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IMPACT ASSESSMENT

Accompanying document to the

Proposal for a

COUNCIL DIRECTIVE

on a Common Consolidated Corporate Tax Base (CCCTB)

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MODIFICATIONS FOLLOWING THE OPINION OF THE IMPACT ASSESSMENT BOARD

A draft of this impact assessment (IA) was submitted to the Impact Assessment Board and discussed at its meeting of 15 December 2010. In its opinion dated 17 December 2010, the Board suggested some improvements of the draft IA-report.

In its overall assessment, the Board recommended that the IA report should clarify that the analysis builds on a consultative process in which the relevant technical details have been discussed extensively with Member States, stakeholders and tax experts. It also suggested that the report should explain that the specific impacts on individual Member States depend largely on the way in which their governments decide to apply the Directive, and whether and how they adapt their mix of taxation instruments. In addition, it suggested that the reduction of tax compliance costs should be prominently identified as the main objective and analysis on this issue should be presented systematically throughout the whole report. Related to that, the report should improve the presentation of the quantitative evidence on the scale of the identified problems, or explain why certain data were unavailable.

In order to take into account the recommendations of the Board a number of changes have been made to the IA-report. In particular, it has been clarified that the technical design of the policy options were discussed extensively in a consultative process involving Member States (MS), experts and stakeholders. A list of the resulting working papers describing the technical aspects of the options as well as the current rules for the definition of taxable bases in the MS has been annexed, and references to the relevant papers added in the main text. In addition, it has been stressed that there are no intended objectives in terms of revenue distribution or revenue neutrality for MS behind the policy initiatives. The ultimate impacts will in fact depend on how the MS will react in terms of corporate tax rates, and the chosen tax mix, in which domains they will in any case retain full sovereignty. The reduction in additional tax related compliance costs arising from international activity has been given the suggested relevance, and the presentation has been strengthened using available qualitative and quantitative evidence. The well known caveats that apply in the interpretation of survey data, as well as the problems in obtaining reliable quantitative evidence on this (and on the related issues of double- and over-taxation) have been spelled out.

1. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

The present initiative follows on from a formal **mandate** by the Council of Ministers in 1999, in which the Commission was invited to undertake a study on company taxation in the European Union. The results of the study were published in 2001 in the *Company Tax Study*[1] and a related Communication[2]. The study presented a twin-track strategy to tackle corporate tax obstacles and tax-induced inefficiencies in the Internal Market – double taxation, the lack of tax consolidation, tax-related obstacles to business restructuring and significant compliance costs. In addition to various targeted measures in the short run (such as improved transfer pricing rules or remedial measures catering for cross-border loss relief), some approaches for possible long-term, all-embracing solutions were presented.

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1 '*Company Taxation in the Single Market*'. SEC (2001) 582 final. See Annex 1 for further details.

2 '*Towards an Internal Market without tax obstacles: A strategy for providing companies with a consolidated corporate tax base for their EU-wide activities*', COM(2001)582.

In the public conference organised in Brussels in April 2002 as part of the consultations on the 2001 Study, the participants showed general interest in the comprehensive solutions "Home State Taxation" and "Common Consolidated Corporate Tax Base". In its 2003 Communication[3], the Commission presented the two comprehensive corporate tax policy options retained: "Home State Taxation" as a useful means of relieving small and medium-sized enterprises from tax costs related to their cross-border activity, and a common (consolidated) corporate tax base, as a general comprehensive solution.

The two retained policy options were favourably received at the public conference organised by the Commission services in Rome in December 2003. Also a public consultation was held in 2003 concerning the use of International Accounting Standards as a possible starting point for a common EU tax base[4]. A Common Consolidated Corporate Tax Base (CCCTB) was generally considered to be the most promising comprehensive solution. Since 2004, the Commission has therefore concentrated its work on this initiative. Ever since the Commission services have maintained and deepened co-operation with the stakeholders involved in order to get their advice and input for the specific design of the policy best suited to tackle the remaining company tax obstacles in the Internal market. In September 2004 Ministers of Finance agreed at an informal ECOFIN-Council that the discussions on the development of a CCCTB should progress in a Commission working group (the **CCCTB WG**). This working group was set up in November 2004 and held quarterly plenary meetings until April 2008 (see Annex 1).

Experts from the tax administrations of all Member States participated in the WG plenary meetings. The role of the members of the WG was limited to providing technical assistance and advice to the Commission services, without the participation implying a political dimension or a commitment to implement the common tax base. All Member States were represented in the WG, including those that opposed the idea of a common consolidated tax base itself[5,6]. In addition, **six sub-groups** were set up (five of which were chaired by a Member State) in order to deepen the technical analysis of certain specific issues. The subgroups met on an ad-hoc basis and reported back to the plenary CCCTB WG. The Working Group, and the subgroups, worked intensely on structural parts of the tax base. Meetings generally included a review of how different Member States dealt with the parts and then attempted to consider how a common approach could be established. The emphasis was on simplicity – i.e. remove unnecessary complexity. Member States contributed during the meetings – diverging views are reported in the Summary Records of the WG meetings and the Reports of the Sub-group meetings. The approach of the CCCTB WG was to review and analyse the individual building blocks of the tax base one by one. The table below gives an overview of the main building blocks of the CCCTB that were discussed.

CCCTB WG Building blocks
1. Depreciation and Assets – discussed at subgroup chaired by DE
2. Provisions and Reserves - discussed at subgroup chaired by IT

3 "*An Internal Market without company tax obstacles – achievements, ongoing initiatives and remaining challenges*", COM(2003)726.

4 See http://ec.europa.eu/taxation_customs/common/consultations/tax/article_385_en.htm

5 See CCCTB WG, *Summary Record for the Meeting of the Common Consolidated Corporate Tax Base Working Group held in Brussels on 23 November 2004*, CCCTB/WP/05: "Two participants stressed that there has to be a clear distinction between the political and technical aspects of the whole project. They were prepared to contribute to the work of the Group at the technical level only. Their respective governments had clearly expressed their political opposition to the idea of a common tax base".

6 Indeed, during the discussions of the CCCTB WG, some members stressed repeatedly that their participation was not to be construed in any way as support from their Member State for the common consolidated tax base and that their state rejects the initiative.

3. Taxable Income - Revenues and expenses discussed at subgroup chaired by FR
4. Foreign Income and relations outside of the EU - discussed at subgroup chaired by ES
5. Consolidation – method and conditions for a group discussed at subgroup chaired by DK
6. Formulary Apportionment – method of apportionment and factors discussed at subgroup chaired by EC

Working Paper 57 from the CCCTB WG[7] summarised the main building blocks of the tax base in the form of a possible technical outline on the basis of the discussions in the working group and subgroups. This working paper and all relevant documents for the CCCTB WG meetings have been accessible to the public on a DG TAXUD website dedicated to the CCCTB[8]: this includes, among other documents, more than 50 working papers prepared by DG TAXUD which have been discussed in the WG. A list of these papers is included at the end of Annex 1. To ensure the involvement of all key experts and stakeholders, the CCCTB WG met three times in **extended format**, allowing professional organisations[9] and academics to contribute to the work. Although Member States expressed different political views on the initiative, in concluding the WG works they shared the common opinion that a preliminary careful assessment of the concrete policy proposal would be necessary in order to take any official position on the policy reforms.

Besides the discussions within the CCCTB WG, comments and advice have been received by the Commission Services through bilateral meetings with **business** federations, professional organisations and other key stakeholders, such as trade unions. Regular meetings were held with a CCCTB Task Force set up by UNICE/Business Europe. In addition, in June 2006 a joint meeting between Member State experts and experts from the financial sector was held[10]. The Commission Services also received written contributions to the ongoing work from these stakeholders, and the contributions were made available to the public on DG TAXUD's website[11].

These discussions and consultations have shown a firm support from the business community to the initiative of **simplifying the current operation of corporate tax systems in the EU** and to the prospect of removing tax obstacles for businesses that operate in a cross-border environment[12]. In addition, the **academic community** has also shown keen and increasing interest in the analysis of reforms of corporate tax systems in an international context. The results of the theoretical and

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7 http://ec.europa.eu/taxation_customs/resources/documents/taxation/company_tax/common_tax_base/ccctbwp057_en.pdf

8 http://ec.europa.eu/taxation_customs/taxation/company_tax/common_tax_base/index_en.htm

9 The organisations represented in the meetings of the CCCTB WG held extended format were: EATLP (European Association of Tax Law Professors), UNICE (Union des Industries de la Communauté Européenne), FEE (Fédération des Experts Comptables Européens), CFE (Confédération Fiscale Européenne), EUROCHAMBRES (Association of European Chambers of Commerce), FBE (European Banking Federation), ERT (The European Round Table of Industrialists), CEPS (Centre for European Policy Studies), AMCHAM (American Chamber of Commerce), UEAPME (European Association of Craft & Small and Medium-sized Enterprises), CEA (Comité Européen des Assurances) and EBIT (European Business Initiative on Taxation).

10 The organisations represented were: EACB (European Association of Co-operative Banks), EFAMA (European Fund and Asset Management Association), EFRP (European Federation for Retirement Provisions), ESBG (European Savings Banks Group), FBE (European Banking Federation) and CEA (Comité Européen des Assurances).

11 http://ec.europa.eu/taxation_customs/taxation/company_tax/common_tax_base/article_3130_en.htm

12 The results of a KPMG International study published in September 2007 and based on a survey to more than 400 companies from all 27 EU countries and Switzerland also show that tax professionals in Europe's biggest businesses are heavily in favour of European Commission proposals for a new corporate tax system. The idea was supported by 78% of respondents across Europe. Business seemed to be attracted by the prospect of more straightforward tax compliance and better business planning.

applied research have been carefully analysed and considered throughout the policy formulation process. Moreover, the Commission services have consulted many leading scholars on various relevant topics in order to gauge their opinion on specific issues[13].

Along the way, the Commission issued some related **Communications**. In 2005, the Commission drew attention in two Communications to the link between its work on the CCCTB and the Lisbon Programme[14]. In April 2006 and May 2007 the Commission issued Communications[15] on the progress made towards a proposal on a CCCTB. These Communications have been discussed in the Council, the Economic and Social Committee and the European Parliament. The Parliament has issued resolutions in support of the project[16]. The latest consultation session on the CCCTB took place on 20 October 2010 when the Commission Services held a CCCTB Workshop, which included representatives of all 27 Member States, business associations, academics and think tanks[17], focused on specific issues of the design of the CCCTB option (see Annex 1).

All these continuous and extensive consultations have informed and played a major role in the development of policy. The conclusions from all these contributions (from Member States' experts, business organisations, academic experts and other stakeholders) have been carefully analysed and feedback has been taken into careful consideration in formulating each aspect of the initiative.

2. PROBLEM DEFINITION

2.1. Background: the current institutional setting for company taxation in the EU

In order to put the assessed policy initiatives in quantitative perspective, table 1 reports revenues from taxes on the income of corporations in the EU27 countries, alongside applicable rates. On average, revenues are fairly stable in time, amounting to about 3 percentage points of GDP. This is roughly 8% of the overall tax-to-GDP ratio (including social security contributions) in the EU which reached 39.3% (in the GDP-weighted average) in 2008 (see Taxation Trends in the European Union, 2010 edition). On the policy side, the current system of corporate income taxation in the EU – in particular with respect to the treatment of international businesses - is characterised mainly by:

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13 Thus, for example a meeting with academic experts was held in March 2004 on "the allocation mechanism" and written contributions on the factors for apportioning income were requested and received at other stages of the consultation process.

14 '*Common actions for growth and employment: the Community Lisbon Programme*' (COM(2005)330) and '*Implementation of the Community Lisbon Programme – The contribution of taxation and customs policies to the Lisbon Strategy*' (COM(2005)532).

15 '*Implementing the Community Lisbon Programme: progress to date and next steps towards a Common Consolidated Corporate Tax Base (CCCTB)*' (COM(2006)157) and '*Implementing the Community Programme for improved growth and employment and the enhanced competitiveness of EU business: Further Progress during 2006 and next steps towards a proposal on the Common Consolidated Corporate Tax Base (CCCTB)*' (COM(2007)223).

16 European Parliament Resolution of 13 December 2005 on taxation of undertakings in the European Union: a common consolidated corporate tax base, Report of 1 December 2005, Committee on Economic and Monetary Affairs, Document A6-0386/2005. See also, EP Resolution of 24 October 2007.

17 AMCHAM (American Chamber of Commerce), Business Europe, CEA (Comité européen des assurances), CEPS (Centre for European Policy Studies), CFE (Confédération fiscale européenne), EATLP (European Association of Tax Law Professors), EBIT (European Business Initiative on Taxation), ETUC (European Trade Union Confederation), EUROCHAMBRES (Association of European Chambers of Commerce), FBE (European Banking Federation), FEE (Fédération des experts comptables européens), UEAPME (European Association of Craft & Small- and Medium-Sized Enterprises), OECD Secretariat and EESC (European Economic and Social Committee).

Table 1: Income of corporations: tax revenues and rates

	Revenues								Corporate tax rates
	in % GDP							in millions euro	
	1995	2000	2004	2005	2006	2007	2008	2008	2008
BE	2.4	3.2	3.1	3.3	3.5	3.5	3.3	11,462	34.0
BG	:	2.8	2.6	2.5	2.9	3.4	3.5	1,208	10.0
CZ	4.6	3.5	4.7	4.5	4.8	5.0	4.4	6,566	21.0
DK	2.3	3.3	3.2	3.9	4.4	3.8	3.4	7,970	25.0
DE	2.1	3.0	2.2	2.5	3.0	3.0	2.7	68,550	29.8
EE	2.4	0.9	1.7	1.4	1.5	1.7	1.7	266	21.0
IE	2.8	3.8	3.7	3.5	4.0	3.5	2.9	5,213	12.5
EL	2.3	4.1	3.0	3.3	2.7	2.5	2.5	5,875	25.0
ES	1.9	3.1	3.5	3.9	4.2	4.8	2.9	31,428	30.0
FR	1.8	2.8	2.3	2.3	2.9	2.9	2.8	54,415	34.4
IT	2.9	2.9	3.1	2.9	3.5	3.9	3.7	58,539	31.4
CY	4.2	6.2	3.7	4.6	5.5	6.8	7.1	1,218	10.0
LV	1.8	1.6	1.8	2.0	2.3	2.7	3.1	727	15.0
LT	2.0	0.7	1.9	2.1	2.8	2.6	2.8	888	15.0
LU	6.6	7.0	5.7	5.8	4.9	5.3	5.1	2,003	29.6
HU	1.8	2.2	2.1	2.2	2.4	2.8	2.7	2,836	21.3
MT	2.6	2.9	4.1	4.5	5.0	6.7	6.8	386	35.0
NL	3.3	4.3	3.3	3.6	3.7	3.5	3.4	20,410	25.5
AT	1.6	2.2	2.4	2.3	2.3	2.6	2.6	7,462	25.0
PL	2.7	2.4	2.2	2.5	2.4	2.8	2.7	9,838	19.0
PT	2.4	3.9	3.0	2.8	3.0	3.7	3.7	6,235	26.5
RO	4.0	3.0	3.2	2.7	2.8	3.1	3.0	4,185	16.0
SI	0.5	1.2	1.9	2.8	3.0	3.2	2.5	936	22.0
SK	6.6	3.5	3.0	3.0	3.2	3.2	3.4	2,203	19.0
FI	2.3	5.9	3.5	3.3	3.4	3.9	3.5	6,471	26.0
SE	2.6	3.8	2.9	3.6	3.7	3.9	3.0	9,700	28.0
UK	2.8	3.5	2.9	3.4	4.0	3.4	3.6	65,369	30.0
EU-27 averages									
weighted	:	3.2	2.8	3.0	3.4	3.4	3.1		
arithmetic	:	3.2	3.0	3.2	3.4	3.6	3.4		
St.dev/mean	49.5	45.1	30.7	30.6	28.2	32.7	34.9		
Max-min	6.1	6.3	4.1	4.4	4.0	5.1	5.4		

Source: Commission services

- 27 different corporate tax codes, which serve to compute the national corporate income tax bases of companies established within each Member State. These tax codes are inherently heterogeneous and often complex, particularly as they have developed by adding new rules to adapt to the increasing mobility of taxable bases as a result of globalization. Furthermore, not only does each Member State have its own sets of rules for determining taxable profits, but it also has its own arrangements for collection and administration of taxes (e.g. different rules and deadlines for completing and filing tax returns, different procedures to deal with the tax authorities, etc.) and its own network of tax treaties. For **businesses that operate in a cross-border environment, the level of complexity is exacerbated**, as they are confronted with **multiple tax regimes**[18], potentially

[18] For the samples of EU multinational groups in the 27 Member States that have been used for several aspects of this Impact Assessment (described in detail in Annex 3) parent companies have subsidiaries, on average, in four EU Member States (other than that of the parent), for the sample based on EU multinational groups taken from Amadeus: thus, they have to deal with as many frequently changing corporate tax systems. Some parents reach the maximum number of EU foreign destinations which is 26. For the sample of EU multinational

subject to frequent changes. Given progressing investment mobility, the economy-wide costs caused by this fragmented tax landscape can be expected to increase over time.

- The allocation of taxable profits of multi-jurisdictional groups between tax jurisdictions according to the so-called **separate accounting** (SA) model. SA relies on the principle that all intra-group transactions have to be priced at arm's length (i.e., at the going market price for a comparable transaction, as if it had taken place among unrelated parties). This system has raised theoretical concerns (since it ignores the very nature of economically **integrated** multi-jurisdictional corporations by treating their operations as if they were separate and independent) and also, mainly, practical ones[19]: in fact, it is costly for tax administrations and for taxpayers, offers opportunities for tax avoidance to corporations by adjusting transfer prices within the controlled group, and often provides for measures that are particularly cumbersome to apply (e.g. finding comparables of high-profit firm-specific intangibles). Determining the tax liability in each jurisdiction by applying the arm's length pricing standard adds complexity to the working of international businesses. The resulting efficiency loss becomes significant at a global level given the large and increasing share of world trade consisting of transfer of goods, intangibles and services within multinational enterprises (MNEs). The WTO (Nordas, 2003) estimates **intra-firm trade at one third of world trade flows**[20]. The OECD reports that the share of intra-firm exports in total exports of manufacturing affiliates under foreign control ranges between 15% and 60% in OECD countries. According to a recent Eurostat[21] survey carried out in 12 European countries, about 60% of enterprises engaged in international sourcing source their business functions within the EU27. At the same time, over 70% of them choose to organise the sourcing within the same group of enterprises instead of buying the services from other companies outside the group.

