monitoring. The business community, via the Business and Industry Advisory Committee of the OECD (BIAC), is associated with this activity. The monitoring process is set out in Appendix 2 of the Guidelines. Appendix 2 provides that the monitoring process is carried out through four related projects:

- Peer reviews of Member Countries; the purpose is to gain detailed information on legislation, practices and experiences of Member Countries,
- Identification and analysis of difficult case paradigms; the purpose is to identify difficult fact patterns and problems which may be illustrated by practical examples and which present obstacles to a consistent application of the transfer pricing methods, along with monitoring of areas where the Guidelines offer no or inadequate guidance,
- Review of changes in legislation, regulations and administrative practices in Member Countries; Member Countries also report on their own updates of legislation and practice,
- Development of further practical examples to illustrate the application of the arm’s length principle.

The extent to which the existing guidance on transfer pricing can be applied to electronic commerce is also being examined.

Third, the improvement of administrative procedures. The various methods of dispute resolution, i.e. the mutual agreement procedure and arbitration are currently being examined.

Fourth, via multilateral seminars the OECD encourages countries outside the OECD to associate themselves with, and apply the Guidelines.

Possible EU initiatives

Any targeted solution should thus build on the fundamental principle underlying the Guidelines, i.e. that multinational enterprises must conduct their business on arm length terms, and be willing and able to demonstrate to the tax authorities that this is the case. However, this does not imply that there is no room at all for Member States to agree, within these principles, upon more targeted solutions to provide for the smooth functioning of the Internal Market.

As an underlying principle Member States should of course always act in accordance with the Guidelines. However, these are not always complete in every detail and sometimes leave room for further interpretation and/or guidance. This is for instance the case with respect to documentation requirements. This is not surprising given that they represent a policy compromise between all the OECD Member Countries. It should be
possible for the 15 EU Member States to develop this compromise further in certain areas and thereby reduce compliance cost by providing clearer more definite guidance for EU tax administrations and businesses. Furthermore, in some cases the Guidelines lay down recommendations, which it is then up to each Member Country to follow. This is for instance the case with respect to the application of certain aspects of dispute settlement mechanisms, the use of simultaneous audits, Advance Pricing Agreements and 'safe harbours'.

It follows from the foregoing that it will probably not be appropriate to suggest a strict EU approach to identify and eliminate all (potential) differences among Member States in the application of the OECD transfer pricing guidelines. The resource and timing implications would be substantial, and duplication or interference with OECD work should be avoided. It is equally important not to jeopardise compromises that have been reached at OECD level. However, in certain areas there is room for an EU approach, and moreover co-ordinated action at EU level appears to be necessary.

Where businesses are reasonably compliant with their obligations to co-operate with the relevant tax administration, they should not suffer disproportionately from high compliance costs. Under the 'Single Market philosophy' internationally operating businesses should not systematically suffer disproportionately higher compliance costs than domestically operating ones and instances of double taxation need to be tackled. This applies to the transfer pricing area just as it does to other aspects of company taxation.

Reducing the compliance cost relating to transfer pricing taxation

As Part III showed, compliance costs relating to transfer pricing mainly result from the obligation to put together appropriate documentation and find comparables. These issues are considered further below. Given that most Member States are still in the "learning process" as regards the implementation of transfer pricing guidelines and documentation requirements and in view of the complexity of the issue, increased co-operation between them appears to be a promising way forward for addressing this issue. Finally, a specific section is devoted to the possibilities for tax administrations to extend their co-operation in this area.

Documentation requirements

The 1999 Ernst & Young transfer pricing survey clearly illustrates that multinational enterprises in principle favour integrated global documentation. In general 68% of multinational enterprises placed medium-high priority on a global approach. The main reason given for this was that an integrated approach provides consistent documentation (51%). Other reasons given included the possibilities of identifying opportunities of tax planning (31%) and cost savings (30%). The survey, however, also showed that multinational enterprises in practice only rarely (19%) apply a global approach. One of the main reasons for multinational enterprises not taking a global approach is probably the different documentation requirements (including questions of language). The existence of a common EU documentation guidance would probably serve as a major incentive for business to prepare EU and, as necessary, global documentation. Moreover, such guidance on common EU documentation rules would help to find an agreement on documentation requirements in the international context, not the least at OECD level.
Another reason for seeking a common EU approach on documentation requirements is the important concept of the prudent business manager in the documentation chapter of the OECD Guidelines (5.4). This concept states that the process of considering transfer prices should be determined in accordance with the same prudent business management principles that would govern the process of evaluating a business decision of the same complexity and importance. This implies that tax administrations cannot expect taxpayers to devote more resources to setting transfer prices at arm's length than they would for other aspects of their business, which of course affects the level of documentation that tax administrations can reasonably expect. The practical application of the prudent business manager is difficult, but this makes it all the more important that Member States adopt the same approach.

The time for a common approach also seems to be appropriate. Whereas a number of Member States have recently introduced formal documentation requirements, the majority of Member States have not, but are likely to do so in the near future. Furthermore, some of the Member States that have introduced documentation requirements have not yet issued detailed guidelines on the actual application of these requirements.

Often multinational enterprises are active in both the EU and other (OECD) countries, and it is therefore important that such documentation requirements do not interfere with the OECD transfer pricing guidelines. However, it is difficult to see how such a problem could occur. Apart from providing guidance to taxpayers on documentation, the most important objective in the documentation chapter of the Guidelines is to keep the right balance between the right of tax authorities to obtain from the taxpayer as much information as possible to ascertain whether the price is at arm's length, and the compliance cost to the taxpayer in providing the information. In general, EU Member States apply less robust documentation requirements rules than other OECD countries. It is worth noting that the OECD have not indicated any intention of revising the chapter on documentation.

It is evident that such an initiative has important resource and timing implications. The resources required by Member States will probably be material and the process is likely to be somewhat lengthy. The relationship with the (general) OECD work on transfer pricing would also need to be carefully planned. None of these difficulties are, however, of a fundamental nature. The way forward should therefore be explored more concretely in an appropriate forum of Member States at EU level. Such a forum could in fact usefully address all EU transfer pricing problems.

Comparables

One of the main difficulties in fulfilling the documentation requirements for transfer pricing is the determination of a comparable transaction (or company) at arm’s length. This problem of finding arm's length comparables for valuing intra group transactions is not straightforward to solve. The trend towards more intra group transactions and fewer independent transactions, more complex group structures and the increased use of intangibles etc. has the effect of reducing the number of easily applicable clear comparables available to both business and tax administrations. Various ways have been suggested for tackling this question at EU level.
One could consider whether it would be helpful if the Commission (or another EU body) were to initiate the establishment of an EU database. As mentioned above, a number of commercial databases including some at the Pan-European level are available. None of these databases is, however, developed specifically for transfer pricing purposes, and the financial information tends to be too aggregated. Furthermore, information is often not consistent, as accounting principles and financial statement requirements vary between Member States and even within Member States (in many Member States business can choose between different principles).

An EU transfer pricing database could be founded on existing information, i.e. without changes in financial information requirements. It could improve the existing databases by including more companies, more detailed descriptions of company activities and more specific market information etc. Another benefit would be that business and tax authorities to a greater extent would be using the same information source. One could also consider establishing a transfer pricing Forum where tax authorities and business could make database searches. If there were a possibility of making joint searches this would enhance co-operation and understanding between different tax administrations, and between tax administrations and business.

Apart from finding the resources required to establish and maintain such a database, there are however some potential downsides. One is that database comparables based on the existing level of information tend to give “only” profit comparables (mainly Transactional Net Margin Method (TNMM) and Comparable Profit Method (CPM)). The use of profit comparables is controversial among tax administrations (especially within the EU), and often gives rise to disputes on the correct transfer price or range of prices. On the other hand it could be argued that a “bad comparable” is better than “no comparable”, and that in practice most EU tax authorities will accept a well documented and justified transfer price even if it is based on a profit comparable. Another problem could be the tendency to exacerbate the present situation where some EU tax administrations insist on the taxpayer providing a comparable based on data from an independent party even where a prudent business manager would not have resorted to searching for such an external comparable.

It seems uncertain whether the potential advantages of this sort of initiative would exceed the disadvantages, in particular when the resource requirement is taken into account, if the present level of available (financial) information is not improved. Therefore, any potential initiative towards a new EU transfer pricing database should probably be linked to an improvement in the level of (financial) information compared to that available in existing commercial databases. This would of course require harmonised and more detailed accounting principles and financial reporting requirements.

In conclusion, it seems sensible to explore the idea of an EU database for comparables first in an appropriate working group which could then, if desired by the participants, be developed into a common search forum. In comparison, however, other remedial measures might be more important for the removal of transfer pricing obstacles.
Work on the application of the various transfer pricing methods

Currently, not all transfer pricing methods are accepted by all Member States. It appears that agreement on the detailed use of profit methods would constitute a big step forward. Member States do not generally accept the application of profit methods (Transactional Net Margin Method (TNMM), Comparable Profit Method (CPM) and Profit Split Method (PSM)) for determining transfer prices at a detailed level. Indeed, it seems fair to say that currently most Member States have gained only little experience with these methods. A forum for exchanging best practice at EU level could help to improve this situation. It should be noted that the OECD is in the process of working on how (and when) its Members should apply profit methods. This process will lead to a more uniform application of the methods.

Some commentators have floated the idea of prescribing more specifically which precise method should be applied to which transaction and thus develop a certain (binding) typology. This suggestion is not undisputed and there is also a concern relating to the risk of harmful tax competition. On the one hand, there would no doubt be a gain in simplicity and certainty of application but on the other hand there would be a risk of creating too strict rules for similar cases which are very different in their details. Again, the use of the various methods for identifying comparables could be usefully considered by Member States.

Finally, the trend towards truly pan-European business structures implies the concentration of some functions, for instance service functions such as marketing, headquarter services and R&D. Very often these service costs – which can be substantial - must be allocated to the various companies in a group. The OECD transfer pricing guidelines include extensive guidance on services and cost contribution agreements. However, due to the importance of the subject a uniform application of the guidelines would nevertheless be desirable and could be usefully discussed by Member States.

Co-operation between tax administrations

Surprisingly, even business representatives sometimes argue in favour of more co-operation (including in tax audits) between Member States' tax administrations on transfer pricing. This is because such co-operation would have positive effects for both tax administrations and taxpayers.

The OECD transfer pricing Guidelines include a comprehensive section on the use of simultaneous audits (Chapter IV, D). The Guidelines recommend a greater use of simultaneous audits, as these provide substantial benefits for both tax administrations and taxpayers. The OECD has also agreed upon a Model Agreement on simultaneous audits containing guidelines on the legal and practical aspects thereof. On 23 July 1992 the OECD Council made a recommendation to Member Countries to use this Model Agreement.

The main advantages of a simultaneous audit are as follows:

- It facilitates better tax audits.
- It helps tax administrations to acquire a better understanding and insight into the overall activities of a multinational enterprise.
• It generally tends to foster mutual understanding and trust between tax administrations.

• It allows for the identification of potential transfer pricing disputes at an early stage and thereby minimises the use of litigation.

• As a simultaneous audit is not a one-sided but a multilateral approach, it improves opportunities of avoiding double taxation.

• Business also benefits from savings of time and resources, for instance because tax administration enquiries can be co-ordinated and duplicate requests avoided.

Despite all these advantages, as sketched out above, the Commission services transfer pricing questionnaire indicates that Member States do not participate in many simultaneous audits. A more comprehensive use of simultaneous audits within the EU should therefore be considered. A possible way forward in this area would be to build on the very positive experience with the FISCALIS programme which is designed to foster simultaneous audits and common training in the area of indirect taxation. The Commission services have already raised this possibility in the appropriate working group with Member States and will follow it up in future. However, at present, some Member States have legal impediments for participating in joint audits.

Exchange of information between tax administrations is another method of obtaining information from sources other than the taxpayer, thus reducing compliance cost for business. The extended exchange of information between tax administrations should therefore be encouraged. This would also correspond to a current general trend following the OECD work on international taxation. It is noteworthy that the Council working group on the Code of Conduct for business taxation has recently created a sub-group in order to explore the possibilities of transfer pricing information exchange.

Avoiding and removing double taxation on transfer prices

In the Internal Market double taxation (as well as unintentional non-taxation) should not occur. Even temporary double taxation is, in principle, not compatible with the Internal Market. Moreover, temporary double-taxation often has non-negligible economic effects on the taxpayer (e.g. cash-flow effects, lost interest etc.). At the very least, when double taxation occurs in transfer pricing cases, there should be mechanisms for its quick and effective removal.

It is therefore, along with all the other recommended initiatives in the transfer pricing area, most important to ensure that appropriate dispute settlement mechanisms are available. The EU Arbitration Convention constitutes a major improvement compared to the traditional Mutual Agreement Procedure (MAP) because it includes an arbitration phase for cases where competent authorities cannot agree upon a solution. However, Part III of this study identified some shortcomings in the Convention. If the overall objective of making the Convention the primary dispute settlement mechanism is to be met these shortcomings must be eliminated.

The following section thus considers the two aspects, (i) preventing double taxation right from the start and (ii) if it still happens, removing it as quickly as possible, by
focussing first on the existing EU instrument of the Convention. The relatively new instrument of Advance Pricing Agreements is also considered.

Introducing mechanisms to prevent double taxation into the Arbitration Convention

Prior approval or consultation

The Arbitration Convention (like bilateral double tax treaties) does not oblige the tax authorities of a Member State to agree in advance an appropriate transfer price with the tax authorities of the affiliated company before an income adjustment is made. Such an agreement would however often be needed to prevent the creation of double taxation. Industry considers transfer pricing disputes to be disputes between (two) tax administrations where all too frequently the multinational enterprise is ‘taken hostage’. They therefore consider it appropriate to include in the Convention mechanisms whereby a tax administration cannot make a primary adjustment until it has agreed the correct transfer price with the other tax administration. This constitutes a 'perfect solution' from a business perspective.

Such a procedure (where a tax authority cannot make a primary adjustment until it has agreed with the other tax administration on the correct transfer price) would solve most of the above mentioned business concerns; i.e. the double taxation itself, the costs of temporarily having to finance the same tax burden twice, business costs of seeking double tax relief etc. It would also pressure Member States to make only well founded adjustments.

Tax administrations might argue that such a rule seems to go beyond the scope of the Convention and that such a procedure would make it very difficult to make primary adjustments as the other Member State would have no incentive to accept the adjustment. This would increase the administrative burden of the tax administrations, lead to more aggressive tax planning, and require substantial extension of the periods where tax returns are open etc. These arguments have to be taken seriously. However, they fail to explain why the creation of double taxation should be accepted within the Internal Market. The basic idea of 'prior approval' should therefore be considered in more detail.

Another, more pragmatic solution could be a consultation procedure where the tax authorities of the other Member State had to be consulted in advance of the adjustment. Whereas a consultation procedure would give no guarantee of solving the double taxation problem in advance it would still have advantages compared to the present situation. These include solving some cases in advance, the possibility of discussing the case at an early stage (thereby avoiding fixed negotiation positions), more co-operation between tax administrations etc. There is no reason to believe that such a consultation procedure would lead to additional workload for tax administrations. Some cases would be solved in advance and for the remaining cases it would just be a question of moving some of the workload of a case from after the adjustment to before the adjustment.

160 Article 5 (1) of the Arbitration Convention only obliges the tax administration to inform the company in due time, so that it can inform the affiliated company which can then inform the tax administration of the other State.
Therefore, on the contrary, such an approach is likely to reduce the overall workload for tax administrations. All in all, however, a 'consultation procedure', albeit having some practical advantages, fails to tackle the basic problem of double taxation.

Finally, another alternative could be to introduce an agreement or consultation procedure for certain types of transactions, adjustments or taxpayers, which are considered to be of particular importance. This could include for instance cases where an adjustment is based on a profit method, cases involving e-business, cases where the adjustments exceeds a certain threshold or cases involving small and medium-sized enterprises. At the very least, a voluntary model could be developed whereby interested Member States could commit themselves to an agreement or consultation procedure.

Suspension of payments

As mentioned in Part III, the lack of a rule in the Arbitration Convention suspending the collection of tax which is due is an important obstacle. If a fully-fledged approval procedure cannot be achieved, the simplest way to avoid this problem would be to include a provision in the Convention whereby tax collection was suspended when the taxpayer requests arbitration under the Convention. Subject to any necessary safeguards such a modest step would constitute a significant improvement to the Convention. Alternatively the Convention could be amended so that suspension of tax collection was possible to the same extent as when an adjustment is appealed against to national courts. However, this would be less effective and would also cause technical problems when Member States’ rules of suspension require a case by case determination.

A problem closely linked to the issue of collection of tax liabilities is that of interest charges - or similar supplementary payments - added to those liabilities. Again, without a fully-fledged approval procedure, setting standard rules could help to mitigate the problem, for instance by disallowing higher interest charges on underpayments than overpayments or by obliging both the primary and the corresponding adjustment to take place in the same income year (e.g. the year when the mutual agreement is completed). If the Convention can be made to work more effectively, i.e. if double taxation is effectively abolished within a short period of time, the importance of this problem diminishes. It still however constitutes an important equity issue and in cases involving significant amounts the interest payment might constitute an important loss of cashflow.

Improving the dispute settlement procedures of the Arbitration Convention

For the reasons given in Part III, thought should be given to the deletion of Article 8 of the EU Arbitration Convention. Deletion of the clause will by definition remove an incentive for business to comply with transfer pricing rules including documentation requirements. However, an alternative incentive could be created through the introduction of an appropriate penalty regime by the Member States. Another solution would be a single definition in the Convention of what constitutes a serious penalty. Again, a working group at EU level could play a useful role in developing such a definition.

Member States define the starting point of the two year period of the first phase differently. It should therefore be clarified when the two year period commences. This would in principle not require an amendment to the Convention. However, if it is being
amended for other reasons such a clarification could of course be inserted directly in the Convention.

Moreover, it should be made clear that thin capitalisation rules are covered. This, again, would in principle not require an amendment to the Convention. There are a number of different ways of addressing the problem, along with the other terms not defined in the Convention (e.g. 'enterprise', 'permanent establishment' and the question of association). One approach would be to refer interpretation problems to the Court of Justice or the European Commission. A disadvantage here would be that the duration of the dispute would be prolonged, as the interpretation problem would have to be solved in advance of the arm's length issue. Another way forward would be to deal with the interpretation problem and the arm's length issue in parallel. This would imply that the competence of the advisory panel under the Convention should be extended.

A more pragmatic approach could be simply to try to identify some of the main problem areas, and then to solve them within the Convention. For instance, in cases where there is no double taxation agreement in place between the Member States concerned, one could make reference to the OECD model tax convention. As regards the question of when companies are associated, a possible solution could be to determine this in accordance with the rules and practices of the Member States making the primary adjustment. Some Member States would probably argue that this would lead to an unbalanced solution, but as the number of adjustments are modest this does not seem to be a real concern. Another solution could be to try developing a common definition of when companies are associated.

Some of these problems are maybe more theoretical than of immediate practical importance. However, experience will show if this will remain the case and a working group at EU level could contribute to finding appropriate solutions that would benefit both businesses and Member States.

The arbitration phase should be explained in more detail and more guidance provided for its functioning. Moreover, the Convention misses an opportunity to create a common transfer pricing jurisprudence. This could be solved by including rules providing for the mandatory publication of decisions from the advisory panel (and perhaps from mutual agreements between competent authorities), thus building up a common knowledge base in this area.

Obviously, there are some confidentiality concerns which need to be addressed but there do not seem to be fundamental barriers to finding a solution to them. Furthermore, in most Member States court rulings are generally available to the public.

The Convention does not include provisions to deal with the denial or the undue postponement by Member States of business access to the Convention procedures. To avoid such practises in the future, a promising way forward would be to give business the possibility of referring the case to the Court of Justice or to the EU Commission. Basic legal considerations strongly plead for giving the parties concerned appropriate means of redress and remedies.

More generally, it is very important to make sure that the provisions of the Convention are made subject to interpretation by the Court. A revised Convention should therefore be agreed as a Directive. This would also resolve the current ratification problems in a
more consistent manner than can the insertion of a conditional clause of automatic prolongation in the Convention.

**Advance Pricing Agreements**

Generally, Advance Pricing Agreements (APAs) are a means for the taxpayer to request a 'binding transfer pricing ruling' from the tax administration(s) on the treatment of a future transaction involving the setting of transfer prices. The disadvantage is that they can usually only be obtained via a lengthy and costly procedure which makes them generally interesting only for very important cases. More precisely, in the OECD transfer pricing guidelines APAs are defined as: "an arrangement that determines, in advance of controlled transactions, an appropriate set of criteria (e.g. method, comparables and appropriate adjustments thereto, critical assumptions as to future events) for the determination of the transfer pricing for those transactions over a fixed period of time". Depending on the number of Member States granting a specific APA, those can be unilateral, bilateral or multilateral. As unilateral APAs do not necessarily prevent double taxation, owing to their domestic scope, the OECD encourages bilateral or multilateral APAs.

Only a few Member States have established formal APA programmes. However, in most other Member States APAs to some extent can be obtained via other general procedures such as rulings and/or under the scope of the mutual agreement procedure of a double taxation treaty. The majority of bilateral or multilateral APAs concluded by EU multinational enterprises (and tax administrations) involve a non-Member State, often the USA. It is worth noting that the OECD transfer pricing guidelines have recently been supplemented with an annex that establishes some common guidelines for operating APAs under Mutual Agreement Procedures in Tax Treaties.

The 1999 Ernst & Young transfer pricing survey indicates that there is an increasing business interest in APAs, as 45% of multinational enterprises would consider using one in the future (in the 1997 survey the percentage was 36). Among those multinational enterprises wishing to conclude an APA, those from Italy (64%), Denmark (62%) and the Netherlands (56%) are the most likely to use an APA in the future (in 1997, US and Canada showed the highest values). The survey also states that 12% of respondents reported having used an APA (14% in the 1997 survey).

It is generally assumed, that the practical application of APA programmes (or similar instruments) is often more difficult than it might seem from the legislation at first sight. From the point of view of the taxpayer the main concern is likely to be the complex procedures, significant cost and time required. For instance, tax authorities will generally require that the multinational enterprises prepare the same (or even higher) levels of documentation as would be required in “normal” circumstances. The confidentiality of the information supplied in the APA might also, by some multinational

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enterprises, be seen as a disadvantage. Seen from the tax administration side, the costs and resources required will be the main concern, and for some tax administrations there is also the problem of a lack of experience in dealing with APAs. As a result, APAs are primarily used by large multinational enterprises in cases involving complex issues (e.g. intangibles, cost-sharing etc.) and/or transactions involving significant amounts, and furthermore a non-Member State is often involved.

However, the Ernst & Young survey indicates that business is less concerned with costs, length of procedures etc. than is generally assumed. Of the 39% confirming that they would not consider using an APA in the future, 48% believed the process unnecessary, 38% declined to give a reason, and 25% responded that the process was either too time-consuming or costly, or too complicated. Only 1% cited too much disclosure! It should of course be noted that the survey does not reveal to what extent costs, length of procedures etc. were also a concern for those multinational enterprises that indicated that in future they would consider entering into an APA; but on balance one should probably not overestimate the problem.

Even if the procedures for entering into bilateral or multilateral APAs – including APAs concluded after Appendix 3 to the OECD Guidelines was issued – might be complicated, costly and time consuming for business (and tax administrations), it seems difficult to avoid this. Thought could therefore also be given to developing simplified administrative procedures in the form of a "mini-APA" available for small and medium-sized enterprises on de minimis grounds. Moreover, if tax administrations are to feel confident in agreeing on the transfer pricing method etc. in advance, it is not unreasonable that the process should include certain safeguards and that taxpayers should be asked to provide sufficiently detailed information to enable administrations to form a judgement. Against this background, Member States clearly should be encouraged to provide the possibility for businesses to obtain under reasonable conditions an APA in important transfer pricing cases. Member States could benefit from an exchange of best practice in this area, especially as the cases and conditions for issuing APAs in the EU seem to be fairly similar (e.g. prominence of third-country cases), which is not necessarily the case for all OECD member countries. On the basis of the analysis so far, it is however too early to give a judgement on the usefulness of EU guidelines on multilateral APAs.

Conclusion

This section has considered a variety of measures that could help to tackle compliance cost and double taxation problems in the area of transfer pricing. The Internal Market clearly requires stricter standards here than would otherwise be the case.

The practical application of the Arbitration Convention could certainly be improved and its provisions made subject to interpretation by the Court of Justice. Moreover, Member States could be encouraged to introduce or expand bilateral or multilateral Advance Pricing Agreement programmes; such instruments, although costly, are an effective means of dealing with the uncertainty relating to transfer pricing. More ambitiously, and subject to safeguards to prevent aggressive tax planning, a framework for prior agreement or consultation before tax administrations enforce transfer pricing adjustments could be established.

More generally, compliance costs and uncertainty could be reduced by better co-ordination between Member States as regards documentation requirements and the
application of the various methods, for example by developing best practices. Such co-
ordination could take place in the context of an EU working group and should build
upon and complement the OECD activities in this field. Co-ordination in this area has
already begun to some extent in the framework of the Code of Conduct group. It would
be possible to develop that process further in order also to address the concerns of
business. The establishment by the Commission of a Joint Forum on transfer pricing
comprising representatives of tax authorities and business might allow the currently
conflicting perspectives of the two sides to be reconciled. While on the one hand tax
administrations view transfer pricing as a common vehicle for tax avoidance or evasion
by companies and as a source of harmful tax competition between Member States,
business on the other hand considers that tax authorities are imposing disproportionate
compliance costs. This study finds that both sides have legitimate concerns to which it is
necessary to seek a balanced solution through dialogue at EU level. A more uniform
approach by EU Member States would also contribute to a stronger position in relation
to third countries.

**CO-ORDINATION OF DOUBLE TAXATION TREATIES**

**The need for co-ordinated EU double taxation treaties**

Three main approaches have been identified by commentators and by the Panel assisting
the Commission services with this Part of the study to resolve the problems of double
taxation in the Internal Market and incompatibilities with EC law that are not currently
being adequately addressed by bilateral tax treaties. These are:

- the conclusion of a multilateral tax treaty between all EU Member States;

- the development of an EU Model Treaty, based on the OECD Model but taking
  account of the requirements of the EC Treaty, which could be used by Member
  States in their future tax treaty negotiations with each other and with third countries;

- within the OECD framework, work on specific EU concepts (such as the definition
  of "residence" and "non-discrimination") culminating in a recommendation to
  Member States or an agreement by Member States to reflect these concepts in their
  relations with each other and with third countries.

All these approaches basically boil down to various degrees of co-ordination of Member
States’ double taxation treaty policies within a Community framework. It is important to
emphasise that any such co-ordination exercise would be designed in harmony with the
work of the OECD in this area. Clearly, the OECD model convention and the OECD
work on double taxation treaties in general form the framework for possible – more
specific – EU work in this area.

Irrespective of which approach is adopted, there is a need to ensure either that the
obligations arising from the Treaty, from the existing tax Directives and the Arbitration
Convention, and from their interaction with Member States' domestic and international
tax arrangements are clarified so as to remove the current situation of legal uncertainty.
The various approaches are considered in detail below.

Incidentally, it is important to note that the Court of Justice will, in interpreting the
interaction of Community Law provisions with bilateral tax arrangements and national
provisions, seek inspiration from international law, guidelines and commentaries, including the OECD Model Convention and Commentary. In such a highly technical and complex area a Community framework could help to ensure consistency and coherence in Court decisions and this would only be to the benefit of both tax authorities and taxpayers.

The Ruding Committee already considered that "there is a need for the co-ordination of Member States' policy at the Community level with a view to approximating their tax treaty provisions in areas covered by Community law (as in the cases of withholding taxes on dividends, interest and royalties, for example) and to avoid conflicts with treaty provisions". It recommended action by the Commission in concert with Member States aimed at defining a common attitude with regard to policy on double taxation agreements with respect to each other and also with respect to third countries. The members of the panel assisting the Commission services agreed with the Ruding Committee recommendations. Many of them strongly expressed the view that bilateral tax treaties no longer adequately address the increasingly complex multilateral structures of enterprises and that a multilateral convention is now required between EU Member States.

There also appears to be a measure of support among Member States for more cooperation at Community level in the tax treaty area. The High Level Group of personal representatives of EU Finance Ministers, which has met a number of times following the discussions at the informal ECOFIN Council at Verona in April 1996 on a new global approach to tax policy, identified policy areas where sharing information at a Community level could be helpful. One suggestion was for consideration of the role, functioning and possible co-ordination of double taxation treaties.

**Possible instruments**

*Multilateral Convention*\(^{163}\)

The idea of a multilateral tax treaty between EU Member States has been in existence for some time. The EC first produced a draft for such a treaty dealing with taxes on income and capital over thirty years ago and it was discussed with the then six Member States in a Commission working group\(^ {164}\). The discussions did not lead to any agreement on a text.

Since then there has been a significant growth in the number of tax treaties as well as of Member States. With this growth which coincides with the growth in cross-border activities of enterprises it has become clear that the bilateral character of tax treaties does not always cater for the complex multinational character of economic relations or the requirements of the Internal Market. It is clearly the case, for example, as mentioned in Part III, that bilateral tax treaties do not adequately address triangular problems. Furthermore, with the increase in the number of bilateral tax treaties, tax law becomes

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\(^{164}\) The text of this draft convention was published in Regul (ed), Steuern und Zölle im Gemeinsamen Markt (15\(^{th}\) Amendment 1969) V B/2.
increasingly complicated and, although many bilateral tax treaties are quite old, the process of revision is time-consuming because of the number involved. There is also the fact that the effect of Court decisions concerning one bilateral tax treaty on other similar but not identical tax treaties is not always certain.

It is for this reason that many commentators have suggested that a multilateral tax convention is now needed within the European Union. There is already a multilateral convention between three Member States of the EU - the Multilateral Nordic Convention for the Avoidance of Double Taxation with respect to Taxes on Income and Capital was signed in 1983 between Denmark, Finland, Sweden, Iceland and Norway. The experience with this convention appears to be generally positive. A multilateral convention can address problems which a bilateral tax treaty is incapable of addressing and it creates greater legal certainty and reduces complexity. This ought to be especially true in an Internal Market such as the EU. Some commentators even go as far as arguing that an EU taxpayer must get the benefit of the most favourable tax treaty concluded by the Member State where he is resident or from which he derives income.

The Ruding Report, states in its annex 6 that it "is absolutely unacceptable in the Internal Market that bilateral tax treaties between Member States give preferential tax treatment to enterprises in one or several Member States and not to enterprises resident in the remaining Member States". It is also argued that the fact that a Member State may apply a different rate of withholding tax to interest paid to an enterprise resident in a second Member State compared to an enterprise resident in a third, because of different bilateral tax arrangements with the second Member State and the third, is in conflict with the provisions against discrimination of the Treaty of Rome. A similar argument could be made concerning special incentives such as the extension of an imputation credit or tax sparing to taxpayers resident in some Member States but not to others.165 If the fundamental freedoms of the EC Treaty are reflected in bilateral tax treaties between EU Member States, there is an implicit move in the direction of the multilateralisation of those tax treaties.

But there are also some arguments against the conclusion of a multilateral double taxation convention. The Nordic Convention is almost constantly being amended by protocols. Moreover, many argue that bilateral treaties are more appropriate to reflect special relations between Member States and reflect individual States’ interests. Moreover, the previous attempt to agree a multilateral double taxation convention within the EU resulted in failure. There are a significant number of differences in Member States' corporate tax systems. If it is already a frequent difficulty to resolve the problems of the interaction of such different systems in a bilateral context, how much harder would it be to do so on a multilateral basis? Then, divergences of economic relations between Member States create specific requirements which may be more easily met in a bilateral treaty than under a multilateral approach. Imbalances between capital importing countries (with high outgoing dividends) and capital exporting countries (with fairly low outgoing dividends) often mean, for example, that the capital importing

165 However, some commentators also maintain that different tax treatment under different tax treaties may not, in the end, be discriminatory. If, for example, a higher rate of withholding tax under one treaty is offset by corresponding tax relief in the other, the treatment is only different and not discriminatory.
country wish to retain a withholding tax on dividends whereas the capital exporting countries may not.

It is not clear that such a multilateral convention could be put into place without including a number of protocols and appendices to deal with the specific situations of different countries and specific bilateral economic relations. This could mean no reduction in technical complexity compared to the current situation of 94 bilateral tax treaties. Furthermore, in view of the experience of trying to secure agreement on Directives, it is not certain that a multilateral convention could be put in place quickly enough to meet the needs of the Internal Market or, whether once implemented, it could be updated and modified as quickly as necessary.

**EC Model Treaty**

An alternative approach would be for Member States to agree to an EC Model Treaty for use in their tax treaty negotiations with each other and with third countries. This long term approach would have the advantage that it would leave Member States free to continue to reflect strictly bilateral concerns in bilateral tax treaties. It could also, unlike a multilateral convention but like the OECD model, be adopted in a non-legally binding form.

In any event, it is important to note that this approach would not aim to replace the OECD model treaty within the OECD or "compete" with it but rather to provide clearer solutions where the OECD model currently provides options.

**Work on specific EU concepts**

This approach would be limited to fields that are of major interest to the Community e.g. where case law has clearly interpreted Treaty provisions. Under this approach guidance could, for example, be provided on residence and non-discrimination and Member States would then be free to reflect such guidelines either in their tax treaties or in their domestic laws. This approach would go some way towards, but might not completely address the problem of complexity of tax treaty rules compared to national laws about which business associations frequently complain.
Box 56: Examples of articles of the OECD Model Convention where bilateral tax treaties between EU Member States may need to be adjusted to bring them into line with the Treaty

Article 2. Taxes covered

Article 293 of the EC Treaty implies that bilateral tax treaties between Member States should cover taxes in addition to those on income and capital, particularly taxes on capital, estates and inheritances, in addition to state and local taxes.

Article 7 (Business Profits)

In line with the principle that permanent establishments be treated in the same way as resident companies, the determination of the income of permanent establishments should be carried out in the same way as for subsidiary companies. Rules restricting the deduction of general expenses and losses to those directly related to the operations of the permanent establishment may be too strict. Apportionment may be one of the only practical solutions. Profits before deduction of headquarters expenses may also constitute a criterion to be considered. Taxation of part of the headquarters expenses in the country in which the headquarters are located could also be considered.

Article 9 (Associated enterprises)

Here the provisions of the Arbitration Convention should be reflected. It would be useful if it also provided for common rules on Advance Pricing Agreements.

Article 10 (Dividends)

Article 10 should reflect the Parents-Subsidiary Directive.

With regard to Articles 10, 11 and 12, different withholding tax rates in different treaties, between Member States and between Member States and third countries are undesirable. Furthermore, extension of imputation tax credits to some EU countries or third countries and not to other EU countries might be discriminatory.

Articles 10, 11 and 12 should also provide rules that tax withheld has to be refunded in a reasonable period of time.

Articles 11 and 12 (Taxation of interest and taxation of royalties)

These should reflect the proposal for a Directive on Interest and Royalties.

Article 24 (Non-Discrimination)

This article should reflect the fundamental non-discrimination principles of the Treaty. This may imply
- equating nationality with residence,
- treating permanent establishments in the same way as resident subsidiaries,
- requiring provisions available to groups of companies within a Member State to be applicable where one of the members of the group is resident in another EU Member-State.

Any statement that anti-abuse legislation is not prohibited under this Article would have to reflect the restrictions on anti-abuse legislation to be inferred from the EC Treaty. Any other special rules added by Member States in Article 23 and 24 to govern the taxation of income which has been taxed at a low-rate in another country would have to aligned with the Treaty.

Article 25 (Mutual Agreement Procedure)

This must be amended to reflect the provisions of the Arbitration Convention applicable to transfer pricing disputes. It would also be advisable, in order to ensure the complete elimination of double taxation, to provide for the Court of Justice to arbitrate in other double taxation disputes and cases not covered by the tax treaty, such as triangular cases. This was proposed in the EC draft multilateral convention and has been included in the Austria/Germany double taxation convention.

Article 26 (Exchange of Information)

Here reference should be made to the Mutual Assistance Directive which takes precedence over this Article.
Tax treaties with third countries

The issue of tax treaties between individual Member States and third countries is a separate one. Annex 6 to the Ruding Report suggests that "under the rules of fair competition, the same or at least similar principles should apply in the tax treaties between individual Member States and third countries, especially those treaties concluded with the most important trading and investment partners of the Community such as the United States, Japan and the other OECD Member States". The Panel assisting the Commission services with this part of the study agreed that more co-ordination is required in this area. This is a far-reaching ambition. But it is certainly true that anti-abuse clauses in tax treaties concluded by Member States with third countries should not discriminate against taxpayers in other Member States. The treaty-shopping ("Limitation of Benefits") clauses concluded by many EU countries with the United States should be examined in this connection.

Conclusion

This study identifies a number of obstacles of discriminatory treatment and double taxation which the current network of double taxation treaties has not addressed and this section has considered possible remedial measures for these. It goes without saying that it is essential that the few remaining gaps in the existing network of double taxation treaties covering taxes on income and capital within the EU should be filled. Moreover, the existing tax treaties of Member States could be improved in order to comply with the principles of the Internal Market, in particular in relation to access to treaty benefits. Better co-ordination of policy in relation to treaties with third countries is also necessary. In addition, the study identifies the need for binding arbitration where conflicts arise between treaty partners in the interpretation and application of a treaty, leading to possible double taxation or non-taxation. The most complete solution to such problems would be the conclusion under Article 293 of the Treaty of a multilateral tax treaty between Member States, conferring interpretative jurisdiction on the Court of Justice. Another possibility, leaving intact the existing bilateral system, would be to elaborate an EU version of the OECD model convention and commentary (or of certain articles thereof) which met the specific requirements of the Internal Market.

Irrespective of the way forward, it is clear that co-ordination within the EU in this area is essential. The choice is to leave the Court to find the flaws in Member States' treaties or to try to come up with common rules of interpretation of the interaction between the EC Treaty and bilateral tax treaties which can provide guidance for the Court and legal certainty for companies. Such co-ordination could resolve problems of the cross-border allocation of headquarter expenses and general overheads, which at present are very often restricted in national tax law. It would also have the advantage of approaching the problems of limitation of benefits clauses in treaty negotiations with third countries in a more uniform way, thereby increasing the efficiency of the parent-subsidiary Directive. Last but not least, such co-ordination would eliminate distortions in tax competition in

the relations between Member States and third countries, specifically with respect to the transfer of investment income from the European Community to third countries. Clearly, however, no EU initiative in this area should interfere with OECD work, which should continue to form the general framework for the elimination of double taxation.

**Remedial Measures for Addressing Tax-Related Labour Costs**

**Pensions**

As explained in Part III Member States’ tax laws in many cases de facto prohibit cross-border membership of occupational pension schemes. This may lead to considerable extra costs for companies with establishments in different Member States. They are in practice forced to establish separate pension schemes in each State where they have employees, and they often have to compensate their employees where these, as a result of moving cross-border, incur extra taxes and/or lose pension rights.

In order to deal with these problems the Commission, on 19 April 2001, issued a Communication on "The elimination of tax obstacles to the cross-border provision of occupational pensions"\(^{167}\).

One of the main conclusions of the Communication is that the Commission considers that discriminatory tax treatment of pension schemes with pension institutions established in other Member States is contrary to the Treaty and should be abolished. The Commission will monitor the relevant national rules and take the necessary steps to ensure compliance with the EC Treaty. As a result migrant workers should be able to remain in their homes schemes and sedentary workers should be able to enter into pension schemes with pension institutions established in other Member States, thus enabling European business to centralise their pension provision.

**Stock options**

As explained in Part III, the impact on companies of taxation rules relating to employee stock options is twofold:

- *first*, there is the direct impact of the tax treatment of the companies’ costs for employee stock option plans

- *second*, there is the indirect impact of the tax treatment of the stock options in the hands of the employees.

As regards the second point, i.e. the tax treatment of stock options in the hands of the employees, it is worth repeating that, especially in cross-border situations, this is far from being a problem just for the employee. Companies wanting to move an employee from a plant (or a company in the group) in Member State A to a plant (or another company in the group) in Member State B, will as a rule be faced with demands for compensation for any extra costs, including in the form of increased taxes, resulting

\(^{167}\) Communication from the Commission to the Council, the European Parliament and the Economic and Social Committee, The elimination of tax obstacles to the cross-border provision of occupational pensions [COM(2001)214 final]
from such a move. Furthermore, any tax treaty issue facing the employee will normally result in compliance problems for the employer.

Ultimately the problems stem from the diversity of Member States’ taxation rules as regards employee stock options. It is noteworthy that the rules in this field have undergone a particularly rapid evolution over the last few years.

The development of the taxation rules quite naturally reflects the increase in use of employee stock option plans and their economic importance. A majority of Member States have by now (January 2001) introduced specific legislation. In many cases this legislation, although relatively new, has already been amended or is about to be amended. It seems probable that this evolution will continue. Unfortunately, so far, there appears to have been no tendency towards convergence of Member States’ rules.

As mentioned, the key issues in cross-border situations are the deductibility of the costs for employee stock option plans and the risk of double taxation of the stock options in the hands of the employee. There is a clear link between these issues and the ability of companies and employees to avail themselves of the fundamental freedoms enshrined in the EC Treaty.

Therefore it seems essential that the matter be discussed at EU level. Discussions with Member States could usefully sound out the possibilities of achieving a greater coordination or approximation of Member States’ domestic rules and how adequately to address the problems of double taxation or non-taxation,

- *both* as regards the deductibility of the costs incurred by employers for the setting up of stock option plans (costs of the shares etc.)

- *and* as regards the taxation of the stock options in the hands of the employees.

In the latter respect, a particularly important problem to be discussed seems to be the *timing*: both the timing of taxation, i.e. the event triggering the taxation, and the period during which, depending on the conditions linked to the stock options, the charge to income tax arises.

If greater co-ordination could be achieved between Member States’ domestic legislation, the risks for international double taxation and non-taxation would decrease correspondingly. In the absence of complete co-ordination some risks would, however, remain. A solution would then have to be found through double taxation treaties.

The double taxation problems relating to employee stock options could be dealt with within the context of some of the solutions discussed in section 9 above on double taxation treaties, namely the conclusion of a multilateral tax treaty between all EU Member States and/or development of an EU Model Treaty. The aim of these solutions is precisely to resolve the problems of double taxation in the Internal Market and incompatibilities with EC law which are not currently being adequately addressed by bilateral tax treaties. However, these problems are not limited to the EU but have a wider international dimension. It is therefore desirable that they be discussed also at OECD level. In fact, the issue has recently been raised within the OECD. The steering group of Working Party No. 1 has formed a sub-group to examine the tax treaty issues arising from employee stock option plans and formulate provisions for inclusion in the Model Tax Convention and Commentary to address the problems identified. However,
so far, no attempt has been made to assess the practical importance of any of these tax treaty issues, or to suggest possible solutions.

Since all EU Member States and the Commission are represented in the OECD, a joint action could prove productive in order to achieve progress. Any discussions at EU level, along the lines suggested above, should therefore ideally also deal with the possibility of co-ordinating Member States’ positions in the OECD, as the OECD work is taken forward.

**SPECIFIC REMEDIAL MEASURES IN FAVOUR OF SMALL AND MEDIUM-SIZED ENTERPRISES**

**Company tax measures giving relief to small and medium-sized enterprises**

Generally, and notwithstanding the two exceptions referred to in Part III of this study, the tax obstacles to cross-border economic activity are identical for small and medium-sized enterprises and bigger companies. According to the panel assisting the Commission services with this part of the study, the impact of many obstacles on small and medium-sized enterprises is however stronger as they have, simply due to their smaller size, less resources and tax expertise available. Thus, they should also benefit relatively more from the realisation of remedial measures (e.g. those on cross-border loss-compensation). Any measure that approximates or harmonises important elements of the tax base, notably concerning depreciation rules and more uniform transfer pricing rules, would reduce the complexities of cross-border tax treatment for small and medium-sized enterprises and increase the necessary transparency. As a result, tax competition would take place mostly via tax rates.