- Often inadequate recognition of cross-border situations by national corporate income tax systems, particularly in the area of **cross-border loss compensation** within a multinational group of companies (see section 2.2).

2.2. The remaining tax obstacles in the Internal market

The current arrangements for corporate income taxation in the EU give rise to a number of obstacles to cross-border activities, and thus, impede the proper functioning of the Internal market and the achievement of its potential in terms of efficiency gains. The **remaining tax barriers to the Internal market**, which have prompted the current policy initiative, can be categorised into the following three types:

I. Additional compliance costs specifically linked to cross-border activities[22].

II. International double taxation, traditionally divided into: *economic* double taxation (i.e. the imposition of comparable taxes on the same income in the hands of different taxpayers in two or more states) and *juridical* double taxation (i.e. the imposition of

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groups operating in the financial sector (ORBIS database), on average parent companies have subsidiaries in 2 Member States (other than that of the parent), so they have to deal with more than three tax codes.

19 See for example Hellerstein (2005) "*Income Allocation in the 21st century: The End of Transfer Pricing? The Case for Formulary Apportionment*", International Transfer Pricing Journal, Vol. 3.

20 More specifically, the OECD reports that the share of intra-firm exports in total exports of manufacturing affiliates under foreign control ranges between 15% and 60% in the OECD countries for which such data are available.

21 Statistics in focus 73/2009

22 For the purpose of this document "compliance costs" are defined as the administrative costs incurred by taxpayers to comply with tax legislation.

comparable taxes on the same income in the hands of the same taxpayers in two or more states).

III. Over-taxation in cross border situations, which occurs when cross-border activities create tax liabilities that would not occur in a purely domestic context.

The following focuses on examples of the three types of tax barriers identified which companies may incur in the current scenario as a result of doing business in more than one Member State. However, the description of these problems is not intended to be exhaustive, and more specific details on these issues can be found in the 2001 Company Tax Study (see Annex 1)[23].

I. Additional compliance costs

Tax compliance costs are the "hidden costs of taxation". The existence of a tax liability means that eventually a taxpayer will have to bear an overall tax burden consisting of the actual amount of tax and the costs associated with its calculation, payment and collection. Those costs, as opposed to taxes that accrue to the public budget and are used to finance potentially welfare-increasing expenditures, are generally considered inherently wasted resources ("deadweight costs") that do not contribute to the general development of society or to the realization of public goals.

A number of studies have been conducted around the world on the issue of compliance costs. Despite potentially different methodologies, country samples and tax systems they converge on three major findings: first, **compliance costs for companies are high and significant** however measured –whether in absolute money terms or relative to tax yield or GDP (ie, the studies suggest that tax related compliance costs are typically anywhere between 2% and 10% of the revenue yield from the corresponding tax); second, they are **regressive**, thus hitting small business disproportionately more heavily than large businesses; third, they are **not reducing over time**. Also, notably, two particular factors stand out as major, **over-riding determinants of compliance costs: change and complexity of the tax system(s)** (Lang et al., 2008). These latter findings point to a significant impact of the current arrangements for company taxation in the Internal market upon the compliance burden of companies operating cross-border. A summary of the existing quantitative evidence on compliance costs for company taxation in the EU is given in Box 1.

Box 1: Company tax related compliance costs

PricewaterhouseCoopers LLP (PWC) carries out since 2005 an annual *Total Tax Contribution* survey of the Hundred Group of Finance Directors (ie an association of the 100 largest listed UK companies, which contribute nearly a quarter of the total corporation tax take in the UK) asking them to provide information on the time spent on compliance activities relating to their taxes borne and collected, as well as to provide data on their tax payments. The results of the 2007 survey showed an *average* **cost of tax compliance** for corporate income taxation of **2.2% of taxes paid**. On top of that, around **15% of the time spent on compliance activities relate to the international aspects of corporate taxation** (of which, transfer pricing represented 36%, Controlled Foreign Corporations 23%, double tax relief 19%, withholding tax 6%, treasury consents 4%, and other 12%). Furthermore, the results of the 2008 Survey show that 43% of the total compliance time and **54% of the total compliance costs relate to corporation tax**. As it represents only

[23] Although the three types of tax barriers are analysed separately for presentational purposes, sometimes the obstacles are intrinsically intertwined: e.g. the attempts to alleviate double taxation involves additional compliance costs, etc. Where available, quantitative and qualitative evidence of the existing problems is given, using data from existing studies and available models and feedback from experts and concerned stakeholders. On top, as in the section below analysing the impacts, the alternative policy options are compared to the current baseline scenario, those outcomes can serve as an indication of the "opportunity costs" of the present situation.

16% of the total tax payments for the surveyed companies, the compliance burden appears disproportionately high for this tax, not the least when it comes to its international aspects.

Research undertaken by the European Commission (European Tax Survey, 2004 – more details in Annex 4) confirms both the significance and the regressivity of compliance costs in the corporate sector. 700 companies across 14 MS of the EU responded to the survey (carried out in 2003), which shows that **compliance costs for the large companies** averaged € 1.5 million, which represented **2% of the taxes paid** and 0.02% of sales. By contrast, **SMEs** incurred compliance costs, on average, of € 200,000, which represented **31% of the taxes paid** and 2.6% of sales. The study also indicates that **cross-border activity** (for example, establishing a subsidiary in another Member State) is likely to **lead to higher** absolute and relative **tax-related compliance costs**, as are transfer pricing issues. Thus, these findings corroborate the view that cross-border operations make it more difficult for companies to comply with the administrative aspects of company taxation.

According to estimates in the 2001 *Company Tax Study* based on information from business representatives, the tax compliance costs of transfer pricing are significant. These costs result from the obligation on 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. Medium-sized multinational enterprises are reported to spend approximately € 1 million to € 2 million a year on complying with transfer pricing rules. Large multinational enterprises incur compliance costs related to transfer pricing of approximately € 4 million to € 5.5 million a year[24].

The Ernst & Young *Transfer Pricing Surveys* show that transfer pricing has increased compliance burdens over the last years, due to two main factors: (i) more demanding documentation requirements from tax authorities accompanied by tax authority reviews; (ii) adjustments and changes of the type and scope of business operations around the world. Particularly, the increased **documentation demands owing to transfer pricing appear to be stretching tax department resources**. In the 2007 Survey, 65% of respondents saw an increased need for transfer pricing resources over the former three years, with 72% meeting the need through increased reliance on external advisors and 34% by hiring in-house resources. Already in the 2005 Survey, many companies seemed to have expanded their internal resources dedicated to transfer pricing and task risk management, increasing their average headcount by 1 full-time equivalent to 2.5.

II. Double Taxation

Double taxation is one of the most onerous obstacles to international economic activity, with detrimental effects on efficiency and growth. At present, there are still **numerous instances of double taxation** which result from the need to comply with different national tax systems when operating in the Internal market and from the SA system of profit allocation to taxing jurisdictions. In the absence of actual tax data provided by national administrations, it is very difficult to obtain reliable estimates of the size of the monetary costs of double taxation. However, a recent public consultation carried out by DG Taxation and Customs Union on double taxation confirmed that double taxation continues to be considered to be a significant problem by many EU enterprises and tax advisors. On the basis of qualitative evidence, some of the most significant instances are:

i) **Cross-border business restructuring operations**

Although the Merger Directive and recent case-law have improved the situation, all instances of double taxation in relation with cross-border business restructuring have not been eliminated. For instance, the absence of clear obligations in the Directive may give rise to different interpretations by Member States resulting in **double taxation of capital gains**. Further details and examples on why cross-border restructuring operations may still result in double taxation and create significant compliance costs, including

[24] These figures only refer to the compliance costs associated with transfer pricing and do not include the costs and risks of double taxation due to transfer pricing disputes.

the opportunity cost of accepting suboptimal structures can be found in the Company Tax Study (e.g. pgs. 312-315).

ii) Tax treatment of **transfer pricing**

The allocation of tax revenues between Member States on the basis of the "arm's length principle", which lie at the heart of transfer pricing, is a source of double taxation for intra-group transactions[25]. Double taxation in transfer pricing occurs when the tax administration of one Member State unilaterally adjusts the price set by a company on a cross-border intra-group transaction, without this adjustment being offset by a corresponding adjustment in the other Member State/s concerned. According to the biannual surveys on **transfer pricing**[26] published by Ernst & Young, one of the reasons why business considers transfer pricing a priority tax issue is indeed its connection with double taxation. In some years, ,e.g. 1999, business have reported that **42% of cases of adjustment gave rise to double taxation**. This is primarily because firms do not generally refer cases to mutual agreement procedures, as they consider the procedures too lengthy and costly[27].

Importantly, EU Member States have developed a network of bilateral **double taxation Treaties**. These treaties do not provide a comprehensive solution for all cases of double taxation, though. Indeed, the Company Tax Study already recognised that the area of double taxation conventions is 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, nevertheless important gaps remain. First, although they broadly follow the OECD model, the treaties are still significantly heterogeneous. Moreover, their provisions are prone to different, and sometimes divergent, interpretation and application by the treaty partners, which result in double taxation (e.g. in case of triangular situations or in cases of different interpretation of crucial concepts such as "permanent establishment" within a territory) or non-taxation. Business representatives also refer to the increasing complexity of treaty provisions as a source of compliance costs and uncertainty. Indeed, with increasingly complex group structures and cross-border transactions, the application of these treaties often gives rise to difficult issues of interpretation, leading to complex dispute procedures and ultimately failure to ensure double taxation relief. In addition, the Company Tax Study also showed 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 coordination 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.

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25 It should be noted that "transfer pricing" requirements can also create problems due to unduly high compliance costs (see infra). Annex 1 gives more details on why transfer pricing rules affect the 'double taxation' and 'additional compliance costs' tax obstacles in the Internal market.

26 The number of companies and countries covered by these surveys has varied through the years. For the last report (*2007-2008 Global Transfer Pricing Survey* available at http://www.ey.com/global/content.nsf/International/2007-2008_Transfer_Pricing_Global_Survey) interviews with 850 multinational companies across 24 countries (of which 11 EU Member States) were conducted. The biannual surveys are conducted by Consensus Research International, a London-based Research Agency, and include interviews with the persons responsible for international tax matters in leading multinational organisations. These surveys represent the only available large-scale work in this area and its findings give valuable insights into business perception of the subject.

27 The 2007-2008 survey also reveals that over half (52%) of respondents had been subject to a transfer pricing audit since 2003, with 27% of these examinations resulting in adjustments by the tax authorities. Intercompany *services* transactions were the most susceptible to audit by tax authorities. In audit cases resulting in adjustments, parent respondents indicated that tax authorities threatened to impose penalties in 31% of cases, and penalties were actually imposed in 15% of cases. 78% of respondents believed a transfer pricing audit is likely in the next two years.

In addition it will be noted that there has been a year on year increase in the number of unresolved cases under the Arbitration Convention as illustrated in the table below. The increase in the number of unresolved cases may be taken as evidence of the continuing problems in the area of transfer pricing.

Table 2: ***Total amount of pending MAPs under the EU Arbitration Convention as of 31/12/2008 in relation to the year when the request was received by the tax administration***

	Requests received prior to 2000	*Requests received in 2000*	*Requests received in 2001*	*Requests received in 2002*	*Requests received in 2003*	*Requests received in 2004*	*Requests received in 2005*	*Requests received in 2006*	*Requests received in 2007*	*Request received in 2008*	*Total pending cases**
2008	*0 -3*	*2 -3*	*1 -3*	*2*	*2 -4*	*4 - 8*	*21 - 32*	*36 -41*	*56 - 60*	*54-62*	*178 - 218*
2007	*2*	*1 - 5*	*1 - 5*	*4 - 6*	*3 - 8*	*6 - 11*	*29 - 42*	*45 - 66*	*55 - 81*		*146 - 226*
2006	*2 - 5*	*3 - 6*	*0 - 4*	*4 - 9*	*10 - 16*	*8 - 20*	*39 - 55*	*46 - 69*			*112 - 184*
2005	*16 - 24*	*1 - 13*	*5 - 10*	*10 - 18*	*12 - 23*	*12 - 25*	*42 - 68*				*98 - 181*
2004	*24*	*8*	*12*	*24*	*23*	*16*	*0*				*107*

* discrepancies in the number of pending cases reported by Member States result from differing criteria in deciding when a case is finally closed

III. Over-taxation of cross-border economic activity

Over-taxation can primarily occur due to the **absence or limited availability of cross-border loss relief.** The possibility to set off losses against profits in computing the tax liability of a taxpayer is a basic feature of company tax systems. However, in the current situation, taxation of corporate income often **does not properly reflect the overall EU-wide result of the business activity** when foreign investment in the EU is involved. Indeed, while most Member States allow for domestic relief of losses within a group of companies, only a few Member States provide for some limited forms of cross-border loss compensation, i.e. allow relief for the losses of a foreign company belonging to the same group of a domestic corporate taxpayer. At the same time, cross-border losses within one company, i.e. losses of a foreign branch or permanent establishment, may be taken into account at the level of the head office in most Member States[28]. These loss offsetting arrangements entail a risk of over-taxation in international activities whenever cross-border losses cannot be compensated immediately. That is, since domestic losses are immediately deductible, thus reducing the current tax burden, a group operating cross-border would face a liquidity cost compared to a domestic group. For the international group, the compensation of losses incurred by foreign subsidiaries will be at best deferred if the source country allows carry-forward of the losses (which creates significant interest cost) and in some cases, where losses cannot be absorbed locally, they will never be relieved, and will become permanent.

As reported in section 5.1.2, evidence based on representative samples of EU multinational groups shows that, on average, every year approximately **50% of non-financial and 17% of financial multinational groups** could **benefit from immediate cross-border loss compensation**. The **additional losses** that could be compensated **cross-border** in the samples amount on average to **3% and 2.5% of the net taxable profits for the non-financial and financial groups respectively.** Overall, the **losses** that could be immediately compensated under the CCCTB scenario account on average for **7% and 20%** of the net current taxable profits **for non-financial and financial groups**, respectively. The current situation also translates into different tax treatment of

[28] Only Austria, Italy, Denmark and France have some form of cross-border group loss relief. Belgium, Czech Republic, Greece, Lithuania, Hungary and Slovakia are the only Member States that do *not* provide any kind of domestic (or cross-border) group relief.

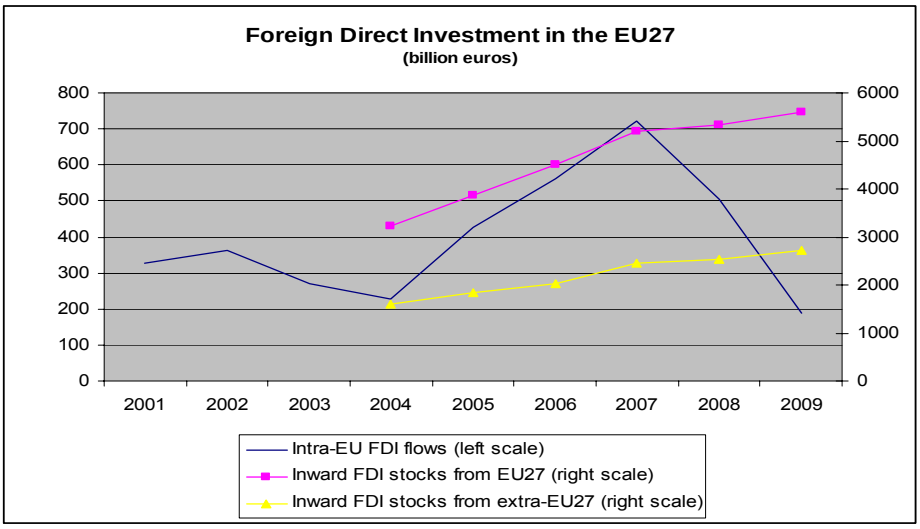
foreign permanent establishments and foreign subsidiaries by Member States, which may affect business decisions on the form of establishment in the Internal market. This different treatment, which could adversely impact on business decisions, might ultimately run against Art. 49 TFEU on freedom of establishment. Other instances of over-taxation can arise in cross-border restructuring operations, and in cases of dividend taxation when different national tax systems are involved.

2.3. Summary of the problems and the baseline scenario

The described tax barriers discourage cross-border economic activity and induce firms to prefer domestic over cross-border operations, thereby directly hindering the achievement of the Internal market (Article 26 TFEU) and the full exploitation of the benefits of market integration. This implies a lack of a "level playing field", barriers to a more efficient allocation of resources and foregone opportunities for growth and welfare gains across the EU. Moreover, in the framework of increased internationalization of economic activities, such company tax obstacles are now more and more evident and detrimental. The simplification of the corporate taxation setting in the Internal market is therefore at the heart of this policy initiative.

For the purpose of the economic analysis, the tax barriers faced by EU firms when they expand across national borders can be defined as cost-increasing barriers resulting in market-entry restrictions. The removal of such barriers is akin to a **liberalisation policy to be analysed within the framework of the freedom of establishment** in the Internal market. According to article 115 of the Treaty on the Functioning of the European Union, Member States can unanimously issue directives for the approximation of laws which directly affect the establishment or the functioning of the common market. Against this background, economic integration at the global level is progressing steadily, with cross-border investment on a clear upward trend, as figure 1 shows for the EU. In a framework in which the geography of production is changing significantly, the fragmented corporate tax landscape is likely to put the EU at a disadvantage in comparison with its main economic partners.