This suggests that there is, in principle, no need for major specific "SME" solutions to the various obstacles at EU level. It must be made sure, however, that the general remedial measures build on taxation techniques which are open to small and medium-sized enterprises. This appears generally to be the case. The idea of far-reaching specific "SME" solutions at EU level could also violate some basic principles of EU law. In this context it should however be noted that among the comprehensive solutions which are analysed in detail below the one of "Home State Taxation" would be particularly beneficial from the perspective of small and medium-sized enterprises.

The analysis so far has not provided compelling arguments for harmonising the domestic special tax arrangements for the taxation of small and medium-sized enterprises or related special incentives. Equally, there appears not to be an advantage in developing an EU tax definition of small and medium-sized enterprises (which in any event would be a very difficult exercise). Tackling the tax obstacles in general will benefit small and medium-sized enterprises relatively more than bigger companies and also more than special targeted tax arrangements possibly could.

As regards the specific problems faced by SMEs that are outside the scope of this study, reference is made to the Commission recommendations on tax problems concerning the transfer of small and medium-sized enterprises¹⁶⁸ and to the Communication on the

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general improvement of the tax environment of small and medium-sized enterprises. Most of the recommendations concern tax problems relating to the legal status of sole proprietorships and partnerships, in particular on the succession of small and medium-sized enterprises. The Ruding report also examined the possibility of allowing businesses which are subject to personal income tax an option of taxation as if they were incorporated. This would reduce the distortions resulting from differing rates of corporate tax and income tax and open broader possibilities for the transfer of losses cross-border. It is clear, however, that such an approach raises a number of questions as to its practical feasibility and application.

Given that compliance cost is one of the most important general cross-border tax problems, and given that the importance of the problem is greater for SMEs than for bigger companies, thought might be given to Community action in this area. In particular, a simplified and uniform tax return and simplified bookkeeping rules for small and medium-sized enterprises which they could file throughout the EU would constitute an enormous help for the businesses concerned. Moreover, consideration could be given to the standardisation of formal and procedural requirements (similar filing dates, similar penalty regimes and a similar basis for charging interest on late payment etc.). Such an initiative should be acceptable to Member States as most Member States already apply specific tax arrangements for small and medium-sized enterprises which are designed to mitigate the administrative burden and reduce their compliance costs. Moreover, it would be possible then to build on the Commission Communication on the improvement of the tax environment of small and medium-sized enterprises, in particular the ideas for moderating the administrative complexity relating to permanent establishments of small and medium-sized enterprises (e.g. building sites). Thus, all remedial measures that are being considered should be checked against their particular impact on small and medium-sized enterprises. Depending on the type of measure the above-mentioned simplification or standardisation initiatives should be supported, as appropriate either at national level or, as for instance currently in the area of VAT, explicitly at EU level.

As regards the issue of loss-compensation and in particular start-up losses, there are various possibilities to address this problem. Some of the domestic solutions found in Member States are already considered in the Commission Communication on the taxation of small and medium-sized enterprises of May 1994 (e.g. build up of reserves to meet future losses). Currently, none of them seems suitable for general application at EU level. A further idea would be to exempt profits from tax for a limited starting period, for instance in the first two to five years. The deferred tax could then be spread over subsequent years. This tax deferment would of course need to be limited, e.g. to companies whose turnover abroad is below a certain threshold. One could also consider the specific approach taken in many double taxation treaties which provides for generous transitional period under which building and assembling companies can operate abroad without creating a permanent establishment. Such rules could be extended generally to small and medium-sized enterprises which would then have more opportunities to familiarise themselves with the tax situation in the foreign country.


169 Commission Communication to the Council and to Parliament on the improvement of the tax environment of small and medium-sized enterprises, COM(94)206, OJ C187, p.5-10.
There is, however, a certain risk that the benefits of such rules could be outweighed by corresponding – presumably complicated – anti-abuse rules.

The medium-term objective is to remove tax anomalies specific to cross-border economic activity so that such activity can be undertaken in the Internal Market in the same way as in national markets. Small and medium-sized enterprises in particular are reluctant to embark upon new business. Given the choice, they would want to start on the basis of the legislation and tax system of their home country and then find their way gradually around the arrangements in the other country (learning by doing). Some representatives in the Panel assisting the Commission services with this part of the study pleaded strongly for finding a EU-wide arrangement of this sort. In an initial phase, companies would thus have to fulfil their tax obligations, solely vis-à-vis the tax authorities of the Member State in which they have their head office, even if they operate in another Member State. Accounting, declaration and payment obligations would continue to apply solely in the home State.170 One could attempt to develop this solution by gradually approximating core elements of the company tax base and the relevant administrative procedures.

Such an approach would, however, require a tax definition of "small and medium-sized enterprises" for this purpose and need to be accompanied by strict tax controls and appropriate anti-abuse measures. This "targeted" solution could also form part of a broader, comprehensive approach available for all companies, regardless of their size.

**Remedial measures in the area of value added tax**

Generally, most of the VAT problems for businesses in general and small and medium-sized enterprises in particular described in Part III would be resolved by an origin-based VAT system. This would reduce complexity (only one jurisdiction) and increase administrative simplicity (cutting costs for business). However, it must be recognised that the current climate (notably the refusal of Member States to accept any further approximation of tax rates and any reduction in the numerous special arrangements, options, derogations, etc. which exist, and the difficulty of establishing a mechanism for the redistribution of receipts that will be perceived to be entirely reliable), mean that it is unlikely that any significant progress towards a definitive origin-based system will be made in the immediate future.

The Commission does not in any way intend to question the idea of an origin based definitive system as a long term Community goal. However, it is now committed to a new strategy to improve the operation of the existing VAT System within the context of the Internal Market. This concentrates on four main objectives, namely, the simplification and modernisation of existing rules, a more uniform application of existing provisions and the re-enforcement of administrative co-operation.171 The first two objectives are of particular importance for the problems addressed in this study.

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170 This approach has an echo - albeit somewhat distant - in Article 28b (Part B) of the Sixth VAT Directive, which allows companies to tax mail order supplies up to a certain value in a calendar year in the country of origin rather than in the country of destination.

Against this background, simplification and modernisation of existing rules should be given priority. First, to allow small and medium-sized enterprises to better benefit from the Internal Market it would be necessary to reduce the complexity of VAT rules, in particular those determining the place of taxation\textsuperscript{172}, reducing the need for small and medium-sized enterprises to invest in tax advice. In addition, all available instruments to ascertain more harmonisation of administrative practices should be strengthened (administrative agreements, common decision on procedures and application of the law).

Second, priority should be given to the reform of compliance rules:

- The adoption of directive 2000/65/CE of 17/10/2000 means the obligation to appoint a fiscal representative, still applicable in some Member States, will be definitively abolished by 1 January 2002. This is the first significant simplification adopted by the Council as an outcome of the new VAT Strategy presented by the Commission;

- The draft proposal to abolish of the 8th Directive procedure\textsuperscript{173} should be adopted by the Council. The difficulty of obtaining refunds of tax from other Member States has been identified as one of the main sources of problems for small and medium-sized enterprises that operate in other Member States.

- Further harmonisation of invoicing requirements could reduce costs for small and medium-sized enterprises as software already available could be used without the need to establish different procedures in other Member States. The Commission has adopted, on 17 November 2000, the proposal for a directive amending Directive 77/388/EEC with a view to simplifying, modernising and harmonising the conditions laid down for invoicing in respect of value added tax\textsuperscript{174}. Its quick adoption by the Council would mean a real improvement in the situation of small and medium-sized enterprises.

- For deliveries in which the suppliers takes charge of assembly and installation, small and medium-sized enterprises have been caused needless difficulty by the coexistence of rules for intra-Community delivery/acquisition and the rules for taxation in the Member State of destination in the case of deliveries of goods by the supplier on the customer's premises. These arrangements should be revised.

- As regards distance selling, small and medium-sized enterprises often fail to spontaneously fulfil their declaration and payment obligations in the Member State where the tax is due. In these circumstances, provision should be made for taxation thresholds to be revised to ensure that the system only applies if there is a genuinely significant activity in the Member State of destination.

These are only a few of the various current Commission initiatives to tackle the VAT obstacles to the Internal Market. They are presented, again, here as they are closely linked to the remedial measures in the area of company taxation.

\textsuperscript{172} TITLE VI and XVIa of the 6th VAT Directive

\textsuperscript{173} COM(98) 377

\textsuperscript{174} COM(2000)650
IV.C
Approaches for a comprehensive solution

INTRODUCTION

The case for a comprehensive approach to tackle the tax obstacles in the Internal Market

The previous section of this Part of the report has analysed a series of targeted solutions to the existing company tax obstacles in the Internal Market. These are considered very valuable by business representatives. However, at the same time, there is an ongoing debate concerning comprehensive approaches to EU company taxation, in particular with reference to the problems mentioned above relating to the existence of fifteen separate tax systems in the Internal Market. This section seeks to enhance that debate by discussing a number of the possibilities within the specific context of the obstacles identified in Part III. Although the impact of these obstacles is for the most part not covered by the quantitative analysis in Part II the results of the modelling can nevertheless contribute to the debate.

While generally academic proposals for an EU corporate tax system have been made for some time, in recent years there has been growing interest in such specific comprehensive approaches both from industry and from the academic world. Many of the main interested parties have assisted the Commission Services through their participation in the two Panels of experts. Various ‘think tanks’ involved in EU tax policies have been debating and researching the issues including the Centre for European Policies (CEPS) and the Institute for Fiscal Studies. UK-based researchers such as Messrs Devereux and Troup have been actively involved and the ‘Stockholm Group’ including Professors Lodin and Gammie have produced a number of papers developing an approach known as ‘Home State Taxation’. UNICE, amongst others has floated the concept of a ‘Common Base’ for taxation across the EU and Professor Plasschaert has outlined a possible ‘European Union Corporate Income Tax’. The following sections draw heavily on their and others’ valuable contributions to the debate, without seeking to represent their individual views.

As an alternative to a series of targeted solutions the possibility of adopting a comprehensive solution is examined. What a comprehensive approach must do is

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175 See, for instance, in Morton, P. V., Company Taxation Barriers in the Single Market - obstacles to cross-border activities of European businesses, contribution for the CFE Forum 2000, Brussels

176 See for instance Sterdyniak, Henri et alii, "Vers une fiscalité européenne", Paris, Economica 1991, where a EU corporate tax was proposed.

177 Centre for European Policy Studies, The Future of Tax Policy in the EU – from 'harmful' tax competition to EU corporate tax reform, Brussels 1999


explained. Some options which have been proposed are briefly described with a basic definition and the distinguishing features of the different methods highlighted. The options are then evaluated, principally in the context of the existing obstacles, highlighting any potential problems and technical issues which may arise. Transitional issues concerning implementation are considered, and possible revenue allocation methods are reviewed. Finally the economic effects, including reference to the quantitative analysis simulations and the overall economic efficiency of the EU are considered.

Much of the debate to date has concentrated on the potential advantages of adopting one or other of the comprehensive approaches. This report builds on the debate and centres more on how the approaches tackle the specific obstacles identified by the expert Panels and on some of the more detailed technical issues concerning particular hypothetical situations. The main aim being to start the evaluation process rather than to merely describe the approaches in detail. It also considers in depth the possible ways of introducing such a system and the possible methods of apportionment or allocation of the tax base or the actual tax. However, in attempting to identify as many as possible of the issues which would have to be resolved, or decided upon, in order to implement an approach it is important not to lose sight of the fundamental advantages of a comprehensive approach over the existing fragmented situation with its 15 entirely separate systems.

**What a comprehensive approach must do**

In Part III of this report a number of specific tax obstacles to cross border activity are identified, and in the opening sections of Part IV these are addressed obstacle by obstacle in a series of possible targeted actions. A comprehensive approach differs in that it seeks to address the various obstacles at a stroke by providing a true Internal Market solution. However, it should be emphasised that it is only a change in the method by which the tax base is determined that is discussed here. The responsibility for setting the rate of tax would remain a matter for individual Member States to decide. When considering a more comprehensive approach it makes sense to initially consider the basic nature of the key underlying obstacles.

These can be summarised as follows –

- The existence of 15 different individual sets of rules, regulations and legislation, and the issues arising from there being 15 separate jurisdictions
- The allocation of profits (and losses) between them on the basis of individual transactions (transfer pricing),
- The lack of a satisfactory treatment of cross border losses,
- The tax costs involved in group restructuring.

It follows that, from a business perspective in order to be comprehensive, a complete approach should ideally incorporate –

- One set of rules, regulations and legislation
• Provide a simpler mechanism for the allocation of profits and losses, (which also covers cross border losses and reorganisations).

The existence of the 15 systems is the source of the majority of the obstacles. In order to carry out activities across the Internal Market business has to compute its results on 15 different tax bases in accordance with 15 sets of legislation. All the comprehensive approaches have the potential to reduce this to one single base thus reducing compliance costs for European business. Even if such a comprehensive approach were adopted by only some Member States, which is now a real possibility under enhanced co-operation, there would be a proportionate saving in costs and a corresponding increase in efficiency. This could be particularly significant for small and medium-sized enterprises, and the new European Company Statute could provide a suitable vehicle for any trial.

In addition to the reduction in compliance costs, an enterprise with a single base would no longer have to involve itself, and the tax administrations across the Internal Market, in the complex, time-consuming and expensive process of agreeing transfer prices for goods and services transferred from one part of the Internal Market to another. There is no productive value to be obtained from this activity and business would clearly benefit enormously from its cessation. Tax administrations would also benefit and would be able to direct their resources towards true cross border issues concerning transactions with countries outside the EU. Even if Member States could, through increased co-operation, ensure that transfer pricing rules were applied in an identical manner across the EU and instances of double taxation did not arise, there would still be costs and inefficiencies present which would simply disappear for businesses operating with a single tax base.

Furthermore Member States recognise that a business should be able to offset its profits and losses, but with 15 separate systems this has proved difficult to achieve beyond the borders of each individual Member State. A single tax base established under a comprehensive system makes this much simpler to achieve using an allocation system and the difficulties over the detailed computational issues disappear when only a single set of rules is applied by a business. Although this will initially reduce Member States’ tax revenue as they recognise unrelieved losses denial of this relief would not be in keeping with the concept of a Single Market.

Just as a comprehensive approach makes cross border loss relief easier to achieve it also makes group reorganisations or restructuring more straightforward. As with transfer pricing the costs flow from the fact that, although these activities take place within the Internal Market, they often involve complex interactions between different tax systems. There is no intrinsic value in making such activities costly and where businesses are deterred from organising their business in the most efficient way because of these costs the EU as a whole suffers. By providing a single tax base the comprehensive approaches ensure that restructuring can be carried out in a much simpler manner in accordance with a single set of rules.

Overall it is clear that the Internal Market would benefit greatly from a common or harmonised base which permits effective cross border consolidation of losses. This could take a number of different forms.
OPTIONS FOR COMPREHENSIVE APPROACHES TO EU COMPANY TAXATION

It is possible to design many different theoretical approaches to company taxation and this section does not seek to cover all the possibilities. The individual approaches analysed are those which were proposed and discussed in detail in the expert panel assisting the Commission with this part of the study. For completeness the general concept of a compulsory harmonised tax base is also mentioned. The approaches discussed are therefore as follows –

- Home State Taxation
- Common (Consolidated) Base
- European Union Company Income Tax
- A Single Compulsory ‘Harmonised Tax Base’

The approaches are designed such that Member States would set the rate of tax\textsuperscript{180} to apply to their share of the tax base allocated to them under an allocation mechanism. All of the approaches require such an allocation system to share the tax base and this is discussed separately from the individual approaches. All of the approaches would also require a clear definition of the group to operate any consolidation of profits and losses. This would ensure that an element of tax competition between Member States would be retained. However, in order to avoid any negative effects of tax competition Member States might wish to agree on a minimum rate, or agree to remain within a specified band around an EU average as a revenue protecting measure.

**Home State Taxation**

Home State Taxation\textsuperscript{181} involves all, or a group of Member States agreeing to accept that certain enterprises with operations in a number of Member States should compute their taxable base according to the tax code of a single Member State – the Home State, instead of according to all the different tax codes of the respective Member States where they have operations. Only the method of calculating the base would change, each Member State would continue to set the tax rate to apply to its share of the group’s profits. Corporate enterprises headquartered and operating from a Member State (MS A) would therefore have the option to adopt the domestic tax code of this Member State (MS A) for all their activities in participating Member States (MS B, MS C, etc), whether carried out by subsidiaries or permanent establishments.

For companies operating in several Member States this would represent a significant simplification compared to the current situation. Home State Taxation aims to ensure that enterprises benefit from being subject to only a single tax system, only compute a single tax base. The group deals with only one tax code and one Member State

\textsuperscript{180} European Union Company Income Tax was originally conceived as a compulsory scheme for large multinationals with a single EU rate but it could also be adapted to in such a way that Member States would set the rate of tax to apply to their share of an allocated base.

administration for computing the taxable base. Member State administrations accept, under a form of mutual recognition, the validity of other Member State tax codes for the purposes of this initial calculation. The definition of an enterprise’s home state would require careful thought as although in the majority of cases it would be clear there would undoubtedly be a number of individual cases where depending on the definition adopted more than one possibility might exist. The definition of the group would also have to be agreed, for example it could be limited to 100% subsidiaries.

Under Home State Taxation cross border loss compensation would be obtained by applying the existing local rules of the Home State – the foreign subsidiaries would be treated as though they were domestic subsidiaries. The group would therefore obtain full loss compensation and eliminate difficulties arising from transfer pricing between the participating Member States. Currently the methods for granting this relief (for example German style Organshaft consolidation or UK group relief) differ and the conditions for eligibility (for example a 90% or a 75% ownership threshold) also differ. Unless participating Member States’ methods were more closely aligned prior to the introduction of Home State Taxation this could maintain the present situation where different groups are subject to different conditions for loss relief depending on their home state. Once the net profit for the group were computed it would then be allocated to individual Member States in accordance with the agreed formula, and in this sense the formula plays a crucial role. All groups in the Home State area would have their net profit shared in accordance with the same formula, but the method for ‘netting off’ of profits and losses could vary, depending on the precise rules of the Home State. In a similar context the concept of Home State Taxation involves the possibility of competing enterprises located in a Member State computing their tax base in accordance with different tax codes.

Box 57: Simple example on the functioning of Home State Taxation

Company Z, headquartered in MS A, with a 100% subsidiary Y in MS B, computes the taxable base of both Z and Y according to the tax code of MS A. Both Z and Y’s tax computations are submitted to MS A’s administration for agreement of the taxable base. When the tax calculations are agreed and the tax base is apportioned between the two Member States, Z pays tax at MS A’s rate to MS A but Y pays tax to MS B at MS B’s rate.

When one entity within a group supplies another in a different Member State with goods or services then an allocation of profits between the two Member States is necessary. The same calculations as in the above example are made and the intra group transactions are treated as though both entities were in MS A. In Member States where consolidation is permitted, the current transfer pricing question relating to the transaction between MS A and MS B effectively disappears. However, the combined taxable base of Z and Y has to be allocated between MS A and MS B, according to the terms of an agreed formula. Possible methods of allocation are discussed separately as this issue is common to more than one comprehensive approach.

It is probable that only Member States with broadly similar (not necessarily identical) taxable bases would wish to participate in the system and therefore initially there would probably be a ‘core group’ of participant Member States. The possibility of achieving such a grouping as a form of ‘enhanced co-operation’ would depend on progress in this
area of institutional development following the ratification of the Nice Treaty. As an alternative a separate multilateral convention between the participants could be envisaged, as is proposed in some of the relevant literature. This might be quicker to organise but would not benefit from the established Community implementation and enforcement procedures and practices, nor from authoritative interpretation by the European Court of Justice.

**Common (Consolidated) Tax Base**

A Common (Consolidated) Tax Base system\(^{182}\) shares some of the characteristics of Home State Taxation. However, instead of extending the application of each of the existing national tax codes across the EU it suggests an optional additional new code should be adopted across the EU. It involves all Member States, or possibly initially only a group, agreeing on a set of common rules for establishing the taxable base of certain enterprises with operations in a number of Member States (or even in a single Member State). Corporate enterprises headquartered in any of the participating Member States would have the option to adopt this common European tax base for all their activities in participating Member States, whether carried out by subsidiaries or permanent establishments. The agreed set of common European rules could take as a starting point agreed European Accounting Standards.

The new European tax rules would be administered by the Member State where the enterprise was headquartered for all its activities and each group of companies would have only one tax base to calculate, and one administration to deal with. The rate of tax (as in Home State Taxation) would be set by the individual Member States. Each Member State administration would deal directly with the tax affairs of only those groups which were headquartered in their respective State, but cover all its activities across the EU. Identifying the appropriate headquarter state would be relatively straightforward as the choice would determine only which Member State administered the common code rather than, as would be the case under Home State Taxation which tax code should be applied to the group’s activities. However, if this also determined the legal system under which any disputes would be resolved it might become a more important issue.

Box 58:
Simple example on the functioning of Common (Consolidated) Base Taxation

Company Z, headquartered in MS A, with a 100% subsidiary Y in MS B, computes the taxable base of both Z and Y according to the new common (consolidated) tax code. Both Z and Y’s tax computations are submitted to MS A’s administration for agreement of the taxable base. When the tax calculations are agreed and the tax base is apportioned between the two Member States Z pays tax at MS A’s rate to MS A but Y pays tax to MS B at MS B’s rate.

Just as in Home State Taxation individual enterprises or groups operating in several Member States would gain from a significant simplification compared to the current situation. Most importantly because it is a single common base rather than a series of separate bases difficulties stemming from transfer pricing within the EU would be eliminated and enterprises would automatically benefit from consolidation. All enterprises in the EU who chose to participate would be taxed on the same base wherever they operated and accordingly differences in tax treatment would not be dependent on headquarter location, which could be the case under Home State Taxation.

The Common (Consolidated) Base would require allocation to the individual Member States for them to exercise their taxing rights and this would require allocation according to the terms of an agreed formula in the same way as for Home State Taxation. Proponents of a Common (Consolidated) Base emphasise in particular that the optional element, combined with the retention by the Member States of the right to set the tax rate would ensure that there was an opportunity for an appropriate element of transparent tax competition between Member States. In contrast to Home State Taxation the method of arriving at the ‘consolidated’ group result, the ‘netting off’ of profits and losses, would be the same for all enterprises and would not depend on the rules in the ‘home’ or headquarter state. This ‘common’ approach to loss relief would then be followed by the allocation according to the agreed formula, ie both stages of the process are identical for all enterprises within the Common (Consolidated) Base, whereas under Home State Taxation the calculations for the first stage could vary.

All Member States who wished to adopt the new tax code would be able to, without amending their existing code. Over time one might expect individual ‘domestic’ codes to evolve towards the common code to further simplify domestic administration but there would be no need for this to be the case if enterprises had the choice to adopt the new code. As a new tax code introduced at the EU level a new multilateral Double Tax Treaty network would seem to be required eventually in order to reap all the benefits and this is explained in further detail later. Introduction of the new code might be possible under the ‘enhanced co-operation’ procedure if Council did not unanimously support its introduction but the use of a multilateral convention independent of the Community institutions is more difficult to envisage.
European Union Company Income Tax

An additional variation on the ‘common base’ theme has also been suggested. The European Union Company Income Tax\(^{183}\) would also require the drafting of a new, single corporate tax code to apply across the EU. In its purest form it would be administered by a new single authority, with a single EU tax rate and the revenues would be used to fund the EU institutions and activities with any excess allocated between Member States according to an agreed formula. However, it could also be administered by individual Member States in much the same way as Value Added Tax, and each Member State could apply its own tax rate to its allocated share of the tax base.

From a tax technical perspective the European Union Company Income Tax is no different from a national one, it is simply applied at an EU level rather than a national level. From a political perspective it represents a fundamental change in that Member States are required to relinquish an element of their fiscal sovereignty and establish a federal EU Tax. It could be argued that several Member States do in effect take a similar approach in their own internal tax systems - for example the United Kingdom has a UK corporate tax system and UK Double Tax Agreements rather than an English system with English Double Tax Agreements, plus a Welsh system with Welsh Double Tax Agreements etc, and Belgium has a Belgian tax system rather than a Flemish system, a Wallonian system etc. However, the introduction of a European Union Company Income Tax would certainly represent a major step towards the creation of a ‘federal Europe’, although whether it could be considered a development on the same scale as monetary union is debatable.

A Single Compulsory ‘Harmonised Tax Base’

The most ‘traditional’ response would be to propose a compulsory harmonised tax base in the EU. This would require a single corporate tax code to be applied across the EU, to all enterprises, by all Member States replacing the existing fifteen domestic tax codes. Past Commission proposals\(^ {184}\) have to a certain extent suggested moves towards harmonisation of bases. However, a Single Compulsory ‘Harmonised Tax Base’ would represent a development well beyond these individual proposals and Home State Taxation, Common (Consolidated) Base Taxation or the European Union Company Income Tax as described above. It would require compulsion, applying to all enterprises regardless of size or cross border activity. The existing tax codes would cease to exist and Member State administrations would all operate the harmonised code without the need for a new centralised administration. In this way the obstacles in the first category above, the very existence of 15 separate systems, would disappear, although as is the case for VAT some differences in application might remain.

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\(^{183}\) See: Plasschaert, Sylvain, "An EU Tax on Consolidated Profits of Multinational Enterprises", European Taxation (IBFD), January 1997. There, a single tax is suggested, legislated for by the EU, whose proceeds would fully or partly accrue to the EU itself. That tax would apply to all (larger) companies with a high degree of multinational involvement within the EU.

A Harmonised Tax Base would by necessity include consolidation. The consolidated tax base of each EU enterprise would therefore have to be allocated between Member States according to the terms of an agreed mechanism. The possible types of mechanism and formula are separately reviewed in more detail below as they are also relevant to other possible comprehensive approaches. However, without going into details at this stage it is reasonable to assume that if a harmonised tax base could be agreed upon then such a formula could be constructed to resolve the points relating to profits and losses.

In this way the key obstacles would be addressed and many of the questions which are discussed in relation to other approaches later in this paper, such as the pros and cons of an optional system, a system for a specific sector, a specific size of enterprise, a limited group of Member States etc would simply be avoided.

Even such a harmonisation would not necessarily solve or remove all the obstacles, for example those where the interaction with personal taxation is a factor such as the taxation of partnerships. However it would self evidently resolve those which arise from the current differences in the methods of computing the tax base of an enterprise across the EU and from determining which particular Member State should subject them to corporate tax. It would not necessarily resolve the similar obstacles which may exist for an enterprise wishing to invest outside the EU but within the Internal Market the potential distortions and inefficiencies would be reduced.

**Comparing the distinguishing features of conceptually different methods**

**Comparing a Home State ‘base’, a Common (Consolidated) Base, and a Harmonised Base.**

The basic descriptions of each of the above suggest that each approach would solve industry’s basic concerns in that an enterprise operating in more than one EU Member State185 could choose to have to follow only one set of rules, regulations and legislation. Coupled with an appropriate method of allocation the problems related to transfer pricing and consequent economic double taxation would essentially cease to exist and cross border consolidation of taxable profits and losses would be freely available, in contrast to the current complex and incomplete network of possible reliefs.

In this context the business representatives in the panel assisting the Commission services with the study emphasised that the creation of a single set of rules, i.e. a single tax base was of paramount importance. The route to achieving this was of less importance providing that participation were optional, which when coupled with the retention of individual Member States’ control over rate setting, should ensure that an element of tax competition could thrive.

As discussed in more detail below Home State Taxation is based on mutual recognition. It does not seek to introduce a new tax code but to make use of the existing ones. It is

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185 The analysis is directed primarily towards an EU group of companies active in more than one EU Member State. However, parent companies from third countries, such as a US parent company with activities in several EU Member States would also be able to benefit by establishing an EU subgroup with an EU ‘parent’.
essentially a pragmatic response to the question of how to introduce a common ‘EU’ approach to the taxation of an EU enterprise, without actually creating a new ‘EU’ tax code. By avoiding the difficulty of creating a completely new code, it represents a workable solution which could be introduced relatively quickly, and to a certain extent it side-steps questions concerning national sovereignty over taxation. It is not suggested as the ‘perfect’ solution, but more a practical ‘half-way’ house, balancing the needs and concerns of business and governments permitting those Member States who already have reasonably similar tax systems to provide a joint solution for business.

An approach based on a Common (Consolidated) Base goes further in that a new tax code has to be drafted and agreed. In this way participating Member States could retain their own domestic tax system intact for domestic activities and contribute to the design of an improved harmonised approach for cross border activities. Participating enterprises active in more than one Member State would all be treated equally, and the precise mechanics of for example loss consolidation will only have to be implemented in one common tax code. This is in contrast to Home State Taxation where loss consolidation is dependent on individual Member States’ existing systems unless the agreement to implement Home State Taxation includes specific loss provisions. A European Union Company Income Tax would be similar but the added possibility of administering it centrally, or of introducing at the a same time a single European tax rate places it politically in a different sphere.

The optional or partial nature of the above approaches involves a number of issues concerning the different ways of restricting or broadening access to the comprehensive approach and a Single Compulsory Harmonised Tax Base neatly avoids these in that it would be applicable to all enterprises in all Member States. However, there can be little doubt that such a common comprehensive approach does not correspond to the current level of institutional development within the EU. In fact individual Member States would be required to give up their freedom of setting company tax rules and would merely retain the right to set tax rates. Accordingly this ‘approach’ is not discussed in substantial detail, although in analysing the potential difficulties associated with the other approaches the practical advantages of such an approach are highlighted.

Fundamental benefits could flow from any of the comprehensive approaches, and the solving of the more technical details concerning implementation could be considered to be the necessary costs of achieving them. A new system, for example Common (Consolidated) Base, would be preferable to the extent that it can be designed to address any particular areas of difficulty. However, implementation of Home State Taxation is potentially a quicker process since it relies on existing systems and therefore the fundamental benefits would be available much earlier.
### Box 59:
*Comparison of comprehensive approaches*

<table>
<thead>
<tr>
<th></th>
<th>Home State Taxation</th>
<th>Common (Cons.) Base</th>
<th>EU Company Taxation</th>
<th>Compulsory Harmonisation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basis</strong></td>
<td>Mutual Recognition</td>
<td>Harmonisation</td>
<td>Harmonisation</td>
<td>Harmonisation</td>
</tr>
<tr>
<td><strong>Tax Code</strong></td>
<td>Existing</td>
<td>New</td>
<td>New</td>
<td>New</td>
</tr>
<tr>
<td><strong>Application</strong></td>
<td>Optional or Optional</td>
<td>Optional</td>
<td>Compulsory</td>
<td>Compulsory</td>
</tr>
<tr>
<td><strong>Participation</strong></td>
<td>All or some companies</td>
<td>All or some companies</td>
<td>All or some companies</td>
<td>All companies</td>
</tr>
<tr>
<td><strong>Establishment</strong></td>
<td>Could be outside EU institutional framework</td>
<td>Via EU institutional framework</td>
<td>Via EU institutional framework</td>
<td>Via EU institutional framework</td>
</tr>
<tr>
<td><strong>Number of tax systems</strong></td>
<td>Existing 15</td>
<td>Existing 15 plus new one</td>
<td>Existing 15 plus new one</td>
<td>One</td>
</tr>
<tr>
<td><strong>Common Treatment for all participants</strong></td>
<td>No – potentially 15 ‘Home’ States</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Loss Consolidation</strong></td>
<td>Yes, or no according to MS rules</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Transfer Pricing</strong></td>
<td>Resolved amongst participants</td>
<td>Resolved amongst participants</td>
<td>Resolved amongst participants</td>
<td>Resolved amongst participants</td>
</tr>
<tr>
<td><strong>Rate set by Member State</strong></td>
<td>Yes</td>
<td>Yes – possibility of ‘special’ rate</td>
<td>Yes, but could be EU rate</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Allocation Method req’d</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Conceivable</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Implementation by group of Member States</strong></td>
<td>Yes – assumed</td>
<td>Possible</td>
<td>Possible</td>
<td>Possible (enhanced cooperation)</td>
</tr>
<tr>
<td><strong>Double Tax Agreements</strong></td>
<td>Existing, if non-EU income excluded</td>
<td>Existing if non-EU income excluded but multilateral DTA required to obtain full benefits</td>
<td>Existing if non-EU income excluded but multilateral DTA required to obtain full benefits</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------</td>
<td>------------------------------------------</td>
<td>------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Specific Comments</strong></td>
<td>Potentially the quickest State's legal system would have jurisdiction over disputes to be clarified</td>
<td>Issues over which Member having tax jurisdiction would be assigned to the location of the transaction</td>
<td>Originally conceived as for an EU Tax</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A pragmatic attempt to gain the benefits without requiring ‘harmonisation’</td>
<td>In keeping with Single Market jurisdiction</td>
<td>Does not correspond to current level of institutional development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In keeping with Single Market philosophy</td>
<td>In keeping with Single Mkt. Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td>Magnitude of task of creating new base makes a limited ‘trial’ very expensive</td>
<td>Magnitude of task of creating new base makes a limited ‘trial’ very expensive</td>
<td>Magnitude of task of creating new base makes a limited ‘trial’ very expensive</td>
<td></td>
</tr>
<tr>
<td>for SMEs and European Co’s could be particularly appropriate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For interest, royalties and income from permanent establishments outside EU the subsidiary receiving the income will generally give a credit for any tax deducted/paid at source under its double taxation agreement. However if the relevant income is apportioned via the formula across a number of Member States the recipient subsidiary could have the tax credit but not the relevant income.

Conceptually a comprehensive approach may be based either on the premise of mutual recognition (Home State Taxation) or on harmonisation (Common (Consolidated) Base, European Union Company Income Tax or a Single Compulsory Harmonised Tax Base). In theory mutual recognition is easier to achieve and may be a preparatory step towards eventual harmonisation. It involves Member States being prepared to recognise the tax systems of other states and accord them equal status to their own. It introduces the possibility of a step by step approach with individual Member States moving towards a position of possible mutual recognition. In contrast harmonisation involves Member States moving towards a single common system rather than a series of individual systems.

In order to do this there must be a certain amount of similarity\(^\text{186}\) between or approximation of the tax codes in terms of the results obtained but the method of achieving these results need not necessarily be the same. For example there are a number of possible methods for calculating tax deductible depreciation but providing

\(^{186}\) It should be stressed that the literature on Home State Taxation assumes, certainly initially, that it would only be introduced by those Member States whose tax systems are already relatively similar and would require minimal amendment.
the end result, the amount, and to a certain extent the timing of, the deductions is comparable then there is no need for exactly the same method to be applied.

**Existing level of comparability**

More definite conclusions may be drawn from the qualitative analysis comparing some of the other categories of tax rules in Part II. It is possible to identify aspects of the tax codes which are particularly different and which would have to be amended in some way before mutual recognition could progress beyond any initial grouping of participating Member States.

Individual parts of different tax codes may be reasonably similar when they share the same aims, for example tax depreciation of plant and machinery generally has as its goal the granting of deductions to take into account the decline in value of an asset over time through wear and tear and/or obsolescence. However even here complications arise when particular provisions are introduced as incentives. In some cases certain assets are treated quite differently. Goodwill is depreciable in some Member States, but not in others and a precise solution in these cases is more difficult. Similarly whereas it is conceptually consistent that if a Member State taxes capital gains on share sales it should recognise capital losses it is more difficult to reconcile this approach with that of another Member State which might ignore both gains and losses. The implications of these differences are discussed further below.

**Distinguishing between mutual recognition and harmonisation**

Mutual recognition would be of the overall tax code rather than each and every individual aspect and therefore it would not be necessary to agree on each and every aspect of the tax code. In contrast harmonisation would inevitably involve agreement at a far more detailed level. Proponents of a mutual recognition system emphasise this ability to take a more ‘macro’ based view of Member State tax codes when assessing whether or not they are sufficiently approximated as a distinct advantage. There are clearly also disadvantages in a system which potentially results in two similar competing enterprises computing their taxable profits according to different methods. The changes in legislation which would be required are limited to those required to make a Member State’s code acceptable to other Member States, and of course the enabling legislation to permit the use of other Member State’s codes to compute the tax base. In overall terms the amount of legislation and regulation to be changed should represent only a small proportion of a Member State’s total tax legislation. If material changes were required in a particular Member State it might raise doubts over the appropriateness of that Member State adopting a mutual recognition approach and it is generally accepted that any initial introduction of Home State Taxation would be confined to a group of Member States.

**Mutual Recognition as preparation for Harmonisation?**

Mutual recognition is also sometimes seen as a preparatory step towards eventual harmonisation in the sense that legislative change designed to make tax codes more comparable, ie capable of mutual recognition, must necessarily bring them closer together and possibly facilitate eventual harmonisation. However, it could equally turn into a ‘brake’ on future developments towards harmonisation as it, to some extent at least, ‘fixes’ the tax codes of participating Member States. Any agreement for mutually recognising tax codes would have to define very carefully the codes themselves and this would inevitably place constraints on participating Member State’s abilities to amend
and improve their own tax legislation without seeking the ‘approval’ in some way of other ‘participants’.

Hence an approach designed to be adopted relatively simply, without detailed harmonisation, with a minimum pooling of sovereignty might induce an unwillingness to contemplate further change as this would necessarily involve reopening the discussions on mutual recognition. Given the potential amount of legislative change required to establish the mutual recognition, if major benefits followed there could be pressure to simply ‘bank’ these and make no further changes towards harmonisation which might not bring further significant benefits. Conversely, if major benefits were not forthcoming there might be a greater reluctance to introduce the further changes required to harmonise given a disappointing outcome from the earlier ‘mutual recognition reforms’.

Harmonisation takes the process a step further in that it involves a much greater degree of alignment of currently disparate tax codes. At its logical conclusion it involves each Member State effectively having the same tax code. A tax code is made up of a number of major structural elements (and many minor ones) all of which need to be harmonised, all of which pose different questions. To what extent harmonisation can be staged or planned out in a series of predetermined steps to assist the process is considered in more detail later.

Harmonisation provides an opportunity to design a new tax system rather than settling for the expedient of mutual recognition. Mutual recognition represents a form of tax co-ordination in that it leaves national tax codes intact and requires only their approximation in order to successfully define the relationships between the different codes. In contrast harmonisation potentially replaces the national tax codes and depending on the extent to which rates are also harmonised, or at least restricted by a lower limit, could have a profound influence on tax competition.

A PRELIMINARY EVALUATION AND ASSESSMENT – ARE THE EXISTING OBSTACLES REMOVED?

Conceptually an approach based on harmonisation should resolve more obstacles more thoroughly than one based on mutual recognition. This is particularly the case for obstacles which arise in part from the existence of different approaches across the EU as harmonisation implies a common or single tax system. Under mutual recognition more variations and hence potential obstacles can be tolerated. Member States might be prepared to recognise the overall tax code of another Member State even if there were specific incompatibilities with its own code on the basis of a degree of ‘give and take’. The acceptable level of toleration is greater for the administration than the enterprise because it can balance the tax effect of any differences across all the enterprises which it taxes, perhaps taking a view over a number of years. In contrast an individual enterprise has only its own individual position to consider and may be materially affected by one particular aspect of a tax code.

The possible specific remedies to each of the obstacles as discussed above, to a certain extent illustrate some of the detailed provisions which would have to be included in any comprehensive approach based on a new tax code. By definition under mutual recognition (ie Home State Taxation) changes would be more limited. In the event of implementation by a group of Member States the obstacles would only be removed in
those Member States who chose to participate. Under harmonisation the aim would be for the effect of the individual actions to be incorporated within the harmonised tax code which in theory all Member States could adopt as an option without amending their existing codes.

Compliance Costs

When assessing to what extent compliance costs are reduced by the comprehensive approaches it is important to distinguish between the initial set up, or implementation costs and the ongoing costs. For the most part this section deals only with ongoing costs, the initial costs could be expected to be ‘amortised’ quite quickly as the benefits emerged.

Home State Taxation offers the taxpayer the opportunity to deal with only one tax code, and essentially only one tax administration. This potentially reduces the costs to the extent that it is no longer necessary to be expert in all the individual tax systems. However, depending on the structure of the company and the resolution of the Double Tax Treaty question outlined below a requirement to maintain relations with the non-home state authorities, and therefore the expertise, may remain for local subsidiaries subject to their parents’ Home State tax code. In fact, if a considerable amount of additional accounting analysis (between activities within and outside the Home State network) is required costs may increase but should still be lower than at present.

Individual administrations may find that their workloads increase if they have a large number of ‘Home State’ enterprises but across the EU this should balance out. Savings should arise in that transfer pricing enquiries between participating states would cease to exist but the allocation process, could require significant resources. If a ‘micro’ rather than ‘macro’ approach were adopted this could also be the case for enterprises. To conclude, Home State Taxation is likely to lead to a significant reduction in compliance costs, in particular for enterprises, but a smaller reduction perhaps in the costs for tax administrations. In order to benefit fully administrations would have to be prepared to accept that auditing of tax returns of previously local subsidiaries would have to be left primarily to the ‘Home’ State administrations (in co-operation with the local tax administration) otherwise each administration would have to become familiar with all the tax codes of the participating ‘home’ States. The precise reduction in costs for administrations is difficult to quantify at present.

Approaches based on a harmonised common or single tax system offer individual enterprises similar benefits in terms of reducing the number of different tax codes which they must apply but, where the current tax codes are also maintained in parallel the administrations effectively have to operate an additional tax system. Cross border transactions within the EU would cease to give rise to specific costs but again precise figures are difficult to quantify at present. As with Home State Taxation to a certain extent the design and operation of the allocation process would determine the level of savings achieved.

When evaluating the comprehensive approaches the Common (Consolidated) Base, European Union Company Income Tax and Single Compulsory Harmonised Base are collectively referred to as ‘approaches based on harmonisation’. This is to avoid listing all three each time to distinguish them from an approach based on mutual recognition. However, when they are considered individually the level of co-ordination required for each approach is clearly different.
Home State Taxation would rely on the respective existing legal frameworks, interpretations and judicial procedures of participating ‘Home’ States. Again, cf auditing above, administrations would have to accept that any litigation would have to be left to the respective ‘Home’ State. For a new common base all these would appear to have to be established at an EU level. The alternative of relying on the existing national frameworks, applying for example the system of the state where the group was headquartered could risk an uneven application of the new common base. Clearly this could involve both administrations and enterprises in additional costs in the short term.

**Group Taxation**

*Groups, mergers and acquisitions*

Under Home State Taxation enterprises would be subject to the applicable existing domestic rules within the Home State which in most cases are more straightforward than those applicable to cross border activities. However, as mentioned above, treatment varies across the EU and unless these variations were specifically eliminated when Home State Taxation was implemented these would remain as potential ‘irritants’. Member States without some form of consolidation or group relief would have to specifically address this. Other more detailed provisions, for example minimum shareholding periods or thresholds to benefit from a merger relief could in theory remain and therefore Home State Taxation would not as such necessarily remove all these obstacles. Enterprises whose Home State was one where a particular provision was disadvantageous would simply be subject to the disadvantage on all of its activities rather than just on those in the Home State.

Approaches based on harmonisation should resolve these obstacles in the sense that they are based on an improved tax code applicable across the EU. Many of the measures which are perceived as obstacles are conceived in order to protect or maintain taxing rights by the respective Member States and therefore the pooling of the taxable bases should remove the need for them.