Figure 1. Foreign Direct Investment in the EU27



Source: Eurostat.

At the microeconomic level, the internationalisation of production increasingly involves vertical trading chains between groups of firms over a number of countries. Ultimately, this is going to

contribute significantly to both increasing the scale of world trade, and to changing its nature, with the share of intra-firm trade gaining even more importance. A survey on international sourcing carried out by Eurostat in 12 EU countries shows that insourcing, i.e. moving business functions abroad within the same enterprise group is by far the most common type of international sourcing. At the aggregated level, over the period 2001-2006, insourcing of support and core business functions is used respectively by about 80 and 70% of enterprises with international sourcing (roughly 16% of all enterprises surveyed). At the same time, 40% of enterprises who have moved certain business functions abroad source within the EU. In perspective, 4% of all the companies not having sourced internationally between 2001 and 2006 had plans to do so in the period 2007-2009. The percentage almost doubles (reaching 7%) when only the manufacturing sector is considered. While, not surprisingly, the most relevant barriers for international sourcing are linked to the production process (proximity to clients and producers, etc), taxation issues are considered a very important disincentive for expanding abroad by a significant number of enterprises (see figure 2). This suggests that the observed and perspective international activity might still be below the potential levels reachable in the absence of the identified barriers.

All in all, taking into account the depicted evolution of the baseline scenario, tax related compliance costs are likely to increase. At the aggregate level, more resources will be devoted to compliance as a consequence of the increasing cross-border expansion of firms. At the margin, the rising complexity in the organisation of production processes will be likely reflected into more cumbersome, and hence costly, transfer pricing requirements.

Figure 2. Barriers for international sourcing by type of enterprise
Share in number of enterprises that considered barriers to be very important (%)

Source: Eurostat: Plans for international sourcing in Europe in 2007-2009 - *Statistics in focus 74/2009*.

2.4. Subsidiarity and proportionality

The right for the Community to act in the field of direct taxation is set out in article 115 of TFEU, which provides that "*[t]he Council shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament and the Economic and Social Committee, issue directives for the approximation of such laws, regulations or administrative provisions of the Member States as directly affect the establishment and functioning of the common market*". Moreover, the envisaged policy options are compatible with the EU Charter of Fundamental Rights.

As pointed out in the previous sections, the current framework with 27 different national corporate tax systems impedes the proper functioning of the Internal market. Member States cannot provide a comprehensive solution to this problem. Non-coordinated action, planned and implemented by each Member State individually, would replicate the current situation, as taxpayers would still need to deal with as many tax administrations as the number of jurisdictions in which they are liable to tax.

Community action is necessary in view of establishing a juridical framework with common rules. The Commission has taken initiative having in mind that, under the principle of subsidiarity, Member States are free to determine the size and the composition of their tax revenues.

The measures to be taken under the present initiative are both suitable and necessary for achieving the desired end (i.e. proportionate). The comprehensive proposals examined in this document do not imply a harmonisation of corporate tax rates in the EU and, therefore, they do not restrict Member States' capability to influence their desired amount of corporate tax revenues. They do not interfere with national choices in terms of the size of public sector's intervention and composition of tax revenues. They propose a more efficient way to collectively manage the problems arising from the segmentation of national corporate tax systems in view of a more efficient Internal market. In line with the general understanding of the subsidiarity principle, they offer solutions allowing managing collectively the market failures resulting from the separate working of 27 national tax systems.

3. OBJECTIVES

3.1. General objectives

The general objectives are to improve the **simplicity and efficiency of the corporate income tax** systems in the EU and thus contribute to the better functioning of the Internal market. This would lend support to the objectives of the Europe 2020 strategy by means of **reduced tax distortions to investment decisions and increased opportunities for cross-border investments**. As a result the EU will be a more attractive place to operating a business and fair competition in the Internal market will be enhanced. This will contribute to the overall objective of exploiting the full potential of an integrated EU economy advocated in the Single Market Act. Engaging in international activities typically also has a positive **impact on the competitiveness and performance of enterprises**. Therefore, an **improvement of the overall macroeconomic performance**, that is, of employment, economic growth and welfare in the EU can be expected, particularly in the medium and longer term.

It should be stressed that the effects on the size and the distribution of corporate taxable bases across the EU (see section 5) are not an intended aim of the policy initiatives. No objectives are therefore defined in terms of revenue distribution or revenue neutrality for MS.

3.2. Specific objectives

The general objectives spelled out above will be achieved by meeting the following specific objectives aimed at removing the remaining corporate tax barriers faced by companies operating in the Internal market (see section 2.2):

1. Reduction of additional corporate *tax related compliance costs* for companies

2. Elimination of *double taxation* for companies operating in the EU Internal Market

3. Elimination of the *over-taxation* on cross-border economic activity, mainly stemming from the absence or limited availability of cross-border loss relief.

The elimination or reduction of these obstacles will help minimise the tax-induced distortions and inefficiencies in the Internal market.

4. POLICY OPTIONS

4.1. Description of the options

The extensive public debate on corporate tax reforms in the EU launched by the Commission in 2001 revealed that, with a view to removing the tax obstacles in the Internal market, a series of **targeted actions** could be envisaged as **short-term** measures, but alternatives for **a comprehensive solution based on the provision of common rules for the corporate tax base** should be considered as the **long-term solution**. Thus, only **comprehensive** solutions are retained for analysis and comparison to the baseline current situation. In any case, **harmonisation would involve the base and not extend to the tax rates**. Each MS will be applying its own rate to the taxable base of the companies. The five possible **options** (*status quo* and four **comprehensive alternative solutions**) envisaged as possible corporate taxation policies, which will be assessed and weighed against the above-mentioned objectives are the following.

Option 1 – No further EU action

The baseline scenario will be the likely evolution of the current situation as described before (sections 2.1-2.3), i.e. with ***no further EU*** *action*. All in all, from the general economic trends pointing to increasing internationalisation of production it can be inferred that the current problems deriving from the fragmented EU landscape when it comes to corporate taxation are likely to aggravate in the absence of policy intervention.

Option 2 – Optional Common Corporate Tax Base

The second policy option to be evaluated is an optional Common Corporate Tax Base (CCTB). This alternative would affect the calculation of the corporate tax bases for the relevant companies in the EU. It would replace, for the relevant companies (tax resident in the EU and of EU-located branches[29] of third-country companies), the current 27 different company tax codes by a single set of tax rules to establish the *common* tax base: the CCTB rules. **Harmonisation** will only involve the computation of the tax base and **not interfere with financial accounts**. Therefore, MS will maintain their **national rules** on financial accounting and, at a second stage, adjust the result of the Profit & Loss Account (**P&L**) in line with the common rules, to arrive at the taxable profits (see Annex 5 for more details). However, as the common tax base would not be consolidated, the SA mechanism would need to remain in place: this means that for groups operating cross-border all intra-group international transactions would continue to be priced at arm's length and there would be no automatic EU-wide consolidation of the tax base. Under this policy option, the CCTB will be considered *optional* for any company in the EU subject to corporate taxation that may wish to use this set of rules to compute its taxable profit within each Member State in which it operates. For the purposes of this Impact Assessment, it will be assumed that all EU-based multinational groups would opt for it in this scenario[30].

Option 3 – Compulsory Common Corporate Tax Base

The third policy option is a compulsory Common Corporate Tax Base. This alternative would affect the calculation of the corporate tax bases for all EU-based companies. It would replace the current

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[29] Branches create a taxable presence in their country of location; the term commonly used for such presence is 'permanent establishment' (PE).

[30] Although companies will likely have to devote time and resources to decide whether or not to adopt the new system, a quantitative assessment is not attempted here due to lack of reliable evidence.

27 different company tax codes by a *common* EU-wide tax base. In this case the CCTB will be considered *compulsory* for all EU-based companies subject to corporate taxation. Thus, this option would be applied both to multinational companies and to purely domestic companies which, by definition, currently do not face any cross-border tax obstacles.

Option 4 – Optional Common Consolidated Corporate Tax Base

The fourth policy option to be evaluated is an optional Common Consolidated Corporate Tax Base (CCCTB). This option would replace, for the relevant companies, the current 27 different company tax codes and the SA mechanism by the taxation of a common (eg, calculated under one single set of tax rules: the CCCTB rules) EU-wide consolidated tax base. The CCCTB is a system of **common rules** for computing the **tax base** of companies which are tax resident in the EU and of EU-located branches[31] of third-country companies. Specifically the common fiscal framework provides for rules to compute each company's (or branch's) individual tax results, the **consolidation** of those results, when there are other group members, and the **apportionment** of the consolidated tax base to the different jurisdictions in which the group entities operate. The tax base is apportioned based on a formula which consists of **3 equally-weighted factors (i.e. assets, payroll and sales)**. Member States can then apply the national corporation tax rates to their respective shares of taxable bases. As another important element of this alternative scenario, it is also envisaged to **simplify the administrative framework** that could facilitate the tax-related administrative requirements for companies operating cross-border (i.e. 'one-stop shop' approach to administration and other reforms introducing common tax-related administrative processes[32]). Annex 5 provides more details on the main features of the option.

Different policy choices can be envisaged for this alternative. In particular, the design of some elements of the tax base and of the apportionment mechanism will be subject to analysis.[33]

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31 Branches create a taxable presence in their country of location; the term commonly used for such presence is 'permanent establishment' (PE).

32 A full description of the main features of the *CCCTB* policy option is included in Annex 5: the definition of the taxable base (and its relationship with IAS/IFRS), water's edge, definition of the group, apportionment mechanism, administrative framework, anti-abuse rules, etc. The CCTB policy (which just entails common rules to define the tax base) is also implicitly described in that Annex, since CCTB is a narrower concept than CCCTB, which on top takes into account consolidation, cross-border loss compensation and allocation of the tax bases to different Member States.

33 Regarding the latter aspect, in-depth discussion during the consultation process led to considering the three-factor formula based on company-specific data the most promising mechanism for sharing the tax base among Member States. See for example CCCTB/WP/47, CCCTB/WP/52, CCCTB/WP/56, CCCTB/WP/60, DG TAXUD Taxation Papers nº8 and nº9. Different alternatives were considered through the way: from apportionment based on macro-factors, a Value Added key (to be retrieved from VAT returns of companies), firm-specific factors defined in several ways, etc. The experiences in countries that use formulary apportionment to split the income of multi-jurisdictional companies were analysed in detail (ie Canadian and US practices). Thus the consolidated tax bases under this policy option –common for all Member States, though with certain specificities for certain industries –would be based on labour (consisting of equal weighted payroll and number of employees), assets (without intangibles, financial assets or inventory) and sales (measured 'at destination'). Stakeholders and experts in the field have agreed that this three-factor formula best fulfils the principles that have guided the design of the sharing mechanism, i.e. the formula should: (i) be as simple as possible for taxpayers and tax administrations to apply and easy for tax administrations to audit; (ii) be difficult for taxpayers to manipulate, that is, it should not rely on factors that can be easily relocated to exploit tax rate differentials across the EU; (iii) distribute the tax base among the various entities concerned in a way that can be considered fair and equitable; and (iv) not lead to undesirable effects in terms of tax competition. Therefore, this three-factor formula will be the main sharing mechanism subject to analysis in this Impact Assessment.

Under this option the CCCTB system will be considered *optional* for any company in the EU subject to corporate taxation that may wish to use this set of rules to compute its EU-wide taxable profits. For the purposes of this Impact Assessment it will be assumed that all EU-based multinational groups would opt for it in this scenario[34].

Option 5 – Compulsory Common Consolidated Corporate Tax Base

The fifth policy option to be evaluated is a compulsory Common Consolidated Corporate Tax Base. This alternative would affect the calculation of the corporate tax bases for all EU-based companies. It would replace the current 27 different company tax codes by a *common* EU-wide *consolidated* tax base. In this case the CCCTB will be considered *compulsory* for all EU-based companies subject to corporate taxation. Thus, this option would be applied both to multinational companies and to purely domestic companies which, by definition, currently do not face any cross-border tax obstacles.

4.2. The choice of the legal instrument

The choice of the legal instrument may have an effect on: (i) legal certainty; (ii) proportionality (i.e. whether the instrument chosen is the least interventionist to achieve the objectives, e.g. directive should be preferred over the regulation); (iii) adequacy of the instrument with regard to the content of the proposal.

4.2.1. Recommendation and soft law

Recommendations or agreements such as a "Code of Conduct" among Member States have been used with a certain degree of success in some limited areas of taxation. However, such instruments would not be appropriate in view of the nature of the tax obstacles and identified substantive solutions involved. In fact, in the framework of company law, the definition of the taxable base is part of the legislation of each State. By its very nature, the taxable base is defined by law in order to secure the adequate level of legal certainty both for taxpayers and tax administrations. The recommendation or another instrument based on soft law would not secure the adequate level of legal certainty. While a soft law instrument could in principle be envisaged for the approximation of certain types of national tax legislation, it would be an inadequate solution for the issues at hand. Firstly, a certain degree of approximation would not lead to uniformity. Thus, the issue of compliance costs would not be adequately addressed. Secondly, national corporation tax systems have to be seen as a coherent set of interdependent rules. For example, the need for a loss carry-back depends on the generosity of the rules for provisions. Approximating certain rules would therefore not be a feasible solution. Thirdly, in view of the fact that cross-border consolidation is an important element for overcoming tax obstacles, any such system requires a specific administrative and legal framework that has to be laid down in community law.

4.2.2. Directive

The directive is an instrument best suited to guarantee basic common rules, applicable in all Member States. In particular, the need for a directive to ensure legal certainty both for the application and in case of litigation is the normal way to deal with company law, not only in the tax area. A directive is the most adequate way to achieve the objectives set out in section 3 and it fully respects the proportionality principle.

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[34] Although companies will likely have to devote time and resources to decide whether or not to adopt the new system, a quantitative assessment is not attempted here due to lack of reliable evidence.

4.2.3. Regulation

As far as direct taxation is concerned, art. 115 of TFEU only provides for the use of directives.

4.3. Main design elements of the tax base

In line with the approach taken in the CCCTB Working Group of examining individual elements of each "block" of the tax base, the Working Group also examined the specific approach taken by individual Member States in detail. The working papers of the Group are listed in Annex I and can be found on the TAXUD website[35]**.** The papers contain information on the different MS approaches to the construction of their corporate tax bases. While the technical approach and detail of the Member States approaches would differ, from a policy perspective there was only a material difference in relation to the treatment of depreciation[36]. As a result of the substantive differences among MS with regard to the treatment of depreciation the focus of the work of the Group concentrated on the rates of depreciation. This impact assessment examins two rates; 20% and 25%.

Following on from the work of the CCCTB Working Group and from working paper 57 the table below summarises the main elements of the CCCTB, more detailed information on the elements and the construction of the tax base can be found in Annex V.

Main elements of the CCCTB

1. The 'tax base' (i.e. the individual tax results of each group member)

- **all revenues are taxable** except if expressly listed as **exempt**; in addition, taxable revenues are **reduced by** deductible (business) **expenses** and certain **other items** treated as deductible.
- **Exempt** items include: received **distributions of dividends**; proceeds from the **disposal of shares;** and income from a **branch in a third country**. **Deductible business expenses** commonly involve all costs relating to sales and expenses linked to the production, maintenance and securing of income. The CCCTB extends deductibility to costs for research and development (**R&D)** and for **raising equity or debt** for the purposes of the business.
- **fixed assets are depreciable for tax purposes** subject to certain **exceptions.** Depreciable assets are distinguished between those subject to depreciation **individually** and those **placed in a pool**. **Long-life tangible and intangible fixed assets are individually depreciated** whilst the **remaining** assets go into a **pool**.
- Losses may be **carried forward indefinitely**. **No loss carry-back** is allowed.

2. Consolidation

A **2-part test** determines the entitlement to participation in the group. The deciding factors are **control** (>50% of voting rights) and either **ownership** (>75% of capital) or **rights to profits** (>75% of rights giving entitlement to profit). EC-located branches (of third-country companies) are eligible. The 2 thresholds have to be met **throughout the year**. Otherwise, the company has to leave the group. There is also a **9-month minimum requirement** for being a group member.

- **Intra-group transactions are eliminated,**

[35] http://ec.europa.eu/taxation_customs/taxation/company_tax/common_tax_base/index_en.htm

[36] Annex XI is the CCCTB WG working paper 4 and annex on tax and depreciation summarises how assets are depreciated differently across Member States.

- **Business reorganisations:**

A. Companies entering the group

The **underlying rationale** is to create a **bridge** between the national tax system and the CCCTB scheme. The aim is to strike a **balance** between MS **individual taxing rights** and the concept of a **consolidated shared tax base**.

(i) Pre-consolidation trading losses are **ring-fenced** and carried forward to be set off against the taxpayer's apportioned share. The idea behind this is that the MS participating in the consolidated group do not have to bear the cost of losses already incurred;

(ii) Unrealised gains: the capital gains are **taxable upon realisation** and **shared** across the group;

B. Companies leaving the group

(i) Group trading losses: **nothing** is attributed to the **leaving company**; losses produced during the period of consolidation remain **at group level**;

(ii) Unrealised gains: capital gains are **taxable upon realisation** at the level of the **company leaving the group**;

C. Reorganisation within a group

(i) Trading losses incurred during consolidation: **no impact**;

(ii) Pre-consolidation losses remaining unrelieved continue to be **ring-fenced**;

(iii) Unrealised gains: tax neutrality is the overarching principle

3. Transactions between the group and entities outside the group

- **Tax Treaties with third countries will override conflicting rules** of the Directive, meaning that a MS will not be hampered from fulfilling its commitments vis-à-vis a third country.

- **Relief by exemption** will be given for third-country located **branch income**; inbound **dividend** distributions; and the proceeds from the **disposal of shares** held in a company outside the group.

- **Relief by credit** for inbound **interest** and **royalty** payments; the credit is **shared** among the group members according to the **formula** (without inclusion in the consolidated base).