Legislation dealing with reorganisations is particularly complex as Member States currently need to ensure that they are not placed in the position whereby they grant material relief or deductions against their domestic tax but subsequently do not share in the benefits realised by, for example, investment in particular assets. However, under a harmonised approach these concerns should, in principle, disappear because both relief and taxation are effectively at the EU level via the allocation process. One difficulty which remains is how to deal with the transitional phase when enterprises move from the current system to a harmonised one. The pragmatic approach, under both Home State Taxation and Common (Consolidated) Base would be to freeze the historic position and to apply strict conditions for any ‘opting out’ of the approach.

Reorganisations under Home State Taxation which involve an entity from a state outside the Home State area; or even an entity within the Home State area, but with a different ‘Home’ State could create complications:
Box 60: 
Example for reorganisations under Home State Taxation

Company Z, headquartered in MS A, sells shares in Subsidiary Y to Company X. Subsidiary Y located in MS B has ‘frozen’ pre Home State Taxation (MS B) losses, and assets partly depreciated under MS A (Home State) rules. The purchaser - Company X - is located in either MS C outside the Home State area or in MS D which is part of the Home State area. The purchaser is not in a Home State area, which tax rules apply to its new subsidiary – those of the subsidiary’s original state (MS B) to whom it actually pays tax or those of its old Home State (MS A)? If the purchaser Company X had been headquartered in MS A there would have been no change of tax base for the subsidiary.

The example highlights the problematic aspects of changing the method by which a subsidiary prepares its tax calculations. For operations within a Home State area the principle of mutual recognition should enable the states to agree upon a solution, but if the purchaser is from outside the Home State area the prospects for a simple solution are not so promising as there is no Home State mutual recognition agreement to underpin discussions. Since one of the main aims is to remove, or at least reduce the influence of tax on business decisions the introduction of new complexities is unfortunate and needs to be balanced against the perceived benefits. Mergers and share sales and purchases currently have to take tax into consideration, but the possibility of such a transaction altering the tax base by the current equivalent of changing the residence of an enterprise could be considered as a move away from achieving tax neutrality.

In contrast under a harmonised approach such group reconstructions, or sales of subsidiaries are more straightforward. For those within the new system the common rules apply, for those involving subsidiaries or purchasers outside the harmonised system the method by which the subsidiary’s tax is computed remains the same – it continues to use the common base rules regardless of the fact that it now has a new parent company. The Member State responsible for the tax return administration may change (under Common (Consolidated) Base it is assumed that the headquarter Member State is responsible for the tax administration of the whole group) but the tax rules relating to computing the tax base remain the same.

Cross Border Loss Compensation

Currently, under the existing system, with its 15 independent sets of tax legislation unless Member States were to follow the ‘deduction/reintegration’ method as explained above individual Member States might feel they were giving relief for a subsidiary’s losses whose subsequent profits they would not be able to tax. The existence of different rates across the EU further complicates the issue at present as losses in a ‘low’ tax subsidiary might relieve profits in a ‘high’ tax one; but the subsidiary’s subsequent profits would be subject to the ‘low’ tax.

Under a comprehensive approach, where the consolidation of losses and profits across existing borders is assumed, this ‘complication’ no longer exists as it would be the allocation process which determined which Member State can tax which profits. The source of the profits would be determined not by separate accounting followed by some
form of consolidation but by the formula itself. It would be this formula or formulae that would share the overall, consolidated results of the enterprise between Member States. Accordingly it is theoretically simpler to resolve the obstacle created by the lack of cross border loss compensation with a comprehensive solution than with a specific targeted measure. This is because the precise method of achieving the initial consolidation, or combination of subsidiary results, does not determine which Member State effectively bears the tax-reducing effect of a subsidiary’s loss.

As mentioned above this is assumed to be a prerequisite for participation in Home State Taxation and therefore the obstacle is assumed to be resolved. However, given the range of methods currently in use across the EU there are a number of detailed issues which could be usefully addressed when any agreement to adopt Home State Taxation was established. The section on losses explains the issues in more detail – obviously the fewer differences between the methods of permitting consolidation the more coherent the overall approach is.

In Member States where there is currently no domestic consolidation if this were not introduced then the current position of some enterprises could actually be worsened. For example an enterprise headquartered in a Member State without consolidation but with two subsidiaries within a Member State where consolidation is permitted could find themselves no longer able to offset the profits and losses of its two subsidiaries because the whole group now computed its tax base under the rules of the headquarter or ‘home’ state. As consolidation reduces the incentive to ‘shift’ profits via transfer pricing it follows that without consolidation many of the difficulties associated with transfer pricing would remain.

Dividend Taxation

Under Home State Taxation all intra group dividends would be treated as domestic but the existing problems concerning some cross border dividends from the parent in a state which operates an imputation system to a shareholder in another state could remain unless the agreement to participate in Home State Taxation addressed the issue. Under a harmonised approach the same situation would exist, unless the harmonisation of the tax base extended to dividends. This existing problem may of course be settled by the European Court of Justice, but if not it would remain unless specifically addressed in the agreement to establish Home State Taxation or a harmonised approach.

A further complication for the administration of companies would exist for those subsidiaries subject to their parent’s Home State taxation code who also have minority shareholders, either in the same state or different ones. The subsidiary would have to account under its domestic legislation for dividends payable to domestic, and presumably foreign and Home State minority shareholders188, and under its Home State legislation for the majority parent. A similar situation could arise under a harmonised approach if harmonisation did not extend to the treatment of dividends.

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188 The ‘imputation’ problem arises because the minority shareholder in the subsidiary would continue to expect his dividend to be paid under the subsidiary’s ‘local’ rules – not under the rules of its parent’s Home State, and the subsidiary therefore has to comply with two sets of legislation each time a dividend is paid.
Transfer Pricing Issues

Transfer pricing issues arising from separate accounting should be eliminated or practically disappear for transactions between connected parties participating in any of the comprehensive approaches where tax consolidation is available since they assume the use of a formula for apportioning income between Member States. The current complexities of interpretation and application of the OECD Guidelines on Transfer Pricing as explained above would therefore cease to exist for activities within the EU. However for transactions with third countries they would remain and Member States, and therefore EU enterprises would continue to apply the Guidelines for any transactions with enterprises outside the EU. Given the increased level of co-operation between Member States required for implementation of any comprehensive approach it would be reasonable to assume that this would improve the establishment of common interpretations and application.

Whatever method for allocating the taxable base (or the revenue from a European Company Tax) is used, this would require some form of co-operation at either the Member State level (where macro level data provides the allocation keys) or the enterprise and allocation authority level (where micro level data provides the allocation keys).

The design of the allocation system would aim at simplicity, to avoid the problems associated with the growing data demands of transfer pricing, but it could still potentially involve an enterprise in dealings with a number of administrations. Under Home State Taxation the natural ‘lead’ authority in verifying the formulae data and their application would be the Home State, with possible support from the other Member States. Under harmonising approaches, the same would apply - the natural ‘lead’ authority would be the ‘headquarter’ state who dealt with the administration of the new tax rules for computing the base. However, given the importance of the actual allocation Member States could be expected to take a close interest in its application and any potentially different interpretations. Some form of mechanism might be required to ensure this did not become as arduous as the existing system and the current Arbitration Convention suitably adapted might provide a framework.

Tax–related labour costs

The obstacles identified relating to labour costs can be divided into two distinct types, those which relate directly to the company or employer, and those which relate directly to the employee and only indirectly create problems for cross border activities by companies.

Those relating directly to the company such as the deductibility of pension contributions would in principle be resolved by Home State Taxation since only one set of rules would be applicable across the group, and only one pension scheme or fund would be required. However, in an existing group of companies operating across the EU this could require the current pension schemes or funds to be changed into the type or types currently recognised by the Home State unless mutual recognition was extended to recognition of the different forms of pension funds and schemes.

Those obstacles relating directly to the employee, arising from personal tax legislation within different Member States would remain if Home State Taxation were adopted as it does not extend to personal taxation. If funds or schemes were introduced or amended to
satisfy the conditions imposed by the Home State, additional difficulties for the employees might be introduced since funds and schemes tend to be designed in accordance with local, domestic legislation. A similar situation would arise vis-a-vis other employee benefits such as stock options etc.

Under a harmonised approach one would hope that a satisfactory solution for companies could be reached but again because the obstacles arise in part because of personal taxation, and harmonisation of personal taxation is not included in the comprehensive options, these obstacles would not be resolved.

In conclusion although both Home State Taxation and a harmonising approach could potentially resolve a part of the obstacles, they might create new complexities and additional specific targeted actions would be required because of the personal tax issues.

**Double Tax Agreements**

The possible targeted methods for resolving the obstacles concerned three areas – a multilateral treaty, an EU Model Treaty, and EU recommendations or ‘guidelines’, all of which imply a better co-ordination between Member States. Amongst Member States adopting a comprehensive approach many difficulties should be resolved to the extent that the relevant articles of the Double Tax Agreements would no longer need to be applied. Resolution of the obstacles relating to activities beyond the Member States depends to great extent on whether the existing Agreements are amended. However, as all the approaches require close cooperation the general situation could be expected to improve.

To a certain extent Home State Taxation could be introduced without amending or extending existing Agreements between participating Member States. However, when the activities of enterprises move outside the Home State network the situation becomes more complex and this is explained in some depth below (‘Potential new issues and related technical issues’). Other legal uncertainties, particularly those concerning their interaction with the EU Treaty would remain, and could be increased. However, even without formally amending any Double Tax Agreements the agreement establishing a Home Taxation ‘group’ could include common rules of interpretation which would go some way to improve the current situation as regards Double Tax Agreements between the relevant Member States and at the same time the vexed issue of interaction with the EU Treaty could be addressed.

An approach based on harmonisation would raise similar issues. However, given the level of agreement and the amount of work which would be required to establish a new tax code, to restrict its application to EU income, (which has been suggested in relation to Home State Taxation) would be unfortunate. Amendments to existing Double Tax Agreements or more likely a new multilateral treaty, an EU model treaty or work on specific EU concepts could be expected – along the lines set out in earlier sections of the study. Simply agreeing on common rules of interpretation would probably not be sufficient for a harmonised approach to be implemented effectively.

In conclusion, Home State Taxation on its own might ease the current situation, but realistically the current obstacles would still have to specifically addressed. An approach based on harmonisation would seem to require more specific action and therefore the concept of harmonisation could be said to offer solutions or remedies to the existing obstacles. However, this distinction is founded on the assumption that the targeted
solutions identified above would form part of any such harmonisation. The task of negotiating new Double Tax Agreements should not be underestimated, particularly when the current existing domestic tax systems remain in place in which case any new Agreement, bilateral or multilateral, would have to cater for enterprises continuing to operate under the existing approach, and those opting for the new approach.

**Small and medium-sized enterprises**

The measures envisaged in the comprehensive approaches are not directed from a technical angle towards small and medium-sized enterprises rather than larger ones but they each have features which make them more or less attractive to this size of enterprise.

For a comprehensive approach to be advantageous clearly an enterprise must be active in more than one EU Member State. To the extent that it is easier to imagine a group of Member States adopting Home State Taxation than a group adopting a harmonised approach, **Home State Taxation** is likely to be more useful to a small or medium-sized enterprise since the likelihood of the core group encompassing all its international activities is greater. However, even where an enterprise had activities outside the Home State grouping, and therefore still had more than one tax code to apply, the members of the expert panel assisting the Commission with this part of the study felt that any reduction in the number of different tax codes applicable was a step in the right direction and beneficial. As explained above, Home State Taxation becomes more complex when enterprises trade outside the Home State territories and again the small or medium-sized enterprise is more likely to be able to avoid this complexity.

The basic premise of applying only one tax code, namely the tax code the company is already used to, is also likely to be particularly attractive to the smaller company with limited resources. The initial and ongoing compliance costs associated with an activity in a different state, starting with simply understanding a new tax system, are likely to be proportionately much greater than for those of a large multinational enterprise.

The attraction of the simplicity of Home State Taxation contrasts with the possible difficulties associated with a harmonised approach, the establishment of a common consolidated base for example, which would involve the smaller enterprise in effectively abandoning its only secure knowledge base – the existing tax code – and adopting a new code without any of the established interpretations and precedents. The example of the European Union Corporate Income Tax accentuates this problem even more and it is more generally perceived as being designed primarily with the larger multinational enterprises in mind.

As explained in Part III (on obstacles), in general small and medium-sized enterprises do not face different obstacles to larger enterprises. They suffer more from them because they have less resources, and fewer opportunities, to avoid or overcome them. The comprehensive approaches seek to provide an overall response and therefore where they are particularly attractive to small and medium-sized enterprises this is by accident rather than design. As a final comment one could add that all the approaches involve participating Member States in a degree of change and hence initial uncertainty as regards the profits they may tax. Therefore such approaches might be more appropriate for smaller enterprises on the basis that the revenue risks to the Member State are less.
then follows that mutual recognition, via Home State Taxation, seems more suited to the smaller enterprise because it involves less change in the existing domestic tax codes.

**The taxation of Partnerships**

To the extent that the issues concerning partnerships arise from differences in their definitions and hence their tax treatment in different Member States the comprehensive approaches do not address all the problems identified in Part III associated with partnerships, as they do not extend to personal taxation. If a common corporate tax treatment were agreed as a result of a specific measure then the harmonising approaches could be applied but for Home State Taxation purposes the issue of residence would also have to be addressed to assist in identifying the Home State.

**Value Added Tax**

In principle the comprehensive approaches do not extend to VAT. However, if Home State Taxation were to be introduced there might be pressure to extend the mutual recognition to include some aspects of VAT administration which currently create difficulties, especially those relating to small and medium-sized enterprises. Similarly if a harmonisation approach were to be introduced it would be logical to consider improvements to VAT at the same time but the comprehensive approaches do not address VAT explicitly and therefore additional specific targeted actions or comprehensive VAT approaches would be required to provide remedies to the identified obstacles.

In this context it should be noted that, as indicated above, the Commission is currently concentrating its efforts in the VAT field to a new strategy to improve the operation of the VAT System within the context of the Internal Market. This strategy contributes via numerous targeted initiatives to the solution of the problems that are identified in this study. The Commission remains nevertheless convinced that only a comprehensive solution of a "definitive" or common VAT system will provide an adequate VAT system for the Internal Market. There is no point in rehearsing the various possibilities and proposals in this respect here but it is important to note that the current cross-border VAT problems ultimately cannot be overcome unless a comprehensive Single Market approach is realised.

**Potential ‘new’ issues and related technical issues: Foreign Income and Double Taxation Agreements**

The report goes beyond a straightforward description of the approaches in attempting to evaluate them and therefore potential new issues in relation to the obstacles should also be mentioned. As stated above if the application of either Home State Taxation or a Common (Consolidated) Base were restricted to

- entities and corporate forms currently located in the Home State area\(^{189}\) or the EU in the case of a Common (Consolidated) Base\(^{190}\), and to

\(^{189}\) Income from a ‘non – HST’ permanent establishment of an HST subsidiary would therefore be excluded from taxation under the HST tax code, and taxed separately
it should be possible, at least in the short term, to rely on the existing Double Tax Treaties and to avoid potential complications over the taxation of foreign source income. Without this restriction a number of difficulties arise – they are explained in relation to Home State Taxation but, broadly speaking, the issues are similar for a Common (Consolidated) Base.

190 Income from a non EU permanent establishment of an EU subsidiary would therefore logically also be excluded from taxation under the Common Base tax code, and taxed separately
Box 61:  
Example concerning the applicability of national double taxation treaties

Subsidiary Y, based in MS B but whose tax base is computed in accordance with the tax code of the group’s Home State MS A, trades with another group company – Subsidiary X, which is a USA company. Although the tax code of MS A applies to transactions with other ‘Home State’ group entities any transfer pricing discussions concerning transactions between Subsidiaries Y and X would have to be between the administrations of the states where they are resident - USA and Member State B, not Member State A. Subsidiary Y remains a resident tax payer of Member State B and has no rights under Member State A’s Double Tax Agreements. It is only the method of calculating the tax base which has changed. The relevant Double Tax Agreement is USA/Member State B. In the event of a transfer pricing enquiry any adjustments agreed between the administrations (USA and Member State B), logically should not form part of the group’s overall tax base computations in accordance with the Home State’s, ie Member State A’s, tax code: They should remain with Subsidiary Y in MS B, as otherwise every participating MS would have to accept the outcome negotiated under the DTA entered into by MS B. In the same way tax credits or withholding taxes paid or suffered would remain ‘entity specific’ and not form part of the overall computation and allocation of the Home State Taxation base.

A similar complication arises when a group has entities in Member States with different approaches to the taxation of dividends.
Subsidiary Y from the above example, based in MS B but whose tax base is computed in accordance with the tax code of the group’s Home State (MS A), pays a dividend to parent company Z in MS A. MS A adopts the credit rule, MS B the exemption system. Subsidiary Y’s dividend may bring with it tax credits for tax paid in MS B, and potentially for tax paid in 3rd countries if Subsidiary Y has 3rd country subsidiaries.

The question here is how to deal with the potential tax credit, in particular whether or not it should form part of the overall consolidated Home State Taxation base and therefore be distributed across the group in accordance with the allocation system for the tax base.

These issues, and a number of other similar ones, have been identified in the literature describing Home State Taxation as areas requiring further research and they illustrate that although a very simple concept, Home State Taxation raises complex issues which would have to be resolved prior to any application. The corporate structure of many multinational enterprises can be very complex and at least seven structures can be identified which would require additional analysis.

A solution to some of these complexities may be for participating companies and their branches to report their activities under two separate categories. Those which are within and between the Home State/common base network, and those which are outside – be they non EU states or EU states who do not participate in Home State Taxation/Common (Consolidated) Base.

Under Home State Taxation some such analysis by subsidiaries seems inevitable, for example if a subsidiary has a minority shareholder then these dividends should continue to be subject to the local tax code where the subsidiary is based. Those paid to the parent should be subject to the Home State tax code. Transfer pricing adjustments with non Home State Taxation countries (as described above) would also remain at the level
of the local subsidiary. Similarly, dividend tax credits or foreign tax credits received by or accruing to the subsidiary may also have to remain at this ‘local’ level.

However, additional analysis may reveal new problems and there is a risk that whereas Home State Taxation may appear to simplify a group’s tax affairs, within some of its subsidiaries it may impose a new type of complexity – that of identifying activities and transactions which must remain at the ‘local’ level and not become part of the overall Home State computed tax base which is to be allocated across participating Member State enterprises. The final tax liability of a subsidiary would then be made up of two parts, one relating to the profits allocated to it from the Home State ‘pot’, the other relating to profits which had remained outside this Home State ‘pot’ and been subject to local rules, principally because of the local State’s Double Tax Agreements. The same could apply under a Common (Consolidated) Base. Proponents of both approaches are convinced that the other benefits from adopting a comprehensive approach would far outweigh these additional administrative tasks and would be a ‘price worth paying’.
Box 64:
Home State Taxation and Double Taxation Agreements

In its study on the Compatibility of the Home State Taxation System with Double Taxation Agreements included in Lodin, S. & Gammie, M. Home State Taxation (IBFD Publications, Amsterdam, 2001) the IBFD examined the compatibility of Home State Taxation (HST) with Double Taxation Agreements (DTA) based on the OECD Model with particular reference to some of the above structures. Preliminary conclusions confirm that if non EU income were initially excluded there should be no fundamental problems. If it were included a number of technical amendments to DTAs would be required, the main problem identified being the receipt of 3rd country dividends by a subsidiary in a ‘credit’ state, whose Home State were an ‘exemption’ state creating the situation of the subsidiary’s state having to give a tax credit under the DTA when the relevant income may be exempt. The assessment identified two key principles -

- It is assumed that participating Member States will agree not to apply their DTAs amongst themselves as the allocation formula effectively allocates taxing rights.
- Some issues remain concerning DTAs with states not participating in the HST system. As access to DTAs is based on the residence of the taxpayer it is assumed that individual members of a corporate group taxed under HST will continue to rely on their ‘domestic’ DTAs, even though their taxable base will be determined by their parent’s Home State tax legislation.

The review covered the following –

- Article 2 Taxes Covered
In principle no problem – the nature of the tax levied does not change, simply the method of computing the base.

- Article 23A & B Elimination of Double Taxation: Exemption Method & Credit Method
Example – HST Parent with an HST subsidiary with a 3rd country branch. HST Parent operates exemption, ie the foreign income of the subsidiary would be exempt. The subsidiary is in a credit system and the subsidiary/3rd country DTA entitles the subsidiary to a credit for tax paid by the branch. The subsidiary/3rd country DTA still applies, regardless of any HST agreement. Only if the foreign tax credit provisions of the subsidiary’s state are granted under its domestic law, and not under a DTA with a 3rd country would the subsidiary’s state be able to allow the treatment of the foreign income to be determined under the exemption rules of the HST.
In principle this can only be solved either by amending the DTAs, or by restricting the operation of HST rules to measuring income derived from within the HST area.

- Article 5 Permanent Establishment & Article 7 Business Profits
Example – HST Parent with a 3rd country subsidiary with an HST branch (PE). The branch (PE) computes its base in accordance with the HST legislation, and the allocation formula. Under the DTA (Art.5) the state with the HST Branch is entitled to tax those profits attributable (calculated in accordance with Art.7) to the PE. But Article 7 basically requires the separate entity approach to the calculation of the PE profits, and these are based on the allocation( ie apportionment) under HST. Unless apportionment is customary the consent of the 3rd country is required under the DTA for the PE to compute its profits in this way. As a further complication the general aim of any apportionment ought to produce figures as close as possible to those which would have been produced under separate accounting [although a UK tax case (Sun Life v Pearson 1986) interpreted this not as a close correspondence, but a degree of correspondence]. Consent would be required in most such cases, and HST states would have to convince 3rd countries that the apportionment formula could provide the necessary degree of correspondence – and 3rd countries who operate a tax credit system to eliminate double taxation would be mindful of the fact that if the formula produced higher profits for the PE then they would have to grant a higher tax credit.
• Article 9 Associated Enterprises
(Transfer Pricing – provides for a corresponding adjustment where a transfer pricing adjustment has been made)

Example - HST Parent with an HST subsidiary with a 3rd country sub-subsidiary. The 3rd country authorities make an adjustment in the sub-subsidiary. Under the DTA between the subsidiary’s state and the 3rd country the subsidiary’s state may make a corresponding adjustment and preferably after the allocation process. By analogy any primary adjustment required would be made by the subsidiary’s state, not by the HST parent state.

• Articles 10,11,12 Payment of Dividends, Interest, & Royalties.

Example - HST Parent with an HST subsidiary with a 3rd country sub-subsidiary. (i) Payments from the 3rd country sub-subsidiary to the subsidiary may be subject to withholding tax, and taxed in the subsidiary (subject to double tax relief already discussed above). However, the subsidiary’s tax base is determined in accordance with the HST rules and apportionment and may not necessarily include all these amounts (or at all if they are exempt) - for which a tax credit may also be expected. This could be particularly relevant for a state with substantial foreign income flows which gives tax credits under its DTAs but where a number of the resident enterprises have parents in potential Home States who operate the exemption system. Excluding such 3rd country dividends from the HST system has obvious record keeping implications for the subsidiaries. (ii) Payments to the 3rd country sub-subsidiary from the subsidiary may again be subject to withholding tax, under the subsidiary’s state’s legislation and DTA – not the HST state.

• Article 24 Non Discrimination

Example – 3rd country parent with a PE in a state which operates HST. Tax on the PE ‘shall not be less favourably levied.. than ..[that]levied on enterprises of that other state carrying on the same activities’, but there may be within the state enterprises who are taxed (more favourably) on an HST basis. It might be possible to counter such a claim by arguing the HST comparison is invalid as it is not the ‘same activities’ but this clause of the DTA should really be specifically amended.

• Potential changes – to make HST more effective

Information gathering powers
Where the HST authority might wish to audit a 3rd country subsidiary, for example when it had a branch in a HST state it would be preferable for the DTA to make reference to this possibility than always having to rely on the existing DTA between the branch’s state and the 3rd country, ie acknowledge the role of a Home State authority.

• Deemed residence

In the long run the most effective solution would be for DTAs between HST states and 3rd countries to permit residence and hence DTA applicability to be determined by membership of the HST group. All members of an HST group, where ever their current residence is would be entitled to apply the DTAs of the Home State with 3rd countries rather than those of their current state of residence.
Conclusion

The following table summarises the findings of this section:

<table>
<thead>
<tr>
<th>Box 65: Are the obstacles removed by the comprehensive approaches?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home State Taxation (HST), Common (Consolidated) Base, EU Company Income Tax (EUCIT) &amp; Compulsory Harmonisation.</strong></td>
</tr>
</tbody>
</table>

**Obstacles -**

| General | In principle most obstacles (within HST group or EU) are resolved or materially reduced. Under harmonisation this is partly because in defining any new tax code one would expect to specifically address the obstacles at the design stage. |
| Compliance | In principle reduced. Enterprises only have to deal with one tax code, and transfer pricing is resolved between participants. But without new DTAs significant costs could remain for some enterprises and the allocation formulae might create additional costs. For administrations operating two tax codes (not applicable for Home State Taxation) could increase costs. Use of existing legal system for HST could be simpler than a new tax code. |

**Group Taxation**

| Groups, mergers & acquisitions | Under HST domestic treatment would apply which is generally more straightforward, but might involve subsidiaries changing their tax base when a new parent company is headquartered in a different state. Harmonising approaches could be expected to specifically address these obstacles by providing a simpler common method. |
| Cross Border Loss Compensation | Requirement for participation in HST, but simple extension of the currently used different methods could be problematic. In general much simpler to achieve under a comprehensive approach than at present, because it is the allocation process that determines how losses are allocated and relieved. |
| Dividend Taxation | Possible continuing difficulties/ new complications with imputation systems and minority holdings. Harmonising approaches could resolve these if extended to cover these issues specifically. |

**Transfer Pricing**

Problems resolved within the EU (or the HST ‘group’) as separate accounting replaced by allocation of the tax base.

**Labour Costs**

All comprehensive approaches could potentially resolve some of the obstacles, but where they arise from interaction with personal tax they would remain.

**Double Taxation Agreements**

Both HST and a common base could probably function under existing DTAs but some of the advantages would be lost as a result of the reduced scope. Perhaps acceptable under HST or a common base as a ‘pragmatic’ response but harmonisation really requires a new multilateral DTA– ie as part of the process the individual obstacles identified would have to be addressed. Existing obstacles relating to issues within either the HST ‘group’ or the whole EU if applicable, should disappear or be more straightforward to resolve.

**Small & Medium Enterprises**

None specifically addressed to SMEs who meet the same obstacles. HST could be particularly appropriate for SMEs – retain existing code, simple, low risk for administrations.
<table>
<thead>
<tr>
<th>Partnerships</th>
<th>Not specifically addressed. Under HST defining residence for the partnership would remain difficult. In theory harmonising approaches could attempt to address issues if desired.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAT</td>
<td>Not specifically addressed. If a comprehensive approach were implemented there might be pressure to further harmonise VAT procedures etc in a similar manner.</td>
</tr>
<tr>
<td>Potential New Issues</td>
<td>Certain Foreign Income – could create difficulties and therefore might have to be omitted from the new treatment.</td>
</tr>
</tbody>
</table>

Although in some instances the analysis of how the existing obstacles could be resolved is complex, the ‘prize’, namely the overall improvement of the current fragmented situation and the potential benefits that arise, should not be forgotten. Further research is required but it is clear that applying a comprehensive approach could potentially permit many of the obstacles to be resolved at the same time. Indeed in Part II of the Study the Qualitative Analysis reveals how for many of the structural elements which make up the tax base there already exist ‘clusters’ of Member States with broadly similar provisions. A harmonised approach would be an ambitious undertaking, requiring as it would the agreement of effectively a new tax code and some form of wider debate is needed to add direction and impetus to the extra research.

MANAGING THE TRANSITION & IMPLEMENTATION ISSUES – THE DYNAMICS: A GRADUAL SERIES OF STEPS OR A SINGLE LEAP?

Changing from one tax system to another

All the approaches create potential transitional difficulties which could extend for many years. Under Home State Taxation aspects of the enterprise’s historic tax position could be maintained outside the Home State calculation and only brought into account after the allocation process. For example unrelieved losses brought forward by a subsidiary could be retained and relieved not against the whole group’s current profits, but only against the profits allocated to the subsidiary. This would take place after the computation of the group’s taxable base under the Home State tax code and its allocation in accordance with the agreed formula. However, if the subsidiary’s local tax code categorised losses into trading and capital losses and similarly restricted their relief then a problem could arise if the Home State tax code did not maintain this distinction. This sort of issue would have to addressed in the initial agreement to participate in Home State Taxation.

Maintaining this historic data is relatively straightforward when the existing tax code co–exists alongside the comprehensive approach but if the new approach, for example a compulsory harmonised system, replaces the existing code it becomes more difficult as the historic data has to be translated in some way into the new system.

Competitors subject to different tax treatment

Any form of parallelism implies differences between tax systems which raises a competition issue. Home State Taxation inevitably creates the situation where two rival enterprises located in the same Member State but belonging to parent companies in
different Member States may be taxed on different bases, and would therefore be contrary to the principle of capital import neutrality.

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**Box 66: Example for potential differences**

Two retail outlets – Z and Y - in Member State A compete. Currently although they may have parent companies in different Member States they are both taxed initially under MS A’s tax code. Under Home State Taxation Z’s tax base may be computed in accordance with its parent’s (MS B) Home State’s tax code, whereas Y with a local MS A parent does not have this possibility. They will both eventually pay tax to MS A but because the bases have been computed differently the effective rate may be different. A third competitor – X – may have yet another Home State, say MS C.

In the above example three identical local business activities compute their tax base according to three separate tax codes and may therefore be subject to different effective tax rates. Whereas one could argue that mutual recognition presupposes a level of comparability such that any differences would be immaterial this begs the question - if there is so little difference between tax codes why not adopt a fully harmonised approach?

Under a harmonised approach identical local business activities could be subject to two separate tax codes. For example, under a Common (Consolidated) Base competitors could be using either the common base or the local base. However if local companies without any international activities are also permitted to opt for the common base then this could be avoided.

Under Home State Taxation if the parent company were from a state outside the Home State area, within or outside the EU, the subsidiary might complain that because it has no option but to compute its tax base according to the local rules, whereas its competitors had the choice to opt for Home State Taxation it is being discriminated against. Under a harmonised approach, for example the Common (Consolidated) Base, if such a subsidiary were permitted to adopt the common base this could be avoided.

**General Dynamics**

With the exception of a rapid introduction of a compulsory harmonised approach comprehensive approaches raise the question of how the initial introduction is likely to develop. Conceptually a new approach can be introduced by either a restricted number of Member States, or for a restricted number of enterprises. The conditions defining the participant enterprises can be defined in a number of different ways - size, sector, type of entity etc. Combining the two factors results in an approach applying in some Member States to some enterprises. How, and to what extent a ‘dynamic for participation’ is created raises the question of how an incentive to participate can be reconciled to the need to avoid distortions in competition.
Member State participation – enhanced co-operation by a core group of Member States

Establishing the core group

To what extent participation by a group of Member States rather than all the Member States would be workable is an important issue. There are precedents at the EU level for Member States to opt in or out of particular policies on a permanent or temporary basis. The Schengen Area has gradually expanded as more Member States join, the Social Chapter did not initially cover all Member States and the Euro has not been adopted by all Member States. The recent Nice Treaty has further defined this concept of ‘enhanced co-operation’ and the use of this may increase.

Any comprehensive scheme must therefore make allowance for the possibility that not all Member States might wish to implement it at the same time. In theory a core group of Member States could probably adopt any of the comprehensive approaches identified but this would have implications both for the level of benefits flowing from the approaches and potentially on the relations between participating and non participating Member States.

Approaches based on mutual recognition seem to provide more scope for partial implementation of this nature and the Qualitative Analysis in Part II provides some pointers to which Member States might be more easily able to adopt this approach where they already have similarities in their tax codes. A certain degree of similarity is an absolute prerequisite for any sort of mutual recognition. Since the aim is essentially to identify and recognise existing similarities, and not to define a new tax code it almost seems to be designed for implementation by a group of Member States.

Clearly to qualify as ‘comprehensive’ a grouping would have to involve a number of Member States but discussions in the panel of experts did confirm that notwithstanding the fact that participation by all Member States would be preferable, a partial implementation would be a step in the right direction. In the same way the creation of a harmonised base by a limited number of Member States would be seen as progress.

Expanding the core group

Whether the formation of a Home State group would encourage other Member States to aim for participation is less clear. Pressure might be expected to come from enterprises headquartered outside one of the Home States either for its ‘own’ Member State to participate, or for one of the Home States to accept it as being headquartered there. For membership of a Home State group to be sufficiently attractive for an enterprise to seek to change its ‘home state’ the advantage would have to be material. Whether such a material advantage would represent a ‘distortion’ to competition is debatable but the issue is not a new one as there is evidence of enterprises seeking to change their residence under the current systems in order to benefit from more advantageous tax treatment.

The incentive for Member States outside the grouping to subsequently negotiate ‘entry’ would depend on a combination of the evaluation of the benefits achieved by the participating states which may not be evident for several years, and the pressure from enterprises as demonstrated by their wish to relocate as outlined above. If the main reason for not participating was originally related to structural differences it is likely that
it would be the ‘incoming’ state who would have to adapt its code to make it acceptable and it is difficult to see the formation of an initial grouping as establishing a rapid momentum, unless the number of enterprises seeking to relocate was material.

Home State Taxation has been described by some authors as a step towards harmonisation, helping to create the conditions for the establishment of a harmonised base but this is not inevitable. If no predetermined timeframe for Member States to join is established then such a ‘transitional’ phase might ‘de facto’ become the established system.

The introduction of a harmonised approach such as a Common Consolidated Base or even the European Union Company Income Tax by a group of Member States essentially raises the same questions. Harmonisation by a group of Member States is perhaps less likely because it requires a greater degree of technical preparation and agreement than Home State Taxation and raises quasi constitutional questions concerning the EU, unlike Home State taxation which could be considered a more straightforward Member State issue. For instance Home State Taxation could be established via a ‘Home State Convention’ agreed by the participating Member States, whereas harmonisation requires Member States to agree upon a new, joint or common tax system which one would expect to progress via the EU’s procedures, requiring unanimity in Council (should all Member States participate).

Optional or compulsory for Corporate Tax payers?

Partial or total participation?

The introduction of any comprehensive approach potentially involves transitional arrangements whereby certain sectors or certain types of enterprises might be treated differently. However, there is an additional issue of principle concerning whether or not the option to participate should be a feature of an approach and who should exercise the choice in what circumstances. The literature on the subject proposes that companies should be free to opt into an approach, but, that with certain well defined exceptions, this should be a ‘one off’ irreversible decision (or at least one which is binding for a significant period of time), in order to ensure that it does not become a tool for tax avoidance. In defining which enterprises would be eligible Member States would be effectively exercising their choice over eligibility. Obviously for a choice to exist there must be an alternative, in which case any element of choice presupposes that a parallel approach has been adopted and the existing tax code remains intact which adds additional complexity. Such choice could raise potential problems concerning discrimination between enterprises exercising their freedoms under the Treaty.

Selection by Sector and/or Size?

There are a number of possible ways in which participation could be partial. At the enterprise level either sector or size could be a determining factor. Defining sectors for the purposes of determining tax treatment is currently widely practised across the EU. Examples include banks and insurance companies, oil and gas companies, and manufacturing companies. Using size to determine tax treatment is similarly widespread, for example, with special rates of tax and compliance requirements for ‘small and medium-sized enterprises’.
The difficulty is what to do when an enterprise moves from one category to another. When it is the sector that is the defining factor, movements are less common and a change in tax treatment is more understandable as the very nature of a business changes. Using size, whether measured by turnover, profits, employees or cross border trades is likely to produce more movements from one category to another. As a general rule existing tax differentiation on the basis of size tends to be for the purposes of providing assistance or incentives for smaller enterprises and it is understandable that as an enterprise grows it may have less need for different treatment. Whether a particular comprehensive approach is to be considered as a form of temporary assistance or incentive, or as a specific measure to remove an obstacle may then be important in deciding whether or not size could be recommended as a factor.

Both sector and size are relatively objective measures, whereas for enterprises (or Member States via the eligibility criteria) to be able to choose between tax systems introduces a far greater degree of uncertainty. Within existing tax codes an element of choice is already permitted, for example, in some Member States there is a choice of depreciation methods, but these are relatively minor. Some members of the expert panel assisting the Commission with this part of the study were very keen that enterprises should be able to choose whether or not to participate and this highlights one of the principle difficulties concerning choice. Neither enterprises nor Member States are likely to support the idea that the other can choose a system to pay less tax, or choose a system to collect more tax, simply by opting in or out of a tax system. This suggests a comprehensive approach which is optional has to be capable of incorporating a motive test, and/or be sufficiently transparent to permit comparisons. If enterprises are given the choice of whether to opt ‘in’ or not, the right to subsequently choose a different option would have to be carefully controlled. If, as has been suggested under Common (Consolidated) Base, ‘special’ rates were applicable then this could be less of an issue.

The main advantage of extending an option to a defined sector or size of enterprise would be that there would automatically be created a group of enterprises who could provide a ‘pilot’ or test case. Enterprises operating under the European Company Statute could clearly form such a group, as could small and medium-sized enterprises, or companies quoted on certain stock exchanges. This latter group would of course dovetail neatly with that proposal for accounting harmonisation and its application to quoted companies.

In principle there is little justification for removing or resolving tax obstacles only for certain types of companies. Thus ideally any comprehensive approach should be extended to all companies. There are, however, practical arguments in favour of a gradual approach, starting with some companies and thereafter extending to include others.

For Member States, extending an approach initially confined to a specific sector will depend to a great extent on the benefits obtained. The extent to which implementation involved structural changes for a Member State might be a determining factor. The initial introduction of Home State Taxation for, say, small and medium-sized enterprises might require few changes but, if Double Tax Agreements were amended, then a wider application might be considered worthwhile. Under a harmonised approach a new tax code would have been defined and this could presumably be extended to beyond any initial restricted introduction.
Common to both a mutual recognition and a harmonisation approach would be the introduction of the allocation system and the extent to which this was successfully established could increase pressure to extend an approach to more sectors (and sizes of enterprise). If the allocation was proving simple to operate and, at the same time, non-qualifying sectors were increasingly involved in transfer pricing disputes or any of the other obstacles addressed by the approach, then Member States would have an incentive to extend the approach.

From the enterprise point of view, the introduction of a comprehensive approach for certain sectors is perhaps less likely to create this dynamic or momentum for a more widespread introduction. Two factors potentially create pressure, one the reduction in absolute costs for the enterprise (either administrative costs or actual lower taxes), the other that of competitive pressure where a competitor has ‘access’ to a more advantageous tax regime.

Where different sectors are concerned the latter pressure would not exist and the driving force would be solely related to cost savings. An exception to this might be the position of enterprises operating in more than one sector, where there would clearly be pressure to extend the definition of a qualifying sector if the approach were considered to be advantageous – the ‘qualifying’ manufacturer who also had ‘non-qualifying’ activities might seek an extension for example. In this way a more general extension might be envisaged as the competition element in the non-qualifying activity sector might be reintroduced.

In the longer term, if size were a determinant, the question of what to do when an enterprise grew above the threshold might result in an extension of the category. Removing the right to a comprehensive approach because an enterprise has grown might be seen as unreasonably punishing success. Over time, as more enterprises exceeded the definition but retained the benefits, then a competition concern might arise with existing large enterprises in the relevant sector if the extension was not made general.

**Speed of momentum**

Whereas a number of factors can be identified that might give rise to pressure to extend approaches to more Member States and/or more enterprises, the majority are relatively long-term and unpredictable. Without a predetermined timetable or statement of intent such change is likely to be very slow indeed, with one possible exception. The restricted introduction of an approach as a pilot or test case with a formal evaluation process to follow might provide an incentive. Ring fencing such a pilot could be based on any of the above factors although the simplest might in fact be to use the new European Company Statute as the determining factor as there would be no problems of definition. Another alternative might be to restrict a pilot to certain small and medium-sized enterprises on the grounds that the risks to Member State tax revenues were lower and more manageable.

**Uncertainty about tax yield**

A more general difficulty would be the degree of uncertainty for Member States concerning their tax yield from any new approach. This is the case for any major tax reform but the scale of the uncertainty could be much greater. With the exception of a compulsory introduction of harmonisation the concept of a staged introduction is a possibility, and this would reduce the level of uncertainty and provide a useful ‘test’
case. If an approach were made optional, as is the strong preference of the expert panel assisting the Commission, a self selected sample would be immediately available. In this respect introducing **Home State Taxation** for small and medium-sized enterprises could be particularly appropriate, and if these only had activities within the Home State area a number of the difficulties outlined above would be avoided.

However, the revenue implications should not be underestimated. In theory, the amount by which total EU tax revenue would change should be limited to the current amount of double taxation, but the timing of its collection would necessarily alter if enterprises active in more than one Member State were able to offset cross border losses rather than, as is currently the case, wait until profits are available within the current respective tax jurisdictions. In addition there would probably be some redistribution of the tax base of enterprises between the Member States as a new allocation system, in place of separate accounting, is unlikely to produce exactly the same results.

In addition to these potential changes in the overall tax base, under a **harmonised approach** unless Member States all applied the same tax rate they would also be subject to competitive pressures as differences in the effective tax rate would become much more transparent. Under **Home State Taxation** the identity of an enterprise’s home state could become a key issue but it should be possible to define objective criteria for establishing the appropriate State, particularly as the approach is based on existing legislation rather than new unproven legislation.

**Accounting**

In preparing for an approach based on **mutual recognition** the required degree of comparability is difficult to define precisely. The initial difficulty concerns the current lack of harmonisation of accounting standards, an issue which is covered above in the section on Company Taxation and Financial Accounts. There is considerably more pressure to successfully implement a common approach to accounting than taxation and there are a number of formal proposals under consideration. However, the different legal traditions within the EU, concerning the degree of independence of financial accounts from taxation accounts, will continue to be a stumbling block to complete harmonisation. On the accounting front the driving pressure is the proposed adoption of International Accounting Standards which tend to reflect more the investor interest than the tax administration interest. The discussions concerning the possible move towards fair value accounting accentuate this trend. In Member States where the degree of independence is high such developments have potentially less impact than where the tax accounts are more dependent on the financial accounts.

In preparing for any comprehensive approach the accounting issues discussed above are particularly relevant. **Mutual recognition** of a tax code does not in itself demand accounting harmonisation. However, because in some Member States the tax treatment is dependent on the accounting treatment, the accounting issue becomes important. Unless mutual recognition of tax codes was extended to include a mutual understanding of other states’ approach to the relationship between tax and financial accounting, or accounting harmonisation was simultaneously developed, some subsidiaries might have to change their accounting policies to retain a particular tax treatment. **Harmonisation**, as a comprehensive approach, on the basis of a new tax code could avoid such
problems, but again the relationship between tax and financial accounting would have to be specifically addressed.

The current practice of permitting the use of different accounting policies in the consolidated group accounts, prepared essentially for investors, from those used in the individual taxable entity accounts is an understandable, and pragmatic, response to the existence of the two legal traditions but hardly contributes to business simplicity or efficiency. The benefits stemming from current developments in accounting harmonisation may then be relatively limited from a tax perspective. Conversely, progress on the tax front might ease the harmonisation of accounting standards in that some of the obstacles to this could be said to exist because of the conflicting demands of individual Member State tax administrations.