- **Withholding taxes** charged on **outbound interest and royalties** will be **shared** among the group members according to the **formula** (without inclusion in the consolidated base); in the case of **dividends**, the withholding tax will not be **shared Transactions between associated enterprises** will be subject to **pricing adjustments** in line with the **'arm's length'** principle.

4. Anti-Abuse

- A General Anti-Abuse Rule (GAAR) is supplemented by measures designed to curb abusive practices of a cross-border nature:

(i) Limitations apply **to the deductibility of interest** paid to associated enterprises in a low-tax third country which does not exchange information with the Member State of the payer;

specific rules define the concept of a 'low-tax third country';

(ii) Controlled Foreign Companies (CFCs) legislation requires that the CFC, resident in a low-tax third country, is **controlled** at **50%** of its voting rights, **owned** at **50%** of its capital and gives **50% profit entitlement** to the taxpayer. In addition, **30% of CFC income** should be **tainted**.

5. Formulary Apportionment (FA)

- The FA comprises 3 equally-weighted factors (i.e. assets, payroll and sales):

(i) Labour is computed based on both **payroll** and the **number of employees** (each item counts for half);

(ii) Assets consist of **all fixed tangible assets**, meaning that intangibles and financial assets are excluded from the FA;

(iii) Sales are taken into account to increase the taxing entitlement of the **MS of destination**.

6. Administration

- The 'one-stop-shop' practice will allow groups with a taxable presence in more than one MS to deal with a single tax authority across the EU (i.e. principal tax authority (PTA)), being that of the EU parent of the group termed 'principal taxpayer'. A consolidated tax return will be filed with that authority.

- The Directive contains procedural rules on various matters:

(i) How taxpayers should submit their **notice to opt** into the CCCTB and subsequently their **annual tax returns**;

(ii) A **ruling mechanism,** coupled with an **interpretation panel** and a scheme for the **exchange of information,** will be operated by the competent authority (CA) in each group member;

(iii) Audits will be initiated and coordinated by the PTA;

(iv) In terms of **dispute settlement,** disputes **between MS** will be referred to **Arbitration** whilst those between **taxpayers and MS** will be dealt with by an **Administrative Appeals Body** at a 1st instance and, at a 2nd instance, will have to be brought before the **national courts of the principal taxpayer**.

5. ANALYSIS OF IMPACTS OF THE RETAINED OPTIONS

This section analyses the different impacts of the tax reforms under analysis. First, specific impacts of the main elements of the concerned policy options[37] and, subsequently, general economy-wide

[37] As specific elements vary across the policy options, not all alternative policy options under scrutiny have an impact in all the aspects analysed: for example, the CCTB option has no effect on cross-border loss

effects of the various options are addressed using the different methodologies summarised in Box 2. Thus, hereafter, the impact of each policy option on the following aspects will be outlined:

1) impact on the **size of the taxable bases**, and on the **distribution of the corporate tax bases** among the EU Member States, stemming from both the new corporate tax base provisions and the possibility of loss consolidation;

2) impact on the **costs** for tax administrations and on the **compliance costs** for taxpayers;

3) the main **economy-wide impact**s.

A qualitative discussion of the expected dynamic long term effects, as well as of the social or environmental impacts, is also provided.

Box 2: Methodologies used to quantify the impacts of the alternative policy options.

1. **The *European Tax Analyzer* (ETA)**: a methodology that simulates the development of a 'model' company over a 10-year period, taking into account the relevant provisions of the tax system in place. The model is used to measure the size of the tax base as defined by current national tax provisions (baseline scenario) in each of the 27 EU Member States, and then to compare the results with the tax base that would result from the application of an EU common tax base, but cannot address consolidation and allocation of the tax base, and therefore does not measure the final tax base size for the CCCTB options. See Annex 6 for more details.

2. **ORBIS and Amadeus databases**: the databases provide balance sheets and profits and loss accounts for representative samples of about 6700 EU multinational groups in the financial and about 2000 groups in the non-financial sectors, respectively, over the 2002-2005 period. The data have been used to calculate the effect of loss consolidation and, with particular reference to ORBIS, to calibrate the CORTAX model. Annex 3 provides a detailed description of the different ways in which the data have been used.

3. **CORTAX model**: an applied computable general equilibrium (CGE) model that describes the 27 countries of the European Union, plus the US and Japan. It is designed to simulate the economic implications of unilateral and multilateral corporate tax policies as well as the harmonisation of these policies. The model is calibrated using data from the ORBIS database. Importantly, the simulations in CORTAX are run under the working assumption that any changes in the corporate tax base would be compensated by changes in the national tax rates to guarantee ex-ante budget neutrality. See Annex 10 for more details.

4. **PricewaterhouseCoopers case study**: a survey launched in 2008 among **multinational companies** located **in the EU**. Of the 21 EU multinational companies surveyed, 17 replied to the questionnaire on the quantitative and qualitative views on compliance under the current national systems for corporate income tax and in the two hypothetical scenarios of CCTB and CCCTB. Annex 7 gives more details on this exercise.

5. **Deloitte Tax Experts survey**: a **survey** among **tax experts** of Deloitte's European network was carried out in 2009 to evaluate the additional recurrent compliance time and cost that would be needed if a multinational group would set up a new subsidiary in another EU Member State. See Annex 8.

5.1. Impact of the policy options on the size of taxable bases

Modifying the size of the corporate tax bases is not an objective *per se* of the company tax reforms under analysis. However, all the alternative policy options imply new tax rules for defining the common tax base. Hence, it is important to assess the changes in the size of the corporate tax bases

consolidation or apportionment of tax bases across Member States. Thus, only the *concerned* policy options are assessed for each of the impacts analysed.

of the EU companies concerned with reference to the status-quo. This analysis should allow answering the question of whether **the EU common tax base under consideration would be in general broader or narrower than the current corporate tax bases** (for individual companies and at the national level). Thus, no conclusions should be drawn on the final impact on overall tax revenues, as those will depend on Member States' own policy choices with regard to possible adaptations of the mix of different tax instruments or applied tax rates.

The change of the tax base can be due to two sets of elements: (i) the establishment of new tax base provisions unrelated to consolidation or loss compensation (CCTB and CCCTB options); or (ii) the new possibilities for loss offsetting (only CCCTB options). The analysis in the following two sections focuses on the two elements described. In the absence of actual data from national tax administrations, several alternative methodologies have been employed in this exercise (see Box 2).

5.1.1. The impact of the common tax base provisions unrelated to consolidation

The aim of this section is to assess the impact on the size of the relevant companies' tax bases of moving to an **EU-wide harmonization of the major structural elements of the corporate tax bases** unrelated to consolidation: depreciation allowances, inventories valuation, etc. Hence, the purpose is to compare the initial corporate tax bases, as defined by current national tax provisions in place in each country (benchmark case) with the size of the tax bases that would result from the application of *common* EU-wide tax base provisions (before loss compensation or apportionment in the scenarios with a CCCTB). At the policy level, tax base broadening measures are generally deemed an efficiency-improving strategy to sustain revenues in the globalised economy[38]. In the context of revenue-neutral reforms, low statutory rates not only make countries less vulnerable to international profit shifting through transfer-pricing and thin capitalization, since mobile profits are particularly sensitive to tax rates, but are also particularly attractive to high-yielding companies, often multinationals earning firm-specific mobile rents from the exploitation of special technologies, brand names, etc (Dischinger, 2007). Promoting inward investment from those companies can generate positive spillovers to the host economies, although the success of such policies might depend on whether the reforms are undertaken unilaterally by one country or multilaterally by a group of countries like the EU[39].

Using the ETA model (based on simulations for a standardized company) it is possible, for each of the two types of representative company (large vs. SME), to calculate the future value of the tax base – i.e. the sum of all yearly tax bases evaluated at the end of the simulation period of 10 years - in case of application of the national tax rules as they stood in 2006, alongside the % change when all provisions of the common tax base (CCTB) are implemented simultaneously, under two different rates applicable for pool depreciation on machinery and equipment, namely 20% and

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38 This approach finds support in the recent economic literature, such as Sørensen (2006), Haufler and Schjelderup (2000), Devereux, Griffith and Klemm (2002) In fact, the incentives to lower the statutory tax rates in a globalising economy, together with the need to raise a certain amount of revenue from the corporation tax, explain the policy of rate-cut-cum-base-broadening pursued by most OECD countries in recent decades.

39 While for individual countries the policy of base broadening and rate reduction may be optimal in order to attract profits and investment, a coordinated policy at a European scale reduces the fiscal externalities within the EU and the beneficial effects of lower corporate tax rates are smaller (i.e. tax rate reduction attracts fewer investments/profits from within the EU if all other European countries pursue the same policy). In that case, a coordinated tax system featuring a narrower base and higher corporate tax rates that creates smaller investment distortions at the margin may be more attractive. Calibration based on actual data to measure the strength of the opposing effects is provided in Section 5.4.

25%[40]. The representative company in all Member States, except Cyprus and Ireland, would see the size of its taxable base increase after the introduction of a CCTB. The results of the calculations are very similar for the 'model' large company and the SME but they differ substantially between a rate for pool depreciation on machinery and equipment of 20% or 25%. On average, **for a 20% rate for pool depreciation, the future value of tax base increases by 6.20% for the representative EU large company, and by 5.57% for the representative SME, while for a 25% rate it broadens by 1.09% and 1.96%** respectively[41] (see Table A.12 in Annex 6). The ORBIS database can be used to calculate the net value of depreciation allowances (and thereby on the tax bases' size) of the current tax systems and the common tax base for both a 20% and 25% depreciation rate for plant and machinery. The overall findings are consistent with those from the ETA model: **the net present value of depreciation allowances decreases on average by 5.9 or 4.9 percentage points if the 20% or 25% depreciation rates hold, respectively.** As expected, the **variation across countries is substantially reduced by the common tax base**: the standard deviation drops from an average of 8.9% to 3% (see Table A.10 in Annex 3 – section 3.3). This is an important result of the common tax base, as it may help to **reduce the differences in effective taxation** across EU Member States which could result in an **improved allocation of capital within the EU**. Finally, the results from the PWC case study show again **a 'broadening of the tax base' trend**, although these results should be taken with caution given the limited sample coverage. In this approach, 13 EU-based multinationals have 'simulated' their taxable bases under both the national systems of the EU countries where they operate and the common tax base scenario – without cross-border loss consolidation. According to the simulations, a move towards a CCTB would increase the *average* tax base of MNEs) by 11% (abstracting from the size of the companies in the sample). The results give a less strong movement in the *aggregated* tax base (i.e. summing together the results of all companies in the sample, thus giving greater weighting to larger MNEs), which would increase by around 3% for the whole EU sample. The MNEs' answers have been aggregated by MS where each company is established: for most individual countries the aggregate effects on the size of tax bases of a move towards CCTB[42] seem to be rather limited or within the margins of statistical relevance (+/-2%) for this sample of firms (see table A.13 in Annex 7).

To sum up, the findings of all the applied methodologies seem to indicate that **the introduction of the common tax base provisions unrelated to consolidation (CCTB) could lead on average and for most EU-based companies to tax bases broader than the current ones. However, the magnitude of this increase seems to depend essentially on the depreciation rules applied**. The common tax base would also **reduce the substantial variation in tax bases** across European countries that currently exist, partly due to differences in fiscal depreciation schemes and inventory valuations.

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40 The value of the corporate tax bases under CCTB still differ across countries even if the rules for tax accounting are harmonised and even if the model company is supposed to be alike everywhere. The reason for this is that some Member States levy local taxes which in this model are assumed to be deductible from the corporate tax base as a business expense (e.g. real estate tax and other local taxes like business taxes) and the amount of such local taxes varies widely between the Member States: from no other than corporate income tax in Malta to other taxes that weigh up to almost 60% on the effective total tax burden of companies in Hungary. The liquidity effects of paying these taxes (which allow or not further investments) and their deductibility of the tax base have accumulative effects through the 10 years simulation period, thus giving rise to the spread in tax bases' size even in the event of a CCTB.

41 The difference is to be attributed to the fact that depreciation rules explain in isolation more than 70% of the tax base size changes; within those, the provisions for machinery and equipment account for 90% of the variation.

42 Depreciation rate of 20% for the pool assets was assumed in this study.

5.1.2. The impact of consolidation of profits and losses

In the corporate tax regimes in Europe, losses can be carried forward and offset against future profits within the same country. This leads to an asymmetric treatment of losses compared to profits, for a twofold reason: i) the possibility of loss offset can in fact be limited in time and in the amount that can be offset per year; ii) firms can only carry forward nominal losses (i.e. without indexation), whose value in real terms decreases with inflation. Loss carry backs are only possible in very few cases[43]. The lack of cross-border loss compensation leads to over-taxation in cross-border activities. Besides the more symmetric treatment of profits and losses mentioned earlier, there are several further potentially important economic effects of (cross-border) loss consolidation: i) improved neutrality between domestic and cross-border investment; ii) reduced risk of investment, as losses are better insured (Domar-Musgrave effect), which may stimulate risk taking and raise returns to capital in the economy; iii) increased efficiency in the international allocation of productive capital; iv) enhanced investment ability from financially constrained firms following higher after-tax profits (see e.g. Hubbard, 1997). Hence, allowing the immediate consolidation of profits and losses for computing the EU-wide taxable bases of multinational groups, would be a step towards the goal of achieving the specific objective of **reducing over-taxation in cross-border situations** and thereby towards improving the tax neutrality conditions between domestic and cross-border activities to better exploit the potential of the Internal market. This would contribute to achieving the general objective of **improving efficiency** in the Internal market.

The policy options involving a CCCTB allow for an EU-wide consolidated tax base with some form of immediate cross-border loss offsetting within the same business group. Therefore, under consolidation, the present value of the EU-wide corporate tax base would shrink somewhat compared to the current situation. The analysis in this section tries to quantify the impact of EU-wide loss offset on companies' tax bases *in relative terms*: what percentage do the losses that could be compensated cross-border represent in terms of the overall tax base for an average EU multinational? What is the quantitative macro-economic effect of EU-wide loss consolidation? The statistical analysis for the sample of EU-multinational groups based on the Amadeus and ORBIS databases shows that, on average, every year approximately **50% of non-financial and 17% of financial multinational groups** could **benefit from immediate cross-border loss compensation**. The **additional losses** that could be compensated **cross-border** in the samples amount on average to **3% and 2.5% of the net current taxable profits for the non-financial and financial groups respectively.** Overall, the **losses** that could be immediately compensated under the CCCTB scenario account on average for **7% and 20%** of the net current taxable profits **for non-financial and financial groups**, respectively. As a result, given the share of corporate tax revenues of the non-financial and financial sectors, on average for the groups involved the taxable base under the CCCTB scenario would be 2.8% lower than in the status-quo. According to the PWC case study of 13 multinational companies on average in the 2005-2006 period immediate loss compensation would involve 10% of the current tax base[44].

The welfare implications of loss consolidation relative to loss carry forward have been analysed using the CGE model CORTAX using the average loss probability calculated from the ORBIS database and assuming that, in the baseline and CCTB scenarios, loss carry forward applies in all EU countries. The simulations show that, given the share of multinationals in the EU and the level

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[43] The MS that apply loss carry back are DE, FR, IE, NL and UK. See, the Commission staff working paper on tax treatment of losses in a cross border situation, Annex VII. http://ec.europa.eu/taxation_customs/resources/documents/sec_2006_1690_en.pdf

[44] On average, losses compensated for this sample represent 5% of the as-is tax base under existing tax rules, but increase to 15% of the current tax base under CCCTB.

of rates, consolidation alone would reduce the corporate tax burden by 15%, a value in line with other studies (e.g. Fuest, Hemmelgarn and Ramb, 2006)[45]. In the steady state equilibrium of CORTAX, the reduction in the tax base is smaller because losses can be carried forward from the past. All in all, **the decline in the aggregate total economy tax base in the steady state would be 4.5%**. The reduction is higher for countries featuring high corporate tax rates and a large multinational sector. Moreover, given the behavioural assumptions of CORTAX, loss consolidation would require a 1.9 percentage point increase in corporate tax rates to balance the government budget from the tax base reduction. The combination of loss consolidation and higher rates raises the cost of capital, which results in slightly lower investment and hence in a decrease in GDP. However, the **net effect on welfare is negligible**[46].

The analysis above shows that a **CCTB policy option** - with common tax base provisions but no cross-border loss consolidation - could imply **broader tax bases** than current ones for most companies. For a similar assessment of the **CCCTB option**, the results of the two previous sections could be tentatively combined. All methodologies indicate that the combined effect of the new tax base provisions unrelated to consolidation (which tend to broaden the tax base) and the introduction of immediate cross-border loss consolidation (which tend to shrink it) would result **in aggregate tax bases of roughly similar size compared to the current ones** (for the companies concerned). The MNEs case study yields a slightly positive net effect: over the companies sampled, the *average* tax base over the two year base period increased by 5% by moving from the current scenario to a CCCTB[47]. A further economic assessment of the implications of the changes of tax bases' sizes on macroeconomic variables for the different policy options under analysis is shown in Section 5.4 below.

5.2. Impact on the distribution of the tax bases between the EU Member States

In addition to 'size effects', the alternative policy options imply changes in the distribution of taxable profits across national jurisdictions. In particular, the CCCTB policy alternatives entail the introduction of an EU *consolidated* tax base for multi-jurisdictional groups, thus raising the question of how the overall tax base should be divided among the Member States in which the group operates. Hence, the CCCTB alternatives require the definition of a system to allocate tax bases across taxing jurisdictions, different from the traditional arm's length methodology[48]. Apportioning mechanisms imply an inter-jurisdictional 'redistribution' of tax bases that is worth quantifying, although such impact does not reflect any policy objectives but is an unavoidable side-

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45 See Annex 10 for details.

46 The incentive effects of loss consolidation on investment and employment are subtle. Despite the lower corporate tax burden due to consolidation, the CGE model shows that the cost of capital does not necessarily fall. Intuitively, marginal returns on investment can still be positive but taxed later or only partially under loss carry forward. Under loss consolidation such positive marginal returns are taxed immediately and always and therefore taxed at a higher effective rate. The smaller capital stock exerts a negative impact on the marginal product of labour and, therefore, on labour demand, which will ultimately lead – with a positive elasticity of labour supply – to a contraction in employment.

47 The EU-wide *aggregate* tax base of all sampled MNEs shows however a small decrease by 2% of the move towards a CCCTB: this result is attributable to important losses incurred by a large company of the sample in the years of study and can be considered within the margin of error of the sample.

48 The 'no policy change' scenario and the CCTB would still allocate tax bases across taxing jurisdictions according to traditional SA. Under the CCCTB, on the other hand, Consolidated profits for firm i are apportioned across countries according to a formula like
$w_{ij} = \sum_k w_k (X_{ij} / X_i)$`
where w_k denotes the formula factors, with $\sum_k w_k = 1$, and X_{ij} denote the share of the multinational i's factor X_i that is operational in country j. The profits apportioned to each country can then be taxed at the national corporate tax rates.

effect of some of the options analysed. Importantly, no general conclusions should be drawn on the final effect on revenues or on the budgetary position of the different MS, as this will depend on national policy choices with regard to possible adaptations of the mix of different tax instruments or applied tax rates.

First of all, the 'full size of the new tax bases' before distribution (i.e. accounting for provisions to offset losses, and non-related to consolidation) has been assessed using the PWC case study of the sample of 13 EU multinational groups. This approach indeed allows for a quantification based on 'actual tax data', although the conclusions should be taken with caution given the limited sample coverage. In this sample of MNEs, changing the weighting of the CCCTB apportionment factors has little effect on the relative apportionment of the tax base between countries. This result can be attributed to the fact that the underlying apportioning factors have a very similar distribution between countries (see Table A.14 in Annex 7). Data from the ORBIS and Amadeus databases – covering representative samples of EU multinational groups operating in the financial and non-financial sectors, respectively – can be used to get some insights on the distribution of tax bases across countries under apportionment rules *versus* current SA. Two limitations of this analysis should be pointed out. First, the effects on the size of the taxable base cannot be fully accounted for since accounting profits are used as a rough proxy for taxable profits and the full impact of the tax base provisions on the *size* of taxable bases – as analysed above – is not captured by financial data. In turn, only 'consolidation of profits and losses' is adequately accounted for in the analysis. As a consequence, for the results in section 5.1.2, the size of the taxable base to be distributed across countries is undoubtedly underestimated in this exercise. Second, missing data problems have somewhat reduced the sample coverage[49]. Therefore, the tax bases of the groups for which 'consolidation + apportionment' has been calculated account for around 15% of (a proxy of) total EU corporate tax bases for the year 2004[50]. In this exercise, taxable profits in each country of the EU, both under the current tax conditions and under alternative scenarios of 'consolidation + apportionment', have been simulated for each of the selected multinational groups. (More details on the methodology are reported in Annex 3). Shifts in the national tax bases after apportionment can be evaluated comparing the formulary apportionment-based distribution of tax bases across countries to the current profits-based distribution. Table 3 reports the results from the formula where **the labour factor (split into payroll and number of employees), assets and sales by destination are equally weighted**, whereas the effects of alternative formulae are left for Table A.11 in Annex 3 (section 3.3), as a sensitivity check . The results for non-financial and financial groups have been aggregated using as weights the respective shares of these sectors in the average corporate income tax revenues for the years 2002 to 2005 according to national accounts in order to get an indication for the economy wide tax base. Overall, the results point to an increase in the tax bases mostly in the MS in Central and Eastern Europe, as well as in Germany, Spain, France, Greece, Italy and the UK. As pointed out above, these results should not be taken as representing the overall effect on MS tax revenues. Clearly, for given corporate tax rates any change in the size of the base translates into a proportional impact on revenues from corporate income. However, national governments might optimally respond to shifts of the taxable base not only by changing

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[49] Out of the above 2000 multinational groups extracted from the Amadeus database (see Annex 3), just around 750 groups had sufficient and appropriate data to run accurately all calculations involved in 'consolidation and apportionment'. Additionally, data from 2073 financial groups out of the total 6700 from the ORBIS database have been analysed.

[50] As an exact figure for corporate tax bases in the EU countries is not available a proxy based on national accounts data was used. The approach followed is similar to the method for calculating the denominator for the implicit tax rate on corporate income published in the 'Taxation trends' (European Commission 2009). The denominator measures not the actual tax base but indicates on a comparable basis the profits of corporations that could potentially be taxed by national tax authorities.

their corporate rates in the short term, but also by adapting the design of the tax mix in the medium and longer run. Evaluating the ultimate effects on the national fiscal positions is therefore very difficult[51].

[51] From a methodological point of view, sound predictions on the effects of the new rules on MS tax rates would require modelling national governments' reaction functions. Models currently available to simulate corporate tax reforms in the EU, like the CORTAX model, do not yet reach this degree of sophistication. Moreover, the economic literature does not offer a conclusive answer to the key question whether the switch from separate accounting to formula apportionment will intensify competitive pressures on tax rates. Undeniably, the common rules for the calculation of the tax base will make the system more transparent - to the benefit of firms when it comes to comparing the effective tax burden across different jurisdictions. In addition, having (destination based) sales in the formula reduces incentives for countries to cut taxes as the destination of sales cannot be easily shifted.

Table 3. Comparison of tax bases under the 'current' scenario and with 'consolidation + apportionment'

	Sample current tax base	1/6 'Cost of employees' – 1/6 'Number of Employees' - 1/3 'Assets' – 1/3 'Sales by destination'	
Country	Cross-country distribution	Cross-country distribution	Change
AT	4.00%	2.90%	-1.10
BE	5.60%	3.90%	-1.70
BG	0.00%	:	
CY	:	:	
CZ	0.20%	0.40%	0.20
DE	16.70%	19.50%	2.80
DK	5.90%	3.90%	-2.00
EE	0.19%	0.20%	0.01
ES	3.40%	4.60%	1.20
FI	8.50%	5.50%	-3.00
FR	8.30%	10.00%	1.70
GR	0.70%	1.30%	0.60
HU	0.60%	0.40%	-0.20
IE	2.90%	2.50%	-0.40
IT	6.10%	7.90%	1.80
LT	0.10%	0.20%	0.10
LU	1.00%	:	
LV	0.00%	0.10%	0.10
MT	:	:	
NL	6.40%	4.20%	-2.20
PL	2.00%	1.80%	-0.20
PT	1.20%	1.20%	0.00
RO	0.10%	0.30%	0.20
SE	5.90%	4.90%	-1.00
SI	0.10%	0.10%	0.00
SK	0.00%	0.10%	0.10
UK	20.30%	20.50%	0.20
Total EU	100.00%	97.30%	-2.70

Source: Own calculations based on Amadeus and ORBIS databases.

As in the previous section, the statistical analysis is complemented by the approach based on the CGE model CORTAX that captures firms' behavioural responses to the new tax system, allowing a quantification of welfare effect of the reforms. In CORTAX, the shift from SA to consolidation with formula apportionment has a number of effects that can be divided into three categories: i) an ex-ante impact on the distribution of corporate tax bases across countries; ii) a removal of profit shifting within the EU; iii) a shift from current distortions in international capital allocation towards a new type of distortion associated with the formula factors. These are analysed in turn.

(i) The ex-ante impact on corporate tax revenue occurs because the sharing mechanism will in general yield a different distribution of the tax base across countries than the current system of SA.

Therefore, formula allocation will cause an ex-ante reallocation of corporate tax bases and, for given rates, of corporate tax revenues[52].

(ii) The second effect of consolidation and formula apportionment is that multinationals and governments no longer need to determine arm's-length prices for intermediate deliveries within the EU. Accordingly, the opportunities for multinationals to shift profits are reduced. This affects the distribution of corporate tax bases between high-tax and low-tax EU countries. The elimination of profit shifting is not a zero-sum game in CORTAX. On the one hand, if tax planning opportunities are taken away, firms save resources that can be used more productively. This improves welfare. On the other hand, the opportunity of profit shifting under SA allows multinationals to reduce their overall tax burden. Taking away this opportunity thus raises the tax burden, which discourages investment and hurts welfare (see a further discussion on this in Section 5.4 below).

(iii) In the current system, firms have an incentive to locate capital (next to profits) in low-tax countries since generated income is taxed at source. The resulting distortion in the international allocation of capital harms production efficiency. Under formulary apportionment, this distortion disappears since taxes are levied on consolidated income. Yet, the formula may introduce a new type of distortion stemming from the incentive for MNEs to reallocate factors to low-tax jurisdictions to affect the final result of the formula. In fact, statutory corporate tax rates become taxes on the factors used in the formula. This generates a potential distortion to the international allocation of productive factors[53].

The welfare effects under the CCCTB have been simulated using alternative sharing mechanisms (see Figure A.3 in Annex 10) [54]. The switch to payroll instead of employment mainly benefits high-wage countries (in the former EU15) at the expense of low-wage countries (like Romania and Bulgaria). The larger weight on capital benefits capital-intensive countries like Belgium, Ireland and the Netherlands. On balance, CORTAX suggests that **the isolated aggregate effect on welfare in the EU of any apportionment mechanism is very small**.

The discussion above assumes away other dynamic effects that would affect the size and distribution of the cake of corporate taxable profits in the EU in the long-term. An analysis of the long-term effects on the size of the cake of each alternative policy option should take into account: i) the number of EU companies which are now purely domestic but may choose to operate cross-border in the Internal Market as a result of the tax reform, thus becoming EU multinationals; ii) the

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52 Devereux and Loretz (2008) and Fuest, Hemmelgarn and Ramb (2007) explore the ex-ante revenue implications of formula allocation using micro data. In CORTAX, the reallocation of revenue is governed by national accounts data (which determine the shares in the formula for each country).

53 The effects of FA on relocation have not been unambiguously confirmed by the existing empirical literature. For instance, Klassen and Shackelford (1998) find evidence that the formula matters for the location of sales in the US, but not for decisions about factors like employment and property. In the light of this and other evidence, Agundez-Garcia (2006, p.66) concludes that "the effects due just to the distortionary burden on the factors in the apportionment formula remain largely unknown". In fact, to evaluate the potential relocation of labour within Europe following FA one should take into account a number of factors other than the resulting overall tax burden, such as labour market regulations, existence of agglomeration economies, productivity levels, etc. Hence, if there are significant differences across countries in these areas, the impact of the fiscal factor as a driver for relocation might correspondingly decrease. Moreover, the overall effects are even more difficult to gauge if one recognises that the importance of the economic determinants of relocation varies significantly across industries.

54 These results are based on simulations considering the CCCTB-WG20 definition of the tax base, assuming that the CCCTB system is compulsory for all firms and for the basic version of CORTAX, which does not include tax havens and discrete location choices. Therefore, they are not readily comparable to the results shown in Section 5.4 (which include tax havens and discrete location choices).

foreign investments that may be attracted into the EU by the more favourable tax conditions due to the reforms, which may generate some additional corporate tax bases; iii) the increased economic activity following the positive growth effects from the improved functioning of the Internal Market, etc. A quantitative assessment of these issues is obviously very difficult. It can be connected to the more general analysis of dynamic effects of the tax reform discussed in section 5.5 below.

5.3. Impact on costs to tax administrations and on compliance costs to firms

The prominent objective of the tax reforms considered is the reduction of tax compliance costs for companies operating in the Internal market. Therefore, a careful evaluation of this issue is a key part of this Impact Assessment exercise. In addition, the reforms analysed will also have an impact on tax administrations' costs.

5.3.1. Member States tax administrations' costs

A move to any of the alternative policy options from the current situation will entail some new costs for Member States' tax administrations. These include: the need for coordination with other administrations (for example, in the application of double taxation relief methods) and one-off costs like the need of personal training, upgrading of IT systems, etc. Some of the alternative systems may save some of the current costs which tax administrations incur, such as the costs of resolving intra-EU transfer-pricing disputes or the general costs of monitoring transfer-price setting by companies (these costs would be saved only by non-SA based systems like CCCTB, but would remain in place under the SA-based current system and CCTB). In case of optional policy alternatives, the costs associated with maintaining two different systems simultaneously should be estimated. These costs would be saved in the compulsory versions of the CCCTB, where this alternative tax scheme would replace all current national corporate tax systems.

To retrieve information on current and perspective tax-related costs incurred by national tax administrations, Member States – through the CCCTB Working Group – have been asked to answer to an "**ad hoc questionnaire**" prepared by the Commission Services (see Annex 9)[55]. Only four Member States gave information on the size of their present tax related outlays. Only two Member States were able to give information on the quantitative foreseen one-off costs in case one of the policy options should be implemented, whereas recurrent administrative costs under the new scenarios were not estimated. Some Member States underline the difficulty to assess administrative costs for the policy alternatives while acknowledging that the implementation of a new system will entail one-off costs to training personnel, to adapt informatics systems and to familiarise firms with the new system and that supplementary costs should be anticipated in case the national tax administration had to simultaneously manage the "national" system and the "common" system.

5.3.2. Companies' tax related compliance costs

This section aims at evaluating the savings in **recurring tax related compliance costs** for companies expected under the different policy options. It should be emphasized that when the adoption of the new system is made optional for firms, the decision process will most likely be based on a cost-benefit analysis that will itself take time and resources. Similarly, learning costs should be expected from the compliance to the new rules. Table 4 reports the areas in which the surveyed multinationals expect costs from a changeover to arise according to the PWC study. The well-known methodological difficulties in estimating tax related compliance costs are exacerbated

[55] The methodology used is in line with the model of 'assessment of administrative costs of legislation', in this case for public authorities, as described in Annex 10 of the Impact Assessment Guidelines.

when it comes to estimating costs stemming from the adoption of a new system. However, such costs will be by definition one-off, and hence expectedly outweighed by the savings in recurring outlays that companies face in dealing with tax administrations.**Table 4: One-off costs expected to arise on a changeover from the current system**

Type of cost	*% of respondents*
Training staff	100.0%
Calculations to decide on whether to opt into CCCTB/CCTB	92.9%
Calculations to set up asset pool for tax depreciation under CCCTB/CCTB	85.7%
Development of new processes and systems	85.7%
Consulting/advisory fees	85.7%
Software license fees	64.3%
Other HR costs/relocation of staff	28.6%
Outsourcing compliance cost obligations	28.6%

Source: PriceWaterhouseCoopers Survey on multinational firms.

Different methodologies have been used to quantify recurring compliance costs. In particular, different surveys have been carried out among firms as well as among tax experts, and their results complemented with simulations using the CGE model CORTAX (see Box 2). The results of the PWC survey of 17 multinationals shows that the respondents predict, on average, **an increase of 4% in time** spent overall for corporate tax compliance activities **in the event of a CCTB** (see table 5). Although somewhat puzzling, small increases are expected in the time spent on record keeping, on the preparation of tax computation and on dealing with tax authorities. The qualitative results show strong belief that the introduction of a CCTB will have little or no impact. An overwhelming majority of companies see the CCTB as equally burdensome across all the categories covered. Regarding **the shift to a CCCTB system**, participants to the survey predicted, on average, a **reduction of 8% in the time** spent overall on corporate income tax compliance activities. The main areas where time savings are expected refer to transfer pricing documentation and to the preparation of tax computations. On the qualitative side, the CCCTB option is deemed by the majority of the respondents less burdensome than to the current situation, with respect to the following areas: keeping up to date with rules and regulations; single filing of the tax return and dealing with a single tax authority; applying for clearances and rulings. The tasks of keeping records and dealing with formulary apportionment are expected more burdensome. Altogether, the qualitative picture confirms, on average, the quantitative estimation of an overall decrease of time devoted to tax compliance activities in the event of a CCCTB.

Table 5: Average changes in compliance time when moving from the current situation to CCTB and CCCTB

	CCTB	CCCTB
Record keeping	2%	1%
Transfer Pricing Documentation	-1%	-4%
Preparation of tax computations	1%	-5%
Tax returns & payments	0%	-1%
Dealing with the tax authorities	1%	2%
Mutual agreement procedures	-1%	-1%
Securing clearances and rulings	0%	-1%
Learning and education	0%	0%
Total	**4%**	**-8%**

Notes:

– Changes are expressed as a percentage change to the total time spent compared to the base case.

– These data do not include the estimation of one-off variation due to the switching to another system. They relate to the permanent time spent associated with the new definition of the taxable base.

– The amount of compliance costs will depend on the wage level of employees in the different tax activities.

Source: PriceWaterhouseCoopers Survey on multinational firms.

Switching the focus from existing companies to multinational enterprises that set up a new subsidiary in a different Member States, significantly higher compliance time and cost savings under the CCTB and most notably under the CCCTB regime can be expected. Through expert assessment, Deloitte estimated that under the current situation with 27 tax codes the additional recurrent compliance costs for a large representative parent investing in a medium sized subsidiary amounts to 0.23% of turnover while for a medium parent this ratio more than doubles to 0.55% of turnover (see table 6) These figures amount to roughly Euros 141,000 and 128,000 respectively, calculated from the estimated compliance time.

Table 6: Compliance time and cost for setting up a new subsidiary *

Large Parent

	Current regime		**CCTB**				**CCCTB**			
	Time	Cost	Time	% Diff.	Cost	% Diff.	Time	% Diff.	Cost	% Diff.
Record keeping for corporate tax purposes	5,261	3,740.60	3,063	-41.79%	2,992.46	-20.00%	3,592	-31.73%	5,708.94	52.62%
Transfer pricing documentation	22,255	36,165.74	22,162	-0.42%	36,143.08	-0.06%	0	-100.00%	0.00	-100.00%
Preparation of corporate tax computations	4,049	2,750.04	1,976	-51.19%	2,190.86	-20.33%	4,256	5.11%	4,761.47	73.14%
Prepayments for corporate tax	907	965.56	771	-14.99%	793.10	-17.86%	2,450	170.18%	2,662.13	175.71%
Corporate tax returns and payments	1,080	1,131.27	987	-8.58%	1,005.12	-11.15%	3,085	185.73%	3,505.17	209.84%
Dealing with the tax authorities for corporate tax	19,009	37,365.70	16,616	-12.59%	35,038.00	-6.23%	10,509	-44.71%	30,200.90	-19.17%
Mutual agreement procedures on transfer pricing	8,823	17,618.47	8,841	0.20%	17,677.73	0.34%	0	-100.00%	0.00	-100.00%
Clearances and rulings for corporate tax	14,430	34,912.77	14,541	0.77%	34,928.95	0.05%	1,288	-91.08%	3,996.90	-88.55%
Learning and education for corporate tax	10,000	5,220.08	8,264	-17.37%	5,388.20	3.22%	1,469	-85.31%	2,104.33	-59.69%
Any other cross-border corporate tax compliance formality	1,548	733.76	1,548	0.00%	733.02	-0.10%	0	-100.00%	0.00	-100.00%
Total estimated time spent/cost	**87,362**	**140,603.97**	**78,768**	**-9.84%**	**136,890.52**	**-2.64%**	**26,649**	**-69.50%**	**52,939.85**	**-62.35%**
Total estimated cost (% turnover)		**0.23%**			**0.22%**				**0.09%**	

Medium-sized Parent

	Current regime		**CCTB**				**CCCTB**			
	Time	Cost	Time	% Diff.	Cost	% Diff.	Time	% Diff.	Cost	% Diff.
Record keeping for corporate tax purposes	5,147	3,653.23	3,034	-41.05%	2,957.01	-19.06%	3,178	-38.26%	4,490.57	22.92%
Transfer pricing documentation	19,962	30,192.40	19,337	-3.13%	30,625.38	1.43%	0	-100.00%	0.00	-100.00%
Preparation of corporate tax computations	4,023	2,253.53	1,954	-51.42%	1,778.82	-21.07%	3,301	-17.94%	2,862.65	27.03%
Prepayments for corporate tax	896	636.81	760	-15.20%	524.54	-17.63%	1,880	109.73%	1,497.66	135.18%
Corporate tax returns and payments	1,075	871.48	987	-8.15%	790.31	-9.31%	2,433	126.34%	2,427.03	178.50%
Dealing with the tax authorities for corporate tax	18,686	32,968.18	16,347	-12.51%	30,604.60	-7.17%	10,675	-42.87%	24,889.54	-24.50%
Mutual agreement procedures on transfer pricing	8,609	17,076.44	8,434	-2.03%	17,115.31	0.23%	0	-100.00%	0.00	-100.00%
Clearances and rulings for corporate tax	13,893	34,175.02	14,083	1.37%	34,188.34	0.04%	1,266	-90.89%	3,958.48	-88.42%
Learning and education for corporate tax	9,997	5,201.14	8,422	-15.75%	5,579.09	7.27%	1,450	-85.49%	2,064.35	-60.31%
Any other cross-border corporate tax compliance formality	1,459	677.86	1,395	-4.42%	674.05	-0.56%	0	-100.00%	0.00	-100.00%
Total estimated time spent/cost	**83,747**	**127,706.09**	**74,754**	**-10.74%**	**124,837.45**	**-2.25%**	**24,184**	**-71.12%**	**42,190.28**	**-66.96%**
Total estimated cost (% turnover)		**0.55%**			**0.54%**				**0.18%**	

* Time in minutes. Costs in Euros. Average of all investment flows

Source: Deloitte Tax Experts survey.

According to the study, the introduction of the **CCTB** would on average **save approximately 10% in compliance time and about 2.5% in compliance costs**.[56] This difference can be explained by the fact that higher savings in time are related to internal compliance activities (e.g. record keeping, preparation of tax computations, prepayments and tax returns and payments) estimated as less expensive compared to external advisors. Such savings are expected to occur because the CCTB tax provisions are simpler and more stable compared to the current frequently changing tax environment. However, the **main corporate compliance cost drivers** directly or indirectly related to **transfer pricing** (transfer pricing documentation, clearances and rulings and mutual agreement procedures), which account for about 60% of all compliance costs, remain unchanged (see figure 3). Due to the elimination or reduction of transfer pricing related compliance tasks, and of those related to contacts with tax authorities, an average **decrease in total compliance time of 70%** can be expected if the additional cross-border investment is made **under the CCCTB regime**[57]. This results in a **reduction of compliance costs of 62%** for a group with a **large parent** and of **67% for a group with a medium-sized parent**[58]. The corresponding monetary figures are about Euros 53,000 and 42,000 respectively. The high savings linked to the abolition of transfer pricing and the sharp reduction of costs in dealing with tax authorities are partly counterbalanced by other activities: corporate tax computations, (pre)payments and tax returns will be most likely centralized at the level of the principal tax payer, normally the parent company[59]. However, all these tasks account only for about 10% of all compliance costs. All in all, as the figures in table 6 suggest, the size of the parent seem to have only a minor impact on total additional compliance time and costs savings under the CCTB and the CCCTB regime.[60]

Figure 3: Compliance time spent on setting up a new subsidiary

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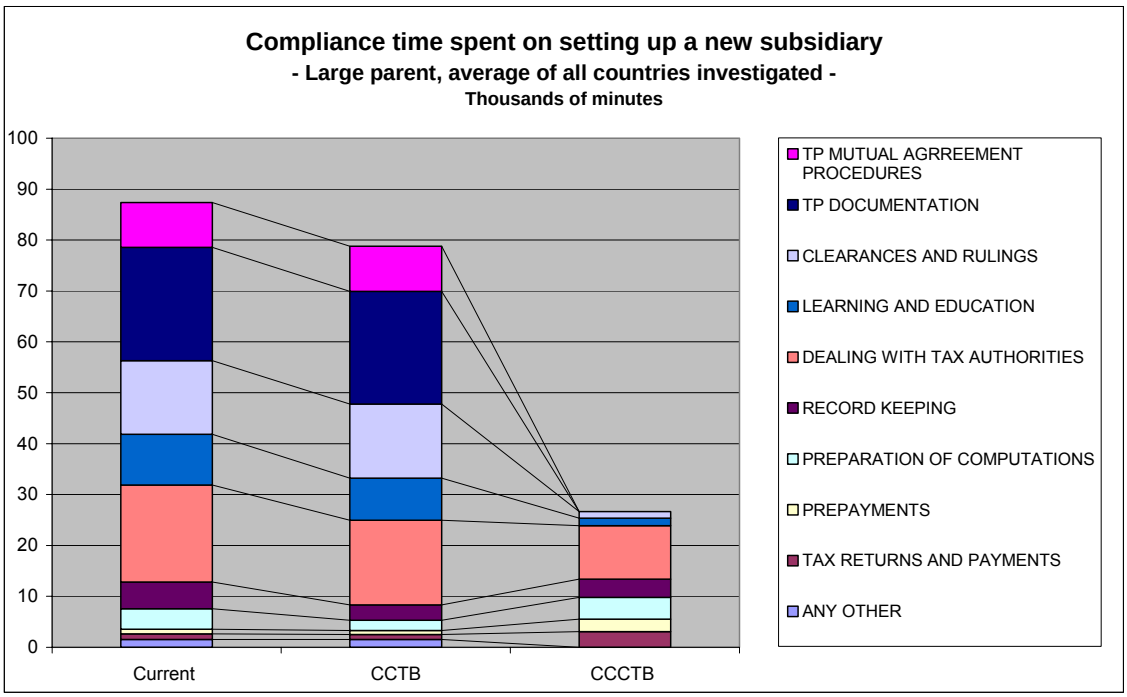
56 The individual investment flow results by country-pairs range between 4% to 16% savings in additional compliance time and between -3% and 9% in compliance costs.

57 The individual results by country-pairs range between 11% to 91% savings in additional compliance time.

58 Deloitte's tax experts expect that the group led by a medium parent can realise more savings on time spent by external advisors that generally have higher costs per hour than the internal workforce.

59 The compliance time and cost savings would be even higher if it would be assumed that compliance activities would be centralized at the level of the subsidiary ("CCCTB Sub lead"-scenario) operating in a low wage country, rather than at the level of the EU parent ("CCCTB Parent lead"-scenario).

60 The results are fairly robust with respect to the sensitivity analysis performed. First, it is assumed that the parent company and the subsidiary belong to different sectors. This would depict a situation in which the central taxpayer lacks sector-specific and tax-related knowledge for its subsidiary. The assumption has no impact on compliance time under the current and the CCTB regimes, whereas under the CCCTB regime an increase of 8% of compliance time can be expected. Accordingly, the savings of compliance time and cost compared to the current situation would slightly diminish to 65% and 50 % respectively. Second, if the investing company would be only a single company without intra-group transactions significant lower compliance time can be expected for the current and the CCTB regime whereas for the CCCTB, without the transfer pricing related task, compliance time remains the same compared to the baseline investment. Again, in this case the savings due to the CCCTB compared to the current regime would be smaller than in the baseline scenario.



Source: Deloitte Tax Experts Survey

The reduction of compliance costs is one of the most significant sources of **welfare gains in the CGE model**. A common base (**CCTB**) could result in lower compliance costs in the long run as multinationals no longer have to deal with 27 different tax regimes, but only one common set of rules. In the short run, companies need to learn the new rules so that these costs may actually increase. Once the learning process has been completed, however, one may expect a reduction in compliance costs. Thus, firms can benefit from economies of scale in tax compliance. Calibration in CORTAX assumes that compliance costs are currently around 4% of total corporate tax payments. These costs might fall for multinationals under a CCTB. The reduction in compliance costs relate to the size of the multinational sector in each country. Simulations of this scenario are carried out assuming that compliance costs for subsidiaries due to the CCTB would fall by 30% while compliance costs for domestic firms and headquarters are kept at their current level in the simulations. On average, this would imply a reduction in compliance costs of 0.4% of the total corporate tax revenue in Europe, or 0.01% of GDP. The associated welfare gain is similar. Countries hosting more multinationals gain more than countries hosting few multinationals. Under the **CCCTB**, even stronger effects can be expected from the reduction of compliance costs since multinational firms would save time and resources on determining transfer prices for intra-group transactions. The positive effects could be magnified if a central administration became responsible for the tax treatment of multinationals. For the simulation of the CCCTB scenarios CORTAX assumes that compliance costs of subsidiaries are reduced to zero, while compliance costs for the multinational headquarter and for domestic firms remain unchanged. It implies a reduction in compliance costs equivalent to 1.3% of the total corporate tax revenue in Europe or 0.04% of GDP. This translates into an aggregate welfare gain in Europe of approximately 0.06% of GDP. Due to the specific assumption about the allocation of compliance cost savings between parents and subsidiaries, countries hosting more foreign subsidiaries gain more than countries hosting relatively few subsidiaries.

5.4. Economy-wide impacts

The final objective of the proposed company tax reforms is to increase cross-border investments, competition in the Internal Market, productivity, economic growth and consumers' welfare[61]. It is therefore essential to get a grasp of the possible impact of the alternative policy options under analysis. The economy-wide effects of the reforms at the EU level are analysed using the **CGE model** CORTAX. The main features of the model, its limitations, as well as the working assumptions and their implications for the results are discussed in Annex 10[62].

Tables 7a-d summarise some of the key results of the four alternative policy options under analysis: optional CCTB, compulsory CCTB, optional CCCTB and compulsory CCCTB. In the *optional* scenarios it is assumed that only MNEs but no domestic companies opt for the alternative tax systems. The results are presented for three different definitions of the common tax base:

- The CCTB-WG20, which assumes 20% depreciation of plant and machinery (depreciation scheme suggested by the CCCTB Working Group)[63].

- The CCTB-WG25, with plant and machinery depreciated at 25 % (thus implying a **narrower tax base** than the WG20).

- The CCTB-EUav, which represents a definition of the common base entailing on average for the EU unchanged net present value of depreciation allowances, and is therefore a benchmark case (and is narrower than the two former ones given the more generous depreciation allowances)[64].

All simulations assume that the governments adjust corporate tax rates to keep revenue constant ex-ante (before behavioural reactions take place). When the reforms apply only to multinationals, the corporate tax rates are adjusted only for them, but not for domestic firms.

CCTB options: the key role of the broadness of the tax base for the results

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61 Welfare is measured from the individual utility function. As such, the welfare effects of a tax reform differ from the impact on economic aggregates such as private consumption or gross domestic product. This is because utility depends also on leisure. More employment may raise income, consumption and gross domestic product, but the decline in leisure reduces these benefits in terms of welfare. Moreover, an increase in gross domestic product may be accompanied by an inflow of foreign capital, the return of which flows to foreign owners, rather than domestic residents. Welfare may also be affected by multinational profit shifting which raises income but leaves the gross domestic product unchanged.

62 The model is calibrated on tax data for 2005 and in the baseline scenario (representing the current situation) the corporate tax changes in 2006 and 2007 are incorporated. The reforms explored in the study are therefore imposed relative to the corporate tax systems as they stood in Europe in 2007. Like any CGE model, CORTAX ignores certain economic mechanisms, include specifications which are not undisputed and cannot take away the uncertainty about the strength of certain behavioural effects of tax policies. For these reasons, numerical outcomes should be taken with proper care, and interpreted in the light of the modelling assumptions (see Annex 10).

63 The details of this scheme are as follows:
- Industrial buildings are depreciated straight line over 40 years at 2.5% per year.
- Plant and machinery is depreciated at 20% declining balance.
- Intangibles are depreciated straight line over 15 years at 6.66% per year.

64 There is a variety of combinations in depreciation rules that matches the CCTB-EUav. For instance, the following structure meets this requirement:
- Industrial buildings are depreciated straight line over 30 years at 4% per year.
- Plant and machinery is depreciated at 30% declining balance, with a switch to straight line at 15% after 3 years.
- Intangibles are depreciated straight line over 9 years at 11.11% per year.

The analysis of the CCTB options centres on the issue of base broadening versus rate reduction. In the context of the neoclassical CGE model, it emphasises the trade-off between a low effective marginal tax rate (result of a narrow base and high statutory tax rate), which minimises distortions in investment[65], and a low statutory corporate tax rate (coupled with a broad base), which minimises multinational profit shifting to outside locations and improves the attractiveness of a location in the discrete choice of the place for investment. From Tables 7a-b it can be seen that CCTB-WG20 and CCTB-WG25 allow for a reduction in the corporate tax rates between 2.5 percentage points and 3.5 percentage points. Despite lower rates, however, these reforms reduce investment, employment, and GDP (in both cases the optional and the compulsory cases). The CCTB-EUav (a base narrower than the former ones) in turn leaves the average corporate tax rate in the EU almost unchanged ex-ante, and is accompanied by small positive economic impacts. CORTAX thus reveals that a policy of base broadening and rate reduction at the EU level causes overall negative economic and welfare effects. Why is that? The reason is that the cost of capital increases. Indeed, less generous depreciation allowances require a higher rate of return on marginal investment for the firms to break even. Although a lower corporate tax rate partly offsets this, it is insufficient to prevent an increase in the cost of capital. Intuitively, corporate tax allowances apply to the cost of investments at the margin, whereas corporate tax rates apply to both the marginal investment and economic rents. As a result, a revenue-neutral reform of base broadening and rate reduction shifts the tax burden from economic rents to capital, which is distortive. Thus, due to the increase in the cost of capital, investment falls. The smaller capital stock exerts a negative impact on the marginal product of labour and, therefore, on labour demand, which will ultimately lead – with a positive elasticity of labour supply – to a contraction in employment. At the European level, **base broadening (implied by the new definition of the common tax base) coupled with rate reduction to balance national budgets reduces aggregate welfare in the EU.** On the other hand, the **reduction of compliance costs is the main positive effect** of the CCTB reforms: they are estimated to be reduced by 0.4% of the total corporate tax revenue in Europe or 0.01% of GDP (see section 5.3.2). **All in all, a compulsory CCTB leaves welfare at a European level nearly constant while the introduction of a CCTB optional for multinationals renders slight welfare gains.**

Table 7: Macroeconomic effects

[65] A policy of "broad base/low rates", by raising the cost of capital, reduces marginal investment at the individual firm's level. On the contrary, having high rates raises the tax on pure rents earned above the 'normal' return to capital, which is non-distortionary, and allows narrowing the base, thus reducing the distortions to the marginal investment.