The Qualitative Analysis presented in Part II of this study illustrates to a certain extent the degree of comparability between the accounting base and the tax base in each individual Member State. However, because of the lack of comparability of the accounting systems, it is difficult to read too much into a comparison between the individual Member States precisely because the accounts themselves may not necessarily be comparable. It may be tempting to conclude that, if accounting standards were harmonised, then this would be a major step forward towards permitting mutual recognition but this is not necessarily correct. There is no guarantee that harmonising accounting standards would inevitably lead to changes in the taxable bases because of the differing degrees of tax and financial accounting ‘dependence’. The same applies to an approach based on harmonisation, but here, with the greater degree of legislative change required, it is perhaps easier to assume that the accounting difficulties could be resolved simultaneously.

The European Company Statute

As it currently stands the above-explained regulation on the European Company Statute does not include any specific provisions for taxation. The arrangements for the taxation of the profits, or losses, of a European Company will be governed by the national tax law of the Member State, and by existing international conventions subject to the application of existing Community law. For instance a European Company registered in France will be governed by French tax law, according to French Double Tax Agreements, and if registered in Germany by German tax law, according to German Double Tax Agreements etc. Logically existing Directives such as the ‘Parent Subsidiary’ Directive and the ‘Merger’ Directive will require a simple amendment to ensure that European Companies have the same rights as domestic companies are granted under the directives. A European Company will therefore face the same tax obstacles as any other local incorporated company.

However, now that the ‘company law’ situation for enterprises wishing to make use of the Internal Market has been so dramatically simplified, there will be additional pressure to ‘find’ a tax solution. Although the benefits may be sufficient in themselves for a new company to incorporate as a European Company, the situation for existing groups may not be so attractive. In return for a legal framework which is applicable across the EU the established enterprise may incur significant tax liabilities when transferring activities into the new entity from existing subsidiaries across the EU; and may ‘freeze’ losses in these existing subsidiaries. An enterprise might as a result of the reorganisation be able to benefit from more effective cross border loss relief than hitherto. This could be the
case if the new European Company traded via permanent establishments across the EU, instead of subsidiaries at present, and therefore the generally more advantageous rules for treating the losses of permanent establishments, in contrast to those of subsidiaries might be available. However, it would still be subject to the same tax legislation, and suffer from the same tax obstacles, as a local registered company.

The European Company could therefore be described as a ‘European’ corporate form looking for a European taxation approach – hence the particular attraction of a comprehensive approach. Adopting Home State Taxation would be possible in the same way as for an ‘ordinary’ company. A harmonised approach, such as Common (Consolidated) Base could also be utilised. The rules governing who may establish a European Company under what conditions are relatively well developed and restricting a comprehensive approach to this category of company would be straightforward and justifiable. For an existing enterprise the transitional complexities would remain unless the approach specifically allowed for the transition, providing new businesses with a ‘European’ system of taxation from day one could be particularly attractive.

**REVENUE ALLOCATION : THE DIFFERENT METHODS**

**General Background – separate accounting and formula apportionment**

As explained in the section ‘What must a Comprehensive Approach do?’ the mechanism for allocating the profits and losses is an integral part of any comprehensive approach and it is therefore considered quite separately from the individual concrete options for a comprehensive approach.

It practically goes without saying that unless corporate taxes are computed and utilised by a single authority in the Internal Market there has to be some form of apportionment or allocation between the individual Member States. The current approach in the EU is that of ‘separate accounting’. Activities within each Member State are accounted for separately, and where enterprises operate across borders the arms length pricing concept is applied to each transaction. Each Member State then individually assesses and collects the tax due from each taxable entity in accordance with its own national tax code and territorial principles. Indeed this analysis can be taken a stage further by ring fencing specific activities in order to stratify the tax base in even more detail, as was done in the UK when the field based Petroleum Revenue Tax was introduced.

Theoretically, separate accounting is the most accurate solution in that it follows a ‘bottom up’ approach, with each transaction being individually recorded in the accounts of its respective jurisdiction so that the correct source of any profit can be identified. The implication is that the EU represents a series of individual national markets rather than one single European market. However, as markets and business models develop it is questionable whether it remains the most appropriate and cost efficient method.

It is also an increasingly difficult approach to follow as the number of intra group transactions grows. Often it comprises not only goods, for which third party equivalents are relatively readily available, but also includes services or rights to exploit group generated intangible assets such as patents, which may have no readily available third party equivalent. This raises the more fundamental question as to whether within a group it is possible to determine where the true profits are generated. When enterprises maintain the full range of activities within one tax jurisdiction, for example, a research
activity to develop a product, a manufacturing activity, and a marketing activity, there is no need in many cases, for tax purposes, to allocate the profit between the activities. Enterprises develop, for management purposes, methods of apportioning the profits and record these in their management accounts.

Should an activity be transferred to another tax jurisdiction then although, within the enterprise, the same apportionment may continue, for tax purposes the ‘arms length principle’ would be applied. The developing nature of business activities results in this happening more and more frequently and, as the methods for determining the appropriate transfer price multiply and become more complex, it is tempting to question the relevance of such an approach within a Single Market.

It is therefore not surprising that one of the major obstacles identified concerns transfer pricing, which is an inherent feature of separately accounting for each transaction. All the comprehensive approaches examined involve to a greater or lesser extent the effective amalgamation of currently separate tax bases. They therefore require some method of allocation or apportionment to individual Member States. So when considering the different approaches one must also consider the possible allocation methods. In theory one could probably apply separate accounting as an allocation method under approaches such as Home State Taxation, European Corporate Income Tax, or Common or Harmonised Base. But since this would in effect negate many of the perceived advantages, it would be rather self-defeating and is therefore not reviewed in any depth here.

Transactions with non EU Member States, or any Member States not adopting a comprehensive approach, would continue to be dealt with within the current international framework. In most cases this would involve following the OECD separate accounting approach, but the coexistence of two different methods for those enterprises operating within and outside the EU would be quite possible.

Methods of allocation may be applied either to the tax base or to the actual tax. Although there are significantly different political implications in the two approaches, in technical terms the two are similar. All methods seek simply to allocate an EU figure across a number of individual Member States. Allocation can be based either on ‘micro’, individual enterprise data, ‘macro’ Member State data, or a combination of the two.
**Allocation on the micro level – formula apportionment**

The best known method (other than separate accounting) is known as Formula Apportionment\(^{191}\). Indeed it has sometimes been described as a potential comprehensive approach to company taxation in its own right\(^{192}\). However, while in theory it could work in isolation if individual tax bases were reasonably similar, in practice it requires some form of overall base to act upon or apportion. It is therefore considered here as a tool for the process of allocation rather than a tool for both measuring and allocating the overall profits of an enterprise operating in more than one Member State.

*The examples of USA and Canada*

**Box 67: USA – Use of Formula Apportionment**

Federal State, with 50 states and the District of Columbia  
Classical system, levied on consolidated group income (80% ownership test)  
Federal Tax Rate: 33% (<$10m income), 34% (>=$10m income)  
State Tax Rate: determined by each state, ranges from 0% to 12%, average of 7%, deductible for Federal Tax, therefore effective State Tax Rate ranges from 0% to 8%, average of 4%.  
Federal plus State Rate: 33% to 42%  
Proportion of total tax (Federal plus State tax) which is State Tax which is based on apportionment of profits by formula: from 0% to 19%.  

States have the right to define the base, the formula, and the rate.  
Rules for computing the state tax base differ from state to state but in general the starting point is the Federal Tax Base which, subject to any specific adjustments, is allocated by formula apportionment. This apportions total income according to the share of total business activity in each state. Each State can set its own formula. The vast majority use three factors, property, payroll and sales, but not all states weight each factor equally. The definition of the factors may vary between different sectors. Most common is the ‘Massachusetts Formula’ with equal weighting of all three, but increasingly sales are double weighted giving 25%,25%,50%; rather than 33%,33%,33%.

**Box 68: Canada - Use of Formula Apportionment**

Federal State, with 10 provinces and 3 territories  
Modified imputation system, levied on individual corporations.  
Federal Tax Rate: 38%, reduced to 28% on domestic income. With 4% surcharge the effective Federal Rate is 29.12%

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\(^{192}\) For a more detailed discussion see: Bravenec, Lorence L, *Corporate Income Tax in the 21st Century*, European Taxation, October 2000

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Provincial Tax Rate: determined by each state, ranges from 14% to 17%, average of 16%, for manufacturing and process income this is reduced to a range from 0% to 10%, average of 6%. It is not deductible for Federal Tax.

Administration of Provincial Tax by Federal government, except in 3 provinces who self administer.

Federal plus Provincial Rate: 43.12% to 46.12% (manufacturing & process 29.12% to 39.12%)

Proportion of total tax (Federal plus Provincial) which is Provincial Tax which is based on apportionment of profits by formula – from 32% to 37% (0% to 26% for manufacturing & processing).

Provinces for whom the Federal government provides the administration have no right to either define the base or the formula, only the rate.

Rules for computing the province tax base are harmonised – it equals the Federal Tax Base. It is allocated by formula apportionment, which apportions total income according to the share of total business activity in each state. Each Province uses the same formula, based on two factors, payroll and sales.

In both the USA and Canada Formula Apportionment is used by individual states to identify and subject to tax ‘their share’ of the national profits of enterprises which operate in a number of different states. It seeks to apportion income according to the share of business activity carried out in each state. This share is calculated according to a formula, or series of formulae, typically based on a combination of the ratios of local to total sales, payroll and assets, (in Canada the asset based key is omitted). This is in direct contrast to the transaction based arms length transfer pricing concepts which seeks to determine the geographical, and hence jurisdictional source of income.

The income which is subject to this allocation process is generally based on the Federal Tax Base, which is itself derived directly from enterprises’ financial records. Historically, formula apportionment was introduced because there was no tradition of separately accounting for a business’s activities at the individual state level. When enterprises began trading in more than one state the question of how to identify that part of the profits which should be subject to taxation in a particular state arose. The emergence of formula apportionment as the most widely used method is thus the result of pragmatism rather than overt theoretical justification.

**Contrast to EU situation**

The position in the EU is rather different as there is no current equivalent of the Federal Tax Base and any comprehensive approach has to justify two quite distinct stages, firstly the creation of the consolidated, or common EU base and secondly the allocation of it to the individual Member States. In the US the choice of method is simply a question of selecting the best method to solve an existing problem, namely how to allocate profits. Therefore although the USA offers an example of a jurisdiction which successfully utilises formula apportionment, it does not necessarily provide the best model for the precise form of formula.

**Complications**

The situation in the USA is further complicated by the existence of the added refinement in some states of unitary combination. The Federal Tax Base, which is the most widely used starting point for apportionment, represents a consolidation on the basis of ownership. Unitary combination seeks to widen this base to combine the integrated operations of associated entities, to include activities which have common functions and at the same time exclude activities which, although they satisfy an ownership test, may not necessarily form part of a logical business unit or activity. This approach recognises
that different activities may be best allocated on the basis of different allocation keys. Just as the introduction of genuine full cross border consolidation would remove the incentive to shift profits from one jurisdiction to another to take account of rate differentials, the use of unitary combination combats profit shifting from one unit to another based on ownership manipulation.

For example the financing activities of a manufacturing group may be excluded from the manufacturing unit and these profits allocated under different keys more appropriate to finance activities. In the same way a manufacturing activity which falls outside the Federal Tax definition of consolidation for the same group may be brought into the unit for allocation purposes.

Another potential difficulty arising from the USA implementation of formula apportionment is the lack of consistency in the formulae themselves. Each state is free to decide its own allocation keys, and although there are groups of states who apply the same keys, there is no standardisation. Furthermore although the nominal starting point for the allocation is the Federal Tax Base, some states do require adjustments before allocation.

Thus, what in theory is a simple allocation begins to look rather complex. The profits to be allocated may differ as a result of adjustments to the Federal Tax Base, the formulae by which they are allocated may differ from state to state, problems arise on the treatment of intra group dividends and intangible assets remain difficult to value for the purposes of inclusion in the formulae. Enterprises with a range of different business activities, such as conglomerates, may under unitary combination find themselves allocating their profits under a multiplicity of different keys. Indeed it would seem that for the EU to adopt Formula Apportionment and/or Unitary Combination it would require a substantial conformity of definitions of tax bases, apportionment formulae, measures of apportionment factors, and unitary businesses.

Despite complications in practice it works

Despite all this, Formula Apportionment should not be dismissed. Under the comprehensive approaches described above the difficulties relating to tax bases should be resolved since they are designed to arrive at just such a base. The USA experience has evolved ‘piecemeal’ over many years with no single decision by common consent of all the states to adopt this particular method of allocation. It seems reasonable to assume that if Member States were to decide to adopt one of these comprehensive approaches that they would at the same time seek to agree the appropriate formulae, factors and definitions as part and parcel of the overall policy.

The comparative low level of USA tax rates permits a greater tolerance of these apparent inconsistencies in the application of formula apportionment than would be the case in the EU. Formula apportionment is used to derive the taxable base for local state taxes, levied at rates which range from zero to 12% and which are in any case deductible when computing gross income for Federal tax purposes. With a potential range in rates across the EU of 13% to 40%+ there would be a far greater need, and hence will to ensure consistency.

The situation in Canada is much simpler. All the provinces use a common definition of the tax base, common allocation factors, and a common definition of the taxable entity. The tax base is the same as the federal tax base, profits are allocated based on payroll
and sales\textsuperscript{193}, and in line with the federal tax base there is no unitary combination, nor consolidation of legal entities. In return for the restrictions of this approach the federal government administers and collects the tax on behalf of the provinces\textsuperscript{194}. There is also an ambitious system of fiscal equalisation and, instead of having the right to grant specific tax deductions, Provinces have the right to provide specific tax credits to reduce the liability to provincial tax. Compliance costs are kept to a minimum by this centralisation and standardisation and protracted litigation is rarer than in the USA. There are some drawbacks to this approach – for example the lack of consolidation can lead to related companies attempting to allocate their tax base to group companies in low tax provinces. However, Canada provides an interesting contrast to the USA and, if a new system were being established, this more straightforward approach with its greater commonality could be adapted by for example introducing consolidation.

In conclusion, the USA and Canadian examples illustrate that formula apportionment can work, (and can, in the international context co-exist with separate accounting) and provide a valuable source of experience and precedent for Member States should they choose to pursue this route\textsuperscript{195}. However, there is clearly a risk that the administration of the allocation process could become almost as difficult and complex as the current separate accounting approach unless the formulae, factors and definitions are agreed and applied by all participating states in advance. The emphasis would have to be on simplicity and there would have to be a recognition that the distribution of profits would not necessarily be the same as under separate accounting.

Although it has been argued that the precise factors in the formula are of less importance than the fact that they should be standardised across those administrations applying them, the choice of factors remains important. Any formula which includes profits reintroduces a potential problem related to transfer pricing, and it remains to be seen how electronic commerce, and in particular the definition of the place of sale, will impact on the sales element in existing formulae. Any formula will inevitably retain some location incentives but it should be possible to minimise these. The degree to which they distort location decisions will ultimately depend on the combination of both the base allocation method and the rate.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{193} Interestingly when the current system was formalised in 1946 the use of a third factor was rejected on the grounds that Canada had no desire to get into the complications and controversies of adding capital as a third factor
\item \textsuperscript{194} Three Provinces have elected to self administer but they tend to use the same base, factors and entity definition.
\item \textsuperscript{195} Closer to home in Germany Trade Tax is allocated between municipalities on the basis of a formula using labour (payroll).
\end{itemize}
\end{footnotesize}
Box 69:  
Example of revenue allocation via formula apportionment versus separate accounting

Base case
Company X has two factories: one in country A with payroll of 3 m. € and one in country B with payroll of 2 m. €. Its sales in A amount to 6 m. €, in B to 2 m. €. Its principal seat is in A. The taxable income in A is 700,000 € and in B 300,000 €. The tax rate in A is 35%, in B 15%. Under "separate accounting", the tax liability of X is assessed as follows:

\[ T_A = 0.35 \times 700,000 \text{ €} = 245,000 \text{ €} \]
\[ T_B = 0.15 \times 300,000 \text{ €} = 45,000 \text{ €} \]

total tax liability for X = 290,000 € (which corresponds to an average tax rate of 29%)

Scenario 1 "formula apportionment"
Generally, following the basic example of the USA and Canada, the tax liability \( T_i \) for A and B can be determined by the following formula

\[
T_i = t_i \cdot \left( \frac{\alpha_i^K \cdot K_i}{K} + \frac{\alpha_i^L \cdot L_i}{L} + \frac{\alpha_i^S \cdot S_i}{S} \right)
\]

with:
- \( i \) = state
- \( T_i \) = Tax Liability in state \( i \)
- \( t_i \) = statutory tax rate in state \( i \)
- \( \alpha_i^K \) = weight on capital in state \( i \)
- \( \alpha_i^L \) = weight on labor in state \( i \)
- \( \alpha_i^S \) = weight on sales in state \( i \)

\( \alpha_i^K + \alpha_i^L + \alpha_i^S = 1 \)

In the example, property is not used for the formula.

Application of two factor formula with equal weights
\[ T_A = 0.35 \times 1,000,000 \text{ €} x \frac{(0.5 \times 3/5) + (0.5 \times 6/8)}{5} = 236,250 \text{ €} \]
\[ T_B = 0.15 \times 1,000,000 \text{ €} x \frac{(0.5 \times 2/5) + (0.5 \times 2/8)}{5} = 48,750 \text{ €} \]
total tax liability for X = 285,000 € (which corresponds to an average tax rate of 28.5%)

Application of two factor formula with weighting: 1/3 labor; 2/3 sales
\[ T_A = 0.35 \times 1,000,000 \text{ €} x \frac{(0.33 \times 3/5) + (0.67 \times 6/8)}{5} = 245.175 \text{ €} \]
\[ T_B = 0.15 \times 1,000,000 \text{ €} x \frac{(0.33 \times 2/5) + (0.67 \times 2/8)}{5} = 44.925 \text{ €} \]
total tax liability for X = 290.100 € (which corresponds to an average tax rate of 29%)

Application of a sales-factor formula
\[ T_A = 0.35 \times 1,000,000 \text{ €} x 6/8 = 210,000 \text{ €} \]
\[ T_B = 0.15 \times 1,000,000 \text{ €} x 2/8 = 37,500 \text{ €} \]
total tax liability for X = 247.500 € (which corresponds to an average tax rate of 24.75%)

Scenario 2 "Formula apportionment"
X decides to relocate its manufacturing activities completely to B because of the lower tax rate.

Application of two factor formula with equal weights
\[ T_A = 0.35 \times 1,000,000 \text{ €} x \frac{(0.5 \times 0/5) + (0.5 \times 6/8)}{5} = 131,250 \text{ €} \]
\[ T_B = 0.15 \times 1,000,000 \text{ €} x \frac{(0.5 \times 5/5) + (0.5 \times 2/8)}{5} = 93.750 \text{ €} \]
total tax liability for X = 225,000 € (which corresponds to an average tax rate of 22.5%)

Application of two factor formula with weighting: 1/3 labor; 2/3 sales
\[ T_A = 0.35 \times 1,000,000 \text{ €} x \frac{(0.33 \times 0/5) + (0.67 \times 6/8)}{5} = 175.875 \text{ €} \]
\[ T_B = 0.15 \times 1,000,000 \text{ €} x \frac{(0.33 \times 5/5) + (0.67 \times 2/8)}{5} = 74.625 \text{ €} \]
total tax liability for X = 250.500 € (which corresponds to an average tax rate of 25%)

Application of a sales-factor formula
\[ T_A = 0.35 \times 1,000,000 \text{ €} x 6/8 = 210,000 \text{ €} \]
\[ T_B = 0.15 \times 1,000,000 \text{ €} x 2/8 = 37,500 \text{ €} \]
total tax liability for X = 247.500 € (which corresponds to an average tax rate of 24.75%)

This ‘pro-forma’ example illustrates a number of general features of formula apportionment, with particular reference to the USA. The choice of formula clearly influences the distribution of tax base between different tax states. If all states use the same formula then there is no double or ‘non-’ taxation, but if different formulae are used both situations can occur. With common formulæ tax competition still exists, but
only at the level of the rate. With different formulae competition can exist on a number of levels, as the formulae themselves can be used to attract certain types of business etc. Labour and capital are relatively easy to ascertain and difficult to manipulate. Sales figures could in theory be manipulated, perhaps through complex intra group transactions but, compared to profit shifting in the conventional sense, the amounts involved would have to be significant. It would therefore be much more easily identified, for example by using simple analytical auditing techniques rather than individual transactional testing.

**Allocation on the Micro Level – ‘value added’**

An alternative to formula apportionment as outlined above would be to base the allocation on the respective ‘value added’ within each Member State. Although similar to a profit based approach this has the advantage of additionally including labour costs – a large and relatively stable base, and excluding financial costs, which removes any problems associated with thin capitalisation. It is not currently used as a base by any of the countries who use apportionment formulae, but this is probably due to the simple fact that without a ‘VAT’ system in place (as is the case for example in the USA) the data would be difficult and expensive to collect. This is not the case in the EU where value added is a familiar concept and ‘VAT’ data extensively recorded and collected.

Such an approach might create difficulties for those groups with permanent establishments and branches outside the EU who do not routinely collect such data, but this point of detail would only affect a minority of enterprises and would not arise if these were excluded. Moreover, some sector-specific issues would occur, for instance in the banking and insurance sector as financial services are usually exempt from VAT. More importantly certain adjustments would be required to the existing VAT data. The treatment of imports and exports\(^{196}\) would have to change (include exports, exclude imports) and the concept of depreciation would have to be introduced in place of immediate deductions for capital investments. An origin based system, rather than the current transitional destination system would be required which might have implications for VAT itself.

However, these alterations should not necessitate additional information requirements, rather existing information is presented in a different manner. Given the size of the value added base manipulation via transfer pricing would be more difficult and easier to detect.

**Allocation on the Macro Level**

Other possible methods are more ‘macro’ based and generally break the link between the individual enterprises and the allocation process. Instead of seeking enterprise specific allocation keys the computed EU tax base would be allocated in proportion to economic data at the level of the Member State. The national VAT base, adapted as necessary, could be used or even the national Gross Domestic Product. Such indicators have the advantage of being generally available on a reasonably standard basis but for comprehensive approaches which retain the concept of individual Member State

\(^{196}\) Under the 6\(^{th}\) VAT Directive these are known as ‘Intra Community Acquisitions and Sales’
corporate taxes, rather than a single EU tax, they create difficulties when tax rates vary widely across the EU.