Table 7.a Optional CCTB: only multinationals

	CCTB-WG20	CCTB-WG25	CCTB-EUav
Corporate tax rate	-3.08	-2.48	-0.29
Corporate tax revenues in %GDP (ex-post)	0.09	0.07	0.01
Investment	-0.54	-0.44	0.02
Wage	-0.06	-0.05	0.01
Employment	-0.05	-0.04	0.00
GDP	-0.04	-0.03	0.01
Welfare	0.01	0.01	0.00

Table 7.b Compulsory CCTB: all firms

	CCTB-WG20	CCTB-WG25	CCTB-EUav
Corporate tax rate	-3.42	-2.80	-0.50
Corporate tax revenues in %GDP (ex-post)	0.15	0.12	0.00
Investment	-1.25	-0.97	0.14
Wage	-0.22	-0.16	0.07
Employment	-0.13	-0.10	0.00
GDP	-0.25	-0.18	0.08
Welfare	-0.01	0.00	0.03

Table 7.c Optional CCCTB: only multinationals

	CCCTB-WG20	CCCTB-WG25	CCCTB-EUav
Corporate tax rate	-0.57	0.12	2.44
Corporate tax revenues in %GDP (ex-post)	0.03	0.00	-0.12
Investment	-0.88	-0.74	-0.11
Wage	0.02	0.05	0.19
Employment	-0.01	0.00	0.09
GDP	-0.17	-0.15	-0.04
Welfare	0.02	0.02	0.03

Table 7.d Compulsory CCCTB: all firms

	CCCTB-WG20	CCCTB-WG25	CCCTB-EUav
Corporate tax rate	-2.21	-1.56	0.91
Corporate tax revenues in %GDP (ex-post)	0.10	0.06	-0.10
Investment	-1.55	-1.25	-0.04
Wage	-0.12	-0.05	0.24
Employment	-0.08	-0.05	0.09
GDP	-0.32	-0.25	0.04
Welfare	0.00	0.02	0.06

CCCTB options: the positive economic effects of consolidation and apportionment

The CCCTB reforms are assessed in CORTAX adding consolidation and formula apportionment to the three definitions of the common tax base previously used (WG20, WG25 and EUav). The

additional economic effects of consolidation and apportionment can be divided into three different categories: (i) the effect on compliance costs; (ii) a shift from separate accounting to formula allocation; and (iii) the shift from loss carry forward to loss consolidation. Since these three effects have been analysed separately in the previous sections, here only the net aggregate effects of the CCCTB reform are discussed. Tables 7.c and 7.d suggest that the CCCTB-WG20 and CCCTB-WG25 reforms imply limited broadening of the base. The CCCTB-WG20 would thus allow for a reduction of the rate by 0.57 or 2.21 percentage points in the optional and compulsory application respectively. The reason is that loss consolidation narrows the corporate tax base for multinationals, thus partly offsetting the effect of the new depreciation rules. Under the CCCTB-WG25 applied only to multinationals, revenues remain virtually unchanged so that rates need not be reduced on average. In turn, under the CCCTB-EUav, the corporate tax base is eventually narrower than the current EU average bases. **Compared to the CCTB, the welfare effects of the CCCTB options are more favourable under all of the analysed scenarios**, thus suggesting that **consolidation and formula apportionment exert a positive welfare effect**. In particular, the CORTAX analysis highlights that:

(i) the lion's share of the positive economic impact of consolidation and formula apportionment is due to lower compliance costs. This effect is responsible for an aggregate welfare gain in Europe of approximately 0.06% of GDP (see section 5.3.2).

(ii) Moving from SA to formula apportionment exerts a negligible effect on GDP and welfare, as a result of different offsetting effects: fewer incentives to shift profits and capital from high to low-tax countries but renewed distortions in the allocation of formula factors to low-tax countries. CORTAX suggests that the aggregate effect on welfare in the EU is very small. However, the results for individual countries, and depending on the specific apportioning mechanisms, can be different. Thus, for example, low tax countries lose from the elimination of transfer-pricing, but may benefit, however, from new tax planning possibilities in the allocation of the formula factors.

(iii) Finally, in the model, loss consolidation, reducing the tax base, may require an increase in corporate tax rates to balance the government budget. The effect on the cost of capital, however, is not certain a priori, given the different treatment of positive marginal returns under the consolidation and the carry forward regimes. In addition, loss consolidation decreases effective labour costs, which translates into positive employment effects. On balance, investment and GDP slightly fall but the net effect on welfare is positive[66].

Overall, the CCCTB implies a **welfare gain of about 0.02% to 0.06% of GDP** in aggregated terms for the EU as a whole[67]. Interestingly, alternative available simulations with CORTAX suggest that

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66 It is important to note that often the welfare effects of the tax reforms differ from the impact on economic aggregates such as private consumption or gross domestic product. This is because utility depends also on leisure. More employment may raise income, consumption and gross domestic product, but the decline in leisure reduces these benefits in terms of welfare. Moreover, an increase in gross domestic product may be accompanied by an inflow of foreign capital, the return of which flows to foreign owners, rather than domestic residents. Furthermore, welfare may also be affected by multinational profit shifting which raises income but leaves the gross domestic product unchanged.

67 These results correspond to the apportioning mechanism based on equal weighting for employment, capital and turnover. The aggregate welfare results of other mechanisms are:
SM **2**: employment (1/6), payroll (1/6), capital (1/3), output (1/3) : + 0.03% GDP;
SM **3**: : payroll (1/4), employment (1/4), capital (1/2): + 0.02% GDP;
SM **4**: payroll (1/3), capital (1/3) and output (1/3): + 0.03% GDP;
SM **5**: payroll (1/2), capital (1/2): + 0.04% GDP.

under the CCCTB-EUav scenario, adjusting lump-sum transfers, i.e. subsidies in fixed amount, instead of increasing corporate tax rates would generate an additional welfare gain of 0.06% of GDP[68].

"All firms" (compulsory) versus "only multinationals" (optional)

Both the CCTB and CCCTB scenarios are simulated for two possible cases: a general application to all firms and a selective application only to the multinational firms in the economy. In the latter case, domestic firms in EU countries would still be subject to the current national tax regimes. To balance the government budget, *the corporate tax rates are adjusted only for multinationals*, but not for domestic firms.

Hence, the hypothesized selective application of the CCTB or CCCTB implies that marginal effective tax rates for multinationals will differ from those of domestic firms. Indeed, the two types of firms face different rules for fiscal depreciation. Especially in countries where the national rules differ much from the rules under the common tax base, there can be sizable discrepancies in the cost of capital for the different firms. In this situation, resource allocation within countries is distorted, with a subsequent distortion in production efficiency. Indeed, the tax system favours investment in the sector where the effective marginal tax rate is lower at the expense of the other sector. This in turn reduces welfare. The negative welfare effects are, however, more than offset by the smaller coverage of the broader tax base, which mitigates the rise in the cost of capital under CCTB-WG20 and CCTB-WG25, compared to the scenario with compulsory application. Accordingly, under the base broadening regimes of WG20 and WG25, **the optional application of CCTB and CCCTB** (Tables 7.a and 7.c) is **more beneficial** than the **compulsory application** (Tables 7.b and 7.d).[69]

The role of profit shifting in the simulations

In Tables 7.a-d, the four alternative policy options have been compared to a baseline scenario capturing the current situation **with profit shifting** (appropriately calibrated). The baseline scenario however only captures the "beneficial" effect of profit shifting i.e. that of allowing multinational firms to reduce the overall tax burden. As such, profit shifting in the baseline scenario with SA encourages investment, raises GDP and improves welfare. Hence, **the abolition of profit shifting *via* consolidation and apportionment raises the tax burden on multinationals** and discourages investment. As a consequence of these assumptions, eliminating profit shifting in the CCCTB scenarios affects negatively welfare compared to the current situation. It is plausible that, **the actual welfare gains of the CCCTB options are underestimated by the simulations.** In fact, taking into account the costs of profit shifting would lower the initial welfare level of comparison, thus resulting in higher relative gains of the CCCTB (at least a further 0.02% of GDP). A further source of downward bias in the estimated welfare gains arises under the optional CCCTB. It is reasonable to assume that in such case only multinationals benefitting from the new system would adopt it, thus reducing their overall burden compared, in terms of tax liabilities and compliance costs, to the current scenario. As the simulations do not disentangle the choices of individual multinationals, the estimated gains from consolidation and formula apportionment are likely underestimated. In addition to issues of fairness and legitimacy, profit shifting may have other implications for efficiency that are not captured by the model. For instance, enforcing transfer pricing rules is relatively costly for tax administrations. Moreover, the possibility of profit shifting creates an

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[68] Bettendorf L., Devereux M., van der Horst A., Loretz S. and Ruud A. de Mooij, 2009. "Corporate tax harmonization in the EU," Working Papers 0932, Oxford University Centre for Business Taxation.

[69] Under the EUav scenario without base broadening compared to the status-quo scenario the suppression of the distortion in production efficiency with compulsory CCCTB develops its full positive welfare impact.

advantage for multinationals that does not apply to purely domestic firms. By discriminating between firms, it creates a distortion in production efficiency.

5.5. Dynamic effects and impact on SMEs

In the previous sections the effects of the different policy options have been quantified using statistical analysis and economic modeling. The quantification is based on ad hoc statistical and survey data on European multinationals; likewise, firms' behavioral responses to the new tax policy concern adjustment to the amount of capital and labor employed in the new steady state, but do not involve other decisions such as entry into new markets. Thus, the different approaches are static in nature. For this reason, they do not capture important dynamic effects potentially associated with the reforms under analysis. Obtaining a reliable quantification of such impacts is extremely difficult. Nonetheless, providing at least a qualitative assessment is crucial in order to better gauge the **long term effects of the different policy options**. The reduction in uncertainty and in the costs (actual and perceived) that firms incur when they operate in international markets is the main channel through which these effects are expected to materialize. Ultimately, this will translate into increased cross border investment within the EU, stemming both from further expansion of European and foreign multinationals and from de novo investment of purely domestic firms into other Member States. By the same token, as argued below, **SMEs might be particularly advantaged by the level playing field created by the reforms under analysis**.

First of all, the introduction of common rules to calculate the tax base will **decrease the complexity and the uncertainty** that firms active in multiple jurisdictions have to face **under the current system** of SA. On the one hand, standardization of tax rules implies a simplified learning process for firms getting exposed to different and often complex tax systems. On the other, multinationals will not have to deal with frequently changing national tax environments. Both these elements are indeed perceived as major tax obstacle by the business sector[70]. Secondly, the reduction in actual and perceived compliance costs is expected to exert a substantial influence on firms' ability and willingness to expand abroad in the long term. In section 5.3.2 it has been shown that isolating the reduction in compliance costs currently incurred by multinationals (quantified at 4% of total corporate tax payments) translates into a welfare gain of 0.01% of GDP under the CCTB and of approximately 0.06% of GDP in the case of CCCTB. Moreover, the survey evidence reported in section 5.3.2 points to a substantial reduction in compliance costs (>60%) in the case of new cross-border investment, i.e. when a new subsidiary is established abroad. Overall, these findings suggest that **the dynamic effects of lower compliance costs might be sizable**. Available evidence points to the same conclusion. The European Commission's European Tax Survey (2004) reports estimates of compliance costs by firms. These outlays include those required for company taxation (and VAT) as well as the costs voluntarily incurred to minimize tax payments. According to the survey, SMEs are disproportionately penalized compared to large companies: compliance costs are estimated at 1.9% and 30.9% of taxes paid by large firms and SMEs, respectively. **Weighing more on SMEs, such costs may de facto represent a significant deterrent to invest into international markets** for this type of firms. Dismantling these barriers, as both in the CCTB and CCCTB scenarios, is likely to encourage significantly cross border expansion of SMEs. The internationalisation process

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[70] In the annual PricewaterhouseCoopers global survey of Chief Executive Officers (CEO) published in January 2009 (PwC 12th Annual Global CEO Survey), CEOs worldwide were asked which aspects of the tax regime were most important in influencing investment decisions. The top choice was clarity and stability of the tax rules. The second most important aspect was the total amount of taxes that companies pay. The Ernst &Young European Attractiveness Survey 2010 as well highlights the importance for business of "policy certainty and consistency, and the confidence that taxes, for example, are not going to change without notice".

would be further facilitated as the 'one-stop shop' principle limits the exposure of firms to foreign (less known) tax systems[71].

In addition, according to the European Tax Survey, cross-border activities have a substantial influence on the size of compliance costs. First of all, **compliance costs are found to be higher for companies with at least one subsidiary in another EU Member State** compared to companies operating only in the domestic market. Secondly, such **outlays increase with the number of subsidiaries abroad**. A possible explanation relates to transfer pricing obligations, which are growing considerably complex due to both the difficulty of identifying comparable transactions for establishing the arm's length price in the presence of new technologies and business structures (which imply, for instance, more emphasis on intangibles) and the tendency among Member States, fearing manipulation, to impose increasingly onerous documentation requirements[72]. Moreover, the same survey shows that audits and litigations are particularly onerous for firms already operating across the borders. Taken together, this qualitative evidence suggests that **the CCCTB options**, which eliminate transfer pricing-related obligations within the EU, might indeed **positively affect MNEs willingness to expand further in other EU Member States**. The effect would be reinforced once the further savings stemming from cross border loss compensation are taken into account. By the same token, these arguments apply to SMEs, who might perceive conducting business abroad as particularly onerous due to the current transfer pricing obligations.

All in all, the proposed standardisation and simplification arrangements are expected to bring about important dynamic impacts in terms of enhanced attractiveness of the EU as a whole for productive investment. Second order positive effects on productivity and employment are also expected to materialize once more firms will be operating into international markets.

5.6. Social and environmental impacts

A comprehensive solution for the definition of the corporate tax base in the EU could also have some limited social effects, notably linked to the impacts on employment. Evidence on anticompetitive regulation in the product market (OECD, 2001; Cincera and Galgau, 2005) suggests that positive effects on the labour market, not only in terms of the number of persons employed, can be expected from the reduction of compliance costs for cross-border companies. First, MNEs seem to pay higher wages than domestic companies (Driffield and Girma, 2003; Feliciano and Lipsey, 1999; Navaretti and Venables, 2004). Secondly, skilled workers appear to be concentrated in multinational companies. Finally, MNEs appear to adjust employment relatively quickly compared to domestic companies. In addition, to the extent that dynamics would translate into increased investment abroad also by SMEs that are currently operating only in national markets, further employment gains are expected in the long term. Given the characteristics of employment in SMEs, these gains might be substantial in size, as SMEs currently contribute for two thirds of total employment in non-financial sectors in the EU, and would not be limited to the highest tale of the skill (and income) distribution.

Given the nature of the proposed measures, no direct **environmental impacts** are expected. Indirect impacts might materialize as a consequence of increased economic activity, particularly in some sectors, if efficiency gains are achieved in the medium and long term.

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[71] The one-shop principle means that the tax payer has to introduce one tax declaration in their mother tongue according to procedures they know, and the tax declaration is processed by one tax administration. At the same time, there is of course the possibility that other tax administrations have questions or initiate an audit.

[72] Transfer pricing is an important issue for 82.8% of large companies, in particular, when it comes to dealing with documentation requirements, which are a difficulty for 81.9% of large companies.

6. COMPARISON OF THE OPTIONS

In this section the alternative policy options described in section 4 will be assessed by reference to the objectives described in section 3 and by comparison with the status quo scenario. In order to put the size of the impacts in perspective, it is important to bear in mind that the reforms under analysis apply to corporate taxation. Corporate tax revenues amount to roughly 3% of the EU GDP, whereas total tax revenues – including social security contributions – stand at about 40% of GDP. The order of magnitude of the quantification provided above have to be judged also in the light of the static nature of the analyses performed. Once dynamic behavioural changes are brought into the picture, further gains from increased cross border investment in the EU can be expected, although they prove very difficult to measure ex ante.

The changes in the macroeconomic framework resulting from the implementation of the different alternative options are assessed by comparing their effects on *real investment, employment, growth, and welfare*, as obtained from the CGE model CORTAX discussed in section 5.4. Table 8 shows the effects of the different options under analysis (variation with respect to the option 1 ('baseline scenario') under different size of the bases. In particular the, columns EUav report the results obtained in the *ceteris paribus* case, that is, considering that the **new definition of the common tax base (before consolidation) leaves the size of the EU tax base unchanged on average.** The columns WG-20 and WG-25 show the **macro-economic effects of the reforms under analysis when they are associated to a base broadening policy**, i.e. the definition of the common tax base corresponds to that of WG20 and WG25 described earlier[73].

Compared to the "status quo" scenario, **all the different policy scenarios analysed result in a slight improvement of aggregate welfare**. Overall, **positive economic effects can be expected by the removal of the corporate tax obstacles** described in section 2 under the unchanged tax base scenario (EUav columns). These effects result from:

a) the efficiency gains for the EU internal market stemming from the lower dispersion of tax bases due to the common definition of the corporate taxable base. This can be seen in the positive overall effects of options 2 and 3, which capture the effects of the common tax base.

b) the reduction of the corporate tax compliance costs for companies, and the elimination of over-taxation of cross-border economic activity and of double taxation for companies operating in the internal market. This can be seen in the positive overall effects of options 4 and 5, which represent the common consolidated corporate tax base, and therefore feature the effects associated to consolidation and apportionment.

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[73] These results are based on two possible definitions of the Common Tax Base following the discussions between the Commission and the Member States Tax Authorities in the context of a joint Working Group (20% or 25% depreciation rate for pooled assets). According to these definitions the Common Tax Base would be broader than the present EU average corporate tax base (the 25%-based definition being narrower than the 20%). In the economic modelling, in order to keep total tax revenues constant, corporate tax rates are lowered ex-ante to compensate for changes in the size of the tax bases.

Table 8: Macroeconomic effects: change compared to baseline scenario (in percentage)

	Option 2: Optional CCTB			Option 3: Compulsory CCTB			Option 4: Optional CCCTB			Option 5: Compulsory CCCTB		
	EUav	WG-20	WG-25	EUav	WG-20	WG-25	EUav	WG-20	WG-25	EUav	WG-20	WG-25
Investment	0.02	-0.54	-0.44	0.14	-1.25	-0.97	-0.11	-0.88	-0.74	-0.04	-1.55	-1.25
Employment	0.00	-0.05	-0.04	0.00	-0.13	-0.10	0.09	-0.01	0.00	0.09	-0.08	-0.05
GDP	0.01	-0.04	-0.03	0.08	-0.25	-0.18	-0.04	-0.17	-0.15	0.04	-0.32	-0.25
Welfare (% of GDP)	0.00	0.01	0.01	0.03	-0.01	0.00	0.03	0.02	0.02	0.06	0.00	0.02

Source: Simulations with CGE CORTAX model

The introduction of a broader tax base with lower rates would have in general negative investment effects. As explained in section 5.4, this outcome is the consequence of the specific features of the general equilibrium models available for this kind of analysis. In fact, according to the CORTAX model a policy of base broadening cum rate cutting in order to keep revenues constant is associated with an increase in the cost of capital and hence decreasing investment. As a consequence, in general, the macro-economic effects of simulations with broader bases are less positive than in the case when the size of the EU average tax base was left unchanged. The **overall effect of any of the reforms**, however, continues to be **small net welfare gains** compared to the current situation. That is, once the positive effects of rate reduction are also modelled - in terms of reduced profiting shifting and increased attractiveness for investment location vis-à-vis the rest of the world - the policy of base broadening/rate reduction does not take out so much of the positive effects owing to the elimination of tax barriers achieved by the reforms[74]. Comparing the results from options 4 and 5 shows that under the base broadening scenarios an optional CCCTB give better results than a compulsory one. While the yield in term of welfare gains is the same under WG25, a compulsory reform under WG20 leaves welfare unaffected. At the same time, employment drops by 0.08 percentage points, and the negative effects on the other variables are roughly twice as large as in the optional scenario. Similarly, notwithstanding the same impact on welfare, under the compulsory WG25 case employment, GDP and investment worsen compared to the corresponding optional scenario.

It is worth stressing that the macroeconomic effects presented in table 8 can be obtained leaving the total amount of corporate tax revenues in the EU unaffected ex-ante, i.e. before behavioural reactions by economic agents. This is achieved by assuming that national corporate tax rates in the CGE model be modified to compensate for any changes in the taxable bases following the introduction of the policy options under analysis. Clearly, alternative adjustments could be hypothesized[75]. Abstracting from the stylized modelling environment, it should be kept in mind that, in practice, governments can resort to alternative tax instruments to balance their budget. In this respect, the economic literature has emphasized that taxes on different bases have dissimilar implications for economic growth (OECD, 2009).

[74] It has to be underlined that the size of the taxable base, as such, is not an objective of the reforms under analysis. In this context, changes in the size of the taxable base have to be considered as a side effect of the elimination of tax barriers, which are the objectives underlying the different policy options.

[75] In particular, available simulations for the case of unchanged corporate tax base before consolidation suggest that using lump sum transfers to balance the budget following reduced revenues would result in an additional 0.06 % welfare gain in terms of GDP.

The reduction of compliance costs related to corporate taxation stands out as particularly relevant for the estimated economy-wide effects. Disentangling the macroeconomic effects of reduced compliance costs isolates welfare gains in the terms of GDP in the range of 0.01% of GDP in the case of CCTB and approximately 0.06% under the CCCTB options. Moreover, the survey evidence summarized in table 9 points to significant implications at the microeconomic level, particularly in the case of new investment flows. The CCCTB could result in compliance cost savings in the range of 60% for a large parent entering a new MS by setting up a subsidiary. Based on this evidence, the reduction in compliance costs is the main channel through which the proposed policy options are expected to exert dynamic effects in the long term. Although reliable quantification proves extremely difficult, available qualitative evidence suggests that lower tax obstacles are likely to translate into further expansion of existing multinationals in the EU. Likewise, eliminating the costs associated to the learning process of different tax systems and establishing the 'one-stop shop' principle for tax administration would particularly benefit SMEs' capacity to enter into international markets. The overall implication is increased cross-border investments in the EU as a whole. The effect is expected again particularly pronounced in the case of CCCTB, given the importance of transfer pricing requirements on total compliance costs.

Table 9: Change in compliance time and cost*

		CCTB	CCCTB
Large parent **investing in a new subsidiary**	**Time**	-9.84	-69.5
(*Deloitte case study*)	**Cost**	-2.64	-62.3
Established multinationals	**Time**	4	-8
(*PWC survey***)**	**Cost**	3	-1

* In percentage (compared to the current regime).

Even if it is difficult to quantitatively disentangle the specific contribution of each objective taken separately to the overall outcome, the analysis presented in this document has allowed for some insights. All in all, the economic results of this Impact Assessment show that the removal of the three types of identified corporate tax obstacles would allow business to make sounder economic choices thus improving the overall efficiency of the economy. On the basis of the quantified economic impacts, the optional CCCTB and the compulsory CCCTB are preferred to the alternative options given the savings in compliance costs they generate. However, the macroeconomic evidence points to the **optional CCCTB** as the overall **preferred policy option of the scenarios analysed** (table 10). In absolute terms, as explained above, the actual welfare gains, particularly in the case of CCCTB, are likely to be underestimated. By the same token, larger gains might be expected once dynamic effects are brought into the picture. The reduction in uncertainty and in the costs (actual and perceived) that firms incur when they operate in international markets is the main channel through which these effects are expected to materialize. Ultimately, this will translate into increased cross border investment within the EU, stemming both from further expansion of European and foreign multinationals and from de novo investment of purely domestic firms into other Member States. Similarly, SMEs might be particularly advantaged by the level playing field created by the reforms under analysis.

This Impact Assessment shows that there are quantifiable economic benefits arising from the completion of the Internal market in the corporate tax area that can be obtained without limiting the capacity of Member States to influence the size of their corporate tax revenues. These results are in line with the expected effects from a liberalisation policy and represent the contribution that a more efficient corporate tax system can offer to the Europe 2020 strategy.

Table 10: Ranking of policy-options (1 = best option)

	Option 1: status-quo	Option 2: Optional CCTB	Option 3: Compulsory CCTB	Option 4: Optional CCCTB	Option 5: Compulsory CCCTB
PWC study (compliance costs)	2	3		1	
Deloitte study (compliance costs)	3	2		1	
CORTAX study (macroeconomic variables)	4	3	5	1(2)	2(1)

7. MONITORING AND EVALUATION

The main objectives of the proposed policy Directive are the elimination of the risk of double and over-taxation, as well as the reduction of compliance costs for firms having operations in multiple jurisdictions. Ultimately, reducing these distortions would enhance the functioning of the Internal market. The Commission services will offer assistance for the implementation of the legislative changes. In order to achieve uniformity of interpretation and reduction in legal uncertainty, further discussion and guidance in respect of key concepts may prove necessary.

The proposed policy intervention will exert effects on a number of variables that should be monitored. At the microeconomic level, the effects of the policy options on firms' tax related compliance costs and on their investment behaviour across national borders should be assessed. To overcome the well known difficulties in obtaining reliable estimates of actual and perceived compliance costs, ad hoc surveys should be designed, and particular attention devoted to the representativeness of the selected samples. Propensity to expand abroad by SMEs might be particularly revealing on the expected long term impacts of the policy options. Such effects can be gauged both by means of surveys among the relevant companies and by analysing observed changes in actual investment choices. At the macroeconomic level, consistent with the general objectives of improving the allocation of productive capital in the EU, evidence should be gathered on foreign direct investment flows directed to the EU and among EU countries.

In line with the Commission work on the reduction of administrative costs, further indicators could be envisaged to measure the changes in the burden for tax administrations following the implementation of the new system and the elimination in outlays related to transfer pricing requirements and related disputes.

The evaluation of the consequences of the application of the legislative measure could take place five years after the entry into force of the legislative measures implementing the Directive. The Commission could then submit to the European Parliament and the Council a report on the technical functioning of the Directive. The content of such a report would vary according to the scope of the Directive as finally agreed in the Council.

Annex 1. Further details on the consultation process

The origin of the present initiative goes back to early studies on company taxation in the European Union. Already in 1990, a Committee of Independent Experts in Company Taxation (Ruding Committee) was asked by the Commission to determine whether the co-existence of different national corporate tax systems lead to major distortions affecting the functioning of the single market and to examine all possible remedial measures. This Committee confirmed the existence of such distortions and proposed recommendations[76]. The findings of the "Ruding report" were not followed by comprehensive policy action at the time, and 10 years later the Council asked the Commission to re-examine the situation, considering that the overall economic framework had changed significantly since the early 1990's.

The Council of Ministers in 1999 invited the Commission to undertake a study on company taxation in the European Union with the following formal **mandate**:

"*The Commission is invited to present an analytical study on company taxation in the European Community. This study will be undertaken in the general context of the Vienna European Council conclusions emphasising 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 with a view to 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 analyse 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 into account of the respective spheres of competence of the Member States and the Community".*

The results of the study were published in 2001 in the so-called *Company Tax Study*[77] and a related Communication[78].

* *The Company Tax Study*

In preparing the 2001 Company tax study, following the Council mandate, the Commission was assisted by two specifically created panels of experts. The task of the first panel, composed of academics and experts, 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

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76 Report of the Committee of Independent Experts on Company Taxation ("Ruding report"), 1992, Brussels.

77 '*Company Taxation in the Single Market*'. SEC (2001) 582 final.

78 '*Towards an Internal Market without tax obstacles: A strategy for providing companies with a consolidated corporate tax base for their EU-wide activities*', COM(2001)582.

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[79].

Thus, Part III of the Study reflects the results of the work of the 2nd panel. It dealt with "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 main burdens identified can be classified in three broad categories:

- Income flows between associated companies
- Transfer pricing
- Double taxation treaties

First, concerning income flows, by 2001, the Parent-Subsidiary Directive has abolished withholding taxes on **payments of dividends** between associated companies of different Member States. However, its effectiveness was found to be reduced by the fact that it did not cover all companies subject to corporation tax and applied solely to direct holdings of 25% or more (at the moment of the study). **Payments of interest and royalties** between associated companies of different Member States were often still subject to withholding taxes that effectively created situations of double taxation. **Restructuring operations** were found to incur one-off costs – the tax-cost induced by cross-border mergers, acquisitions and internal reorganisations being often excessively high and forcing companies to choose economically sub-optimal structures. The study identified particular difficulties in relation to **cross-border loss-compensation**.

All these obstacles together with specific features of certain tax systems lead to an in-built **bias in favour of domestic investment**.[80]

Second, the study identified growing problems in the area of **transfer pricing**, mainly in the form of high compliance costs and potential double taxation for intra-group transactions. The application of the various methods for determining the "correct" (i.e. "arm's length") transfer price for a determined intra-group transaction has become increasingly complex and costly. According to the study, EU businesses faced uncertainty as to whether their transfer prices would be accepted by the tax administrations upon an audit. The cost and time relating to the dispute settlement procedures were often too high for enterprises with the result that it was often less costly to accept the double taxation.

Third, **double taxation conventions** (DTCs) were identified as a potential source of obstacles and distortions for cross-border economic activities within the EU. Although the intra-EU network of

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79 The Commission services contacted a variety of leading business associations, trade unions and accountancy associations. The associations represented were: CEEP (European Centre of Enterprises with Public Participation), CFE (Conféderation Fiscale Européenne), EFFEI (European Federation of Financial Executives Institutes), Eurochambres (Association of European Chambers of Commerce and Industry), Eurocommerce, ERT (European Round Table of Industrialists), IFA (International Fiscal Association), TEPSA (Trans European Policy Study Association), UEAPME (European Association of Craft, Small- and Medium-Sized Enterprises), UNICE (Union of Industrial and Employer's Confederations of Europe) and ETUC (European Trade Union Confederation).

80 For example, under imputation systems, foreign investors cannot benefit from tax credits available to domestic ones

DTCs was largely complete by 2001, some gaps remained. Even though treaties within the EU followed the OECD Model, the study finds significant differences in the terms of the various treaties and their interpretation. Instances of divergent application of treaties by the treaty partners, leading to double taxation or non-taxation, were also recorded. Business representatives referred to the increasing complexity of treaty provisions as a source of compliance costs and uncertainty. What is more, the study shows that DTC provisions based on the OECD Model, in particular non-discrimination articles, were not adequate to ensure compliance with the EU law principle of equal treatment.

Apart from these specific obstacles, the study maintains that "[t]he 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."

Part IV of the Study presented a framework for **possible remedies and** put forward **targeted solutions** to the above problems as well as **comprehensive measures** to tackle tax obstacles in the Internal market.

Why transfer pricing rules affect the 'double taxation' and 'additional compliance costs' tax obstacles in the Internal market

In the area of transfer pricing, the tax problems for cross-border economic activity in the Internal market have increased over the past few years and are still growing. The problems consist essentially in ***high compliance costs*** *and* ***potential double taxation*** *for intra-group transactions as explained below.*

Goods and services are often transferred within a Multi-National Enterprise (MNE) before they generate actual profits by being sold to third parties. According to WTO estimates, approximately 60% of total world trade consists of ***dealings between related parties****.* ***Within the EU, this figure is closer to 70%****. This means that the majority of international trade is carried out between different parts of the same group: between parents and subsidiaries or between subsidiaries under the control of the same parent.*

Successful MNEs are organised to target their third party customers most effectively and in their external activities they generally operate as a single entity. However, for tax purposes the MNE must "draw down the corporate veil" and pay tax based on accounts in each state where it operates. This means that some way must be found of pricing the goods and services that have been transferred between the different parts of the same MNE. A price must be established but since the parties to such dealings are associated the price is open to manipulation. The high share of international trade conducted within MNEs leads tax administrations to fear that they are losing out on their fair share of tax on any profit, either because MNEs are inadvertently using incorrect transfer pricing or because they are deliberately exploiting opportunities to artificially shift profits to low taxing jurisdictions.

In order to deal with this problem most countries have transfer pricing rules. All such rules broadly follow the same principle: dealings between parts of the same MNE must be priced as they would have been between independent enterprises. This is known as the arm's length principle because independent enterprises are described as dealing at "arm's length".

Why are transfer pricing rules so difficult to apply? When goods or services are bought and sold between independent traders on the open market the buyer and seller agree a market price. But different parts of an MNE are under the control of the same shareholders – there is no open market price. Since companies and tax administrations have to imagine a hypothetical situation – what price would have been charged if the transaction had taken place between independent traders? – transfer pricing rules are genuinely very difficult to apply. Not to let alone the potential scope for manipulation.

Nearly all transfer pricing rules follow the arm's length principle and are interpreted in accordance with the OECD transfer pricing guidelines. But these guidelines only provide indications of how transfer prices should be set – they do not say what the transfer price should be. Transfer pricing is no exact science as it is often difficult if not impossible to find comparable market prices. There is also the problem of finding

comparable independent companies and proving how they would have acted. The need to comply with transfer pricing rules is therefore a major inconvenience for businesses.

There is an international consensus that businesses should pay tax only once on the same profit: there should be no double taxation. However, when one tax authority imposes a transfer pricing adjustment, double taxation is created unless and until another tax authority gives a corresponding adjustment downwards. In practice, tax administrations may also disagree on the appropriate transfer prices. Resolving such disputes between tax administrations on highly complex matters takes time. The company has to wait while these disputes between the two tax administrations are resolved, living with the uncertainty of the final outcome and possibly financing the cost of paying the tax twice while the dispute is pending.

Hence transfer pricing rules give rise to disputes between tax administrations and taxpayers and also between tax administrations. Resolving such disputes can take many years. Applying transfer pricing rules and documenting transfer prices are both costly and time-consuming for taxpayers. Auditing a taxpayer's transfer pricing is time consuming and resource intensive for both tax administrations and taxpayers.

* *Targeted actions:*

Income flows between related companies

Responding to the shortcomings identified in the **Merger and Parent-Subsidiary Directive**, the study identifies the need for **amendments** to those directives:

- To broaden their scope to specific transfer taxes;
- To make it clear that instances of economic double taxation should be avoided;
- To extend the scope of the Merger Directive for the purpose of deferring tax charges, until the gain is realised, where assets are moved to another Member State while preserving the departing State's tax claims.

It was also suggested to amend the Parent-Subsidiary, so that it covers both direct and indirect shareholdings or, alternatively, provide for a lower minimum holding threshold.

Finally, the study proposed to make technical amendments for the purpose of revitalising a proposal for a Directive of 1990 in the field of cross-border losses.[81]

Transfer pricing

The study identified several remedial measures in the field of transfer pricing:

- The practical application of the Arbitration Convention could be improved and its provisions made subject to interpretation by the Court.
- To tackle uncertainty, Member States could be encouraged to introduce or expand bilateral or multilateral Advance Price Agreement programmes.

[81] 'Proposal for a Council Directive Concerning Arrangements for Taking into Account by Enterprises of the Losses of their Permanent Establishments and Subsidiaries Situated in Other Member States' COM (90) 595 final, 28 November 1990.

- 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.

Double Taxation Conventions

Proposed remedies in the field of **DTCs** include:

The filling of the few remaining gaps in the existing network of double taxation treaties within the EU,

- Current DTCs of Member States could be adjusted, in order to comply with the principles of the single market, in particular in relation to access to treaty benefits,

- Better co-ordination of treaty policy in relation to third countries,

- Binding arbitration where conflicts arise between treaty partners in the interpretation and application of a treaty.

The most complete solution to such problems would be the conclusion 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 would meet the specific requirements of the *acquis communautaire*.

In addition, according to the study, various problems relating to the divergent application of (both the existing and future) EU Tax Directives by the Member States could be tackled via a regular exchange of best practices or some form of peer review.

* *Comprehensive approaches*

The solutions targeted at solving specifically identified problems cannot fully tackle the impediments to cross-border commercial activity that companies face in dealing with up to 27 different tax systems. Namely, compliance costs would remain high and complications caused by disparities and mismatches among national corporate tax systems would not allow companies to enjoy the full benefits of the single market. This led the Commission to conclude that, in the longer term, a more comprehensive approach for a European company tax system was the most promising way forward.

The study discussed four such options for comprehensive approaches:

- "**Home State Taxation**", implying that all, or a group of, Member States agree that certain groups of companies with operations in a number of Member States may compute their taxable base according to the tax code of a single Member State (i.e. Home State), instead of following all the different tax codes of the respective Member States where they have operations (principle of mutual recognition). Only the method for calculating the base would change, as each Member State would continue to set the tax rate applicable to its share of the group's profits.

- A **Common Consolidated Corporate Tax Base** is a system of common rules for establishing the corporate tax base. Groups of companies of which the parent is tax resident in a Member State would have the option to adopt a set of common rules for

computing the tax base of each individual group member (i.e. subsidiary or permanent establishment (PE)) in the EU. The scheme would involve consolidating the tax-adjusted results of each group member and then, allocating the consolidated tax base to the eligible group members by apportionment. Companies would be entitled to opt in the system individually if they did not fulfil the tests for consolidation.

- The **European Union Company Income Tax** (EUCIT) would require the drafting of a new corporate tax code to apply across the EU. In its purest form, it would be administered by a single tax authority, provide for a single EU-wide tax rate and the revenues would be used to fund the EU institutions and activities whilst any excess would be allocated to 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. In such case, each Member State could apply its own tax rate to its allocated share of the tax base.

- A **compulsory harmonised tax base in the EU** would require that a single corporate tax code applies to all companies across the EU and replaces the existing