The enterprise would no longer have the compliance responsibility of providing the key data and the allocation of its tax base across different Member States would be fixed by reference to factors outside its control. Similarly individual Member States’ share of enterprise’s tax bases, and hence ultimately tax revenues, would be partially determined by the economic performance of other Member States. The link between the tax payer and the taxing authority would be severed. Whereas this might be appropriate under an approach requiring a significant degree of harmonisation between Member States it seems out of keeping with an approach based on mutual recognition, where Member States retain a higher degree of individual responsibility for their own tax codes. Indeed, allocation at such a macro level might really only be appropriate if it were the tax itself which was being allocated, in which case such a macro level allocation implies a common rate of tax.

There are precedents for these types of ‘macro’ economic indicators being used to share resources between Member States, for example part of the contributions to the Community’s ‘own resources’ are computed in this way, but they tend to involve wider issues than just taxation policy. Within the EU the percentage of total taxes raised by Member States’ corporate tax systems varies quite considerably. This could create additional difficulties because, in effect, the proportion of each Member State’s taxation revenues dependent on other Member State’s economic performance would vary accordingly.

**ECONOMIC EFFECTS AND THE RESULTS OF THE QUANTITATIVE ANALYSIS SIMULATIONS**

The economic effects of introducing a comprehensive system are particularly difficult to quantify. Even without the variables associated with the range of possible approaches and the range of methods of introducing them, a precise quantification is beyond the scope of the current analysis. However, one can usefully identify the areas where the economic effects are likely to be felt and, in conjunction with the quantitative analysis in Part II, suggest what the possible effects may be.

**Base costs**

In order to understand what the economic effects might be one must first understand the current position. As regards the level of costs, although theoretically Member States should be in a position to compute the costs of administering their current tax regimes, the position is more complicated for business. The above section on compliance costs explains the current situation as far as it can be established, and touches upon the vexed question of whether or not tax compliance should be considered together with, or separately from, the costs associated with tax planning.

In relation to both these measures one may also assume that the introduction of a comprehensive approach, representing as it would a new system, would incur some transitional ‘learning’ or ‘set up’ costs as administrations and enterprises re-organised themselves. To what extent the costs of any subsequent corporate restructuring which
took place as a response to the changes should be considered as compliance costs or planning costs would again be subject to debate.

Instinctively one would expect the costs to enterprises of dealing with a reduced number of fiscal returns, and a reduced number of tax systems, to be lower than the costs of potentially dealing with fifteen. Similarly, particularly if legitimate planning costs are included, one would expect the proportional reduction in costs to be greater for small and medium-sized enterprises than large multinational corporations, since part of the compliance costs are more ‘fixed’ than variable, and for planning purposes the costs of establishing a particular group structure are broadly similar regardless of the size of the specific investment involved.

Although the level of existing costs for administrations should be more readily available, predicting future costs is rather more difficult. To the extent that international issues such as transfer pricing within the EU require resources, there should be some savings although any additional auditing arising from Home State issues or the allocation process would have to be taken into account in assessing any net benefit.

Redistribution of tax revenues between Member States

The current distribution of taxable profits of enterprises between Member States is the result of the current business activity, as measured by separate accounting based on the arms length principle. Under approaches such as Home State Taxation or a Common (Consolidated) Base, the base would be redistributed in accordance with a formula as explained above. The translation from tax base to tax revenue would be the result of the Member State’s chosen tax rate. Under European Company Income Tax this freedom to set the rate could in theory be lost if a common rate were established, and it would be the tax revenues rather than the tax base that were subject to allocation.

A distribution based on a formula would inevitably create differences, which, depending on the proportion of total taxes raised by individual Member States from company taxation, could have greater or lesser implications for the respective Member States. To the extent that the allocation system produced a ‘fairer’ or more correct allocation than the existing method, one could argue that the change was merely corrective. However, regardless of the ‘correctness’ of any redistribution, Member States would still have to deal with the change.

As mentioned above it has been suggested that, under Common (Consolidated) Base, Member States experiencing large variations in the tax base as a result of the introduction of a comprehensive approach could apply a different rate of tax to those adopting a new approach (whilst maintaining its ‘normal rate’ for those enterprises not using the new approach) for a transitional period. However, in the longer run once the tax base has been harmonised (or is sufficiently similar to be part of a mutual recognition approach) if a Member State is not satisfied more permanent measures would have to be adopted. In the absence of tax rate harmonisation it would therefore be via the rate that a Member State could seek to raise its tax revenues. Depending on an individual Member State’s position, and the underlying reason for its low allocation, it could either raise its tax rate in the hope that it could retain a ‘non mobile’ base or decrease its rate to attract an increased mobile tax base. Such an approach would not be so very different from the situation today, but it would clearly be more transparent, and therefore provide a more open ‘non-harmful’ form of tax competition. Obviously the
effect of any allocation system would have to be extensively modelled prior to its introduction in order for each Member State to understand the full implications.

Quantitative Analysis Simulations – relevance for Comprehensive Approaches

In Part II of this study effective rates of company taxation based on a series of hypothetical investments and model firm behaviour are analysed in detail with particular focus on overall economic efficiency, as measured by the dispersion of rates for different investments in, to, and from the Member States.

Notwithstanding the limitations associated with drawing conclusions from hypothetical models and applying them to specific examples beyond the scope of the models (which are well documented in Part II) two particular aspects of the analysis are especially relevant to a discussion of the comprehensive approaches.

- The extension of the basic analysis to cover the effective average rate of tax (EATR), beyond the traditional effective marginal rate of tax (EMTR) or cost of capital;
- The simulation of various structural changes to the underlying tax calculations, in particular the simulations concerning a common base and an approximation of Home State Taxation.

Using the EATR enables different levels of pre-tax profitability to be modelled, at levels which are closer to those actually achieved by existing enterprises. Modelling some of the structural changes inherent in the comprehensive approaches creates for the first time some indicative quantitative data. The analysis is partial because no account is taken of any benefits (or costs) accruing to administrations or enterprises from, for example, reduced compliance costs. More significantly, it does not include loss compensation or full consolidation, and it cannot model the benefits flowing from a resolution of many of the obstacles arising from transfer pricing. Nevertheless it gives an indication of possible impacts of comprehensive approaches.

Under the base case and the sensitivity tests at pre-tax profit levels of 20% and above, the effective rate in most Member States is close to the statutory rate. On average for the EU an enterprise with pre tax profitability of 20% could estimate its tax liability with 95% accuracy if it simply applied the statutory rate, rising to 98% accuracy at 40%. Although this calculation is based on the domestic rather than cross border case there is no reason to believe that extending the model would give radically different results. The implication is that on average the statutory rate is a major determinant of the effective rate.

The simulations, applied to cross border cases, confirm this. Although the primary aim of the simulation concerning a common base (simulated by equalising the depreciation rules) is to measure the dispersion of rates and thereby estimate deviations from capital import and export neutrality it also illustrates that the EU average EATR remains very

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197 The objective of the sensitivity tests and the simulations is explained in Part II of this study – essentially they seek to establish the respective influences of different aspects of the tax code on the observed dispersions.
similar when the bases are aligned. This is in marked contrast to the simulation where rates are equalised and where, not surprisingly, the EATR falls when a rate below the current arithmetical mean is applied.

The simulation along the lines of Home State Taxation also illustrates the likely primacy of rate, rather than base as a determinant of the EATR, in that the EU average EATR remains similar to the base case. The most striking effect is found in the increased dispersion of effective rates (assuming unchanged statutory rates) indicating a movement further away from capital import and export neutrality due in part to the effective removal of interest deductibility. However, in addition to the significant factors mentioned above, which it has not been possible to include in the model, there is a specific Home State Taxation feature which could not be modelled. Home State Taxation is conceived as a pragmatic response to the existing problems related to cross border trade, but a relatively high degree of similarity between tax systems is a prerequisite for participation. The model is not designed to judge which Member States are ‘ready’ for mutual recognition and accordingly all Member States have been included.

If the hypothetical manufacturing investment example is representative there are a number of implications for comprehensive approaches. On an EU level, their introduction need not dramatically change the overall level of corporate taxation since the EATR is primarily determined by the tax rate. If the rates remained unchanged in each Member State, the implication is that the elements of the approaches relating to the tax base would be relatively tax neutral. However, because of the limited nature of the model as outlined above, many of the benefits of comprehensive approaches are not captured and are therefore not included in the quantitative analysis.

Neither is the impact of the allocation method measured in the quantitative analysis and for individual Member States this is potentially material. Whereas common rules for, say, depreciation would seem to have little impact (because for the most part they are broadly similar already), redistributing the actual profits between Member States with different rates would alter the level of overall taxation. The model effectively assumes the distribution remains unchanged but, depending on the formulae chosen there are likely to be some changes.

198 See Part II of this study for fuller explanation

199 As discussed in Part II a second model, the ‘Tax Analyzer’ was also used which followed the ‘model firm’ approach rather than the ‘model investment’ approach and which covered more aspects of the tax base, for five Member States. By comparing the results of a simulation prepared according to the normal tax rules for calculating the tax base of each Member State, and one prepared where each Member State used the rules of the International Accounting Standards (IAS), it was possible to identify the specific effect of each individual Member State’s tax rules. Where the two results are similar it suggests that the two bases are similar; and furthermore it suggests Member States who have similar results when comparing the two bases could implement either Home State Taxation, or a Common Base close to IAS. The results suggest that the tax rules for determining bases in Germany, Ireland, NL and UK are close to IAS, and they are therefore similar to each other. However, the rules in France are rather different from IAS and therefore including France in a Home State Group, or in a Common Base ‘group’ close to IAS would be problematic. However, although Tax Analyzer includes more items from the tax base it only covers 5 Member States, and like the IFS ‘model investment’ model it cannot take into account such features as consolidation, transfer pricing simplification and formula apportionment etc so these simulations cannot give definitive results concerning the comprehensive approaches.
It follows that, in addition to the issues concerning general capital import and export neutrality and economic efficiency (covered in Part II), the quantitative analysis suggests that the main issues concerning comprehensive approaches are not related to mutual recognition versus harmonisation, or the precise format of any new tax code introduced, but the allocation method itself and the more general question of individual Member State tax rates and tax rate differentials.

**CONCLUSIONS**

At the beginning of this section the main objectives for a comprehensive approach were identified as the provision to companies of one set of rules, regulations and legislation, and a simpler mechanism for the allocation of profits and losses from the starting point of a single or common harmonised base.

A compulsory Harmonised Tax Base would satisfy the first test and would represent what each Member State has effectively introduced independently for domestic purposes. An entity which operates within a single Member State faces as a general rule a single tax system and, by analogy, a single tax system for the Internal Market is simply an extension of the best practice implemented in each of the 15 Member States. However, even within individual Member States, this sometimes gives rise to debates concerning the needs of different regions and areas etc, and it is recognised that such an approach does not correspond to the current level of institutional development within the EU.

An approach based on mutual recognition such as Home State Taxation may be more realistic and, if it appears that a large number of as yet unanswered questions have been raised, this is partly due to the fact that more detail concerning this approach is available. One could perhaps envisage, after further research, it eventually being extended to a trial group of small and medium-sized enterprises within certain Member States with similar tax legislation in an attempt to resolve some of their practical problems and gain some experience of how it would work in practice. The particular benefits for such enterprises would stem from the simplicity of retaining a single tax system, while the risks to Member State revenues could be acceptable. Indeed if Home State Taxation applied initially only to small and medium-sized enterprises it might be possible to consider its introduction without an immediate allocation formula given the small proportion of corporate tax revenues that these enterprises represent. Enterprises incorporated under the European Company Statute would form another logical grouping for any trial.

It is more difficult to form conclusions on approaches based on a single or common harmonised base since they have not been developed in such detail. However, given that all Member States are committed to exploiting the opportunities of the Internal Market to the maximum, there is certainly a case for continuing and extending the research into these possibilities.

The search for a simpler mechanism for the allocation of profits and losses is a logical response, given business and market developments, and there are examples of different approaches being used by tax administrations. However, the two examples mentioned, USA and Canada, have one fundamental distinctive feature in comparison to a possible
EU system. In each case they have both a national (federal) tax and a local tax or taxes (USA-State and Canada-Province).

The implications of this are important because in the EU context the allocation is assumed to be for the purposes of a single tax within each Member State. The current tax rates in the EU which would be applicable to the allocated tax bases range from 10% to over 40%. The comparable state rates for the USA are 0% to 12%, which because they are deductible for federal tax purposes (which is charged at the rate of 34%) are effectively reduced to between 0% to 8%. A maximum of 19% of an enterprise’s overall tax charge (made up of federal at 34% plus state tax charge at 8%) is therefore based on allocated profits. For Canada the provincial tax rates are between 14% and 17%, and these are additional to the federal tax (charged at 29%). A maximum of 37% of an enterprise’s overall tax charge (federal 29% plus provincial tax charge at 17%) is therefore based on allocated profits.

Comparing the USA and Canada could suggest that the more standardised the formulae, the higher the proportion of tax it is reasonable to levy on profits allocated by formula as opposed to the arms length principle. The USA is relatively non standardised – and only up to 19% of the tax is based on ‘formula’ profits. Canada is reasonably standardised – and up to 37% of the tax is based on ‘formula’ profits. One could conclude therefore that in the hypothetical EU example - 100% of the corporate tax collected based on ‘formula’ profits, a very high level of standardisation in the formulae applied would be required – perhaps a single set of formulae applicable across the EU.

Comparisons and an evaluation of the appropriateness of particular formulae have to take this into account. Whereas ‘imperfections’ or uncertainties may be acceptable when the rate of tax to be levied on the allocated base is relatively low in proportion to the total tax, when it is the whole of the tax, which at current rates in the EU can be up to 40% of profits, the allocation system would have to be very robust. It would have to be based on common definitions, with the accent on simplicity, and ease of availability from existing records.

The fact that in the USA and Canada only a proportion of an enterprise’s tax is determined by a formal apportionment of the tax base highlights another relevant issue. Whether a minimum rate of tax would be required to avoid a ‘race to the bottom’ is an open issue but in any consideration of the USA and Canada one should take into account that the federal tax in both countries effectively functions as a minimum tax.

Part I outlined the general economic principles upon which any ‘ideal’ company tax system has to based under the headings of i) equity, ii) efficiency, iii) simplicity, certainty and transparency, and iv) effectiveness. It also considered the economic welfare aspects of company taxation systems on the basis that, broadly speaking, if a tax system satisfies some or all these principles then it should contribute to more EU welfare. The resolution of each of the obstacles identified in Part IV of this study is founded upon the assumption that this is in line with the principles and therefore also a step towards improving EU welfare. However, it is useful to conclude a review of the comprehensive approaches by revisiting these, sometimes contradictory, basic principles to consider to what extent they are satisfied.
Equity

The vertical equity dimension, described as the capacity to operate a distribution of the tax burden among taxpayers according to their ability to contribute, is satisfied by the comprehensive approaches to the extent that the determination of the tax base is considered to be equitable. The method of apportionment therefore has to be accepted as at least as ‘fair’ as the current separate accounting method. Although some supporters of Home State Taxation have expressed a preference for an allocation based on ‘value added’, the different possibilities have not been examined in sufficient depth in this report to reach any firm conclusion on the most appropriate formula. To this extent there is little to distinguish the different comprehensive approaches. The weaknesses of separate accounting have been described in some depth but at this stage it is not possible to measure the benefits of a switch to a formula approach. Accordingly no firm conclusions can be reached regarding this aspect of equity.

The treatment of the three principles of inter-country equity: source country entitlement, non discrimination and reciprocity is also to a certain extent determined by the use of an allocation system rather than separate accounting. The comprehensive approaches effectively re-interpret the source country entitlement by redefining the source. An allocation formula for example, with the emphasis on labour costs, favours as the source country the one with the highest labour costs. It is easier to demonstrate that the comprehensive approaches satisfy the principles of non discrimination and reciprocity as they are based on these two principles. However, whereas Home State Taxation is more explicitly ‘reciprocal’ in that the whole concept is based on mutual recognition, it is not so clear whether it satisfies the non-discrimination principle, as competing enterprises could be subject to different rules for establishing their tax base. To a certain extent this potential problem is present under any comprehensive approach where some enterprises are within the system, and some outside, although where this is the result of choice it is perhaps of less importance.

Efficiency

One of the main objectives of the comprehensive approaches is to render tax as a factor in the investment decision as neutral as possible. By providing enterprises with a single method of calculating their tax, this could in theory be achieved. However, when the rate is set by the individual Member States, as would be the case in all the comprehensive approaches mentioned, with the possible exception of one variant of the European Union Company Income Tax, then inefficiencies in this context between Member States could remain. The fact that most of the harmonised approaches involve the operation in parallel of the existing domestic systems and the new harmonised system also needs to be taken into account. The possibility of a Member State addressing a specific perceived failure in the market, which can at present be achieved via a tax incentive applied as an adjustment to the tax base, would disappear. The only mechanism for such corrective adjustments would be via the rate, which would be more transparent, and therefore perhaps reduce the risk of unfair or unwarranted incentives being introduced.

The exception to the above is Home State Taxation, which because it potentially involves competing enterprises being taxed according to different bases maintains the possibility of differentials. However, it should be emphasised that mutual recognition requires a relatively high level of similarity between different participating Member
State tax codes, in which case the differences should be minimised in comparison to the situation today. However, the comments concerning corrective action to address failures in the market remain valid, as any changes in the base, to the extent that other participating members permitted them, would apply across the Home State group.

By definition the concept of Capital Import Neutrality is harder to satisfy under Home State Taxation than under comprehensive approaches based on the harmonisation principle. Investors in a particular Member State would not necessarily face the same after tax rate of return on similar investments, because their tax base would be determined on the basis of their ‘Home’ State rules. Conversely Capital Export Neutrality, via a Home State enterprise, at least as far as the tax base is concerned, should be satisfied, as investment into another Home State would be on the same terms as domestic investment.

Effectiveness

The effectiveness of a given tax system depends on its ability to achieve its objectives, to generate the necessary revenues and set the desired incentives. These are in part linked to its interactions with other tax systems. Although under Home State Taxation there remain a number of different bases, since these are linked in such a way that they cannot be altered without agreement amongst the members of the group, they would operate in a similar way to a single system. The ‘other’ tax systems under comprehensive approaches would therefore, under Home State Taxation, be those of non-participants in the EU and non EU countries. Under a harmonised approach, they would be the remaining national systems to the extent that they remain and those of non EU countries.

The objectives of a comprehensive approach are similar to those of the existing systems, with the added aim of removing the obstacles as identified. However the introduction of a new approach, principally the allocation method, could change the distribution of income between participating EU states and impact on interactions with other tax systems. However, these could be considered to be implementation issues rather than ongoing ones. As regards the raising of revenues by individual Member States there would still remain the possibility to influence this by way of the rate.

Simplicity, certainty and transparency

Any new approach to taxation obviously involves complexity and hence costs in its implementation. Once established, the comprehensive approaches should achieve a greater degree of simplicity although within the EU as a whole the addition of a tax system, rather than the withdrawal of an old system and its replacement with a new one, will tend to add complexity. Hence one can quite easily compare Home State Taxation (15), Common (Consolidated) Base (15+1), and a compulsory harmonised base (1).

Home State Taxation appears simpler to operate than the other approaches because it relies on existing tax codes, and therefore it should also achieve a higher degree of certainty. The benefits of being able to retain each Member State’s existing tax legislation and judicial precedents for interpretation should not be underestimated; although participating Member States would be required in effect to extend their mutual recognition to aspects of legal practice in addition to the underlying tax codes. In contrast a new tax system, a new tax base potentially creates a high degree of
uncertainty as to how it will operate in practice and how the courts will interpret its application.

Whether the comprehensive approaches would contribute to transparency is difficult to judge since it depends to a certain extent on the simplicity and certainty issues. At one extreme a compulsory harmonised base, once established, should be the simplest, the most certain and also the most transparent. However, the more pragmatic Home State Taxation could be considered to start off as more transparent to the extent that it builds on the existing systems, rather than a new untried, untested system. This transparency could also be considered to be simply short-term predictability, whereas, for example, a new common base, after an initial learning period, could in fact provide greater genuine transparency.

The question of simplicity, certainty and transparency as applied to the allocation process depends on the final format of any agreed process. When designing the process one would aim at all three objectives, but potentially one could end up with an extremely complex, uncertain, opaque system. However, potentially it could be an improvement of the existing method of allocation, namely separate accounting.

**Economic Welfare**

To varying degrees the comprehensive approaches meet some or all of the above criteria and therefore should contribute to increased EU welfare. To the extent that the obstacles are resolved, this is self-evident but, as outlined above, the introduction of any of the comprehensive approaches assumes that certain obstacles are specifically addressed in either the agreement to establish Home State Taxation or the design of any new common or harmonised base. Potentially the welfare costs of inefficient resource allocation due to varying effective tax rates across the EU would remain, to the extent that differences in rates remained sufficiently large to influence investment location. However, since the effective rates would be more transparent, particularly in the case of a harmonised approach, such influences should be less than today and would be harder to maintain in a competitive environment. The benefits in terms of reduced compliance costs should over time be significant, provided that the costs of the allocation process are reasonable.

From a pure efficiency point of view, a uniform EU-wide system would be better than improvements to the current systems. Accordingly, a harmonised ‘comprehensive’ approach would be better for economic welfare but taxation ultimately involves a political choice. The current fifteen separate tax systems were conceived when there were fifteen separate national markets but as the Internal Market develops the concept of a common ‘comprehensive’ approach to taxation demands examination. This section of Part IV does not seek to promote any particular approach, but rather to contribute to the debate and to identify areas for further review and analysis to enable the political choice to be made. There are potentially very significant benefits to be derived from a comprehensive solution and much could be gained from extending the debate to a wider range of interested parties.
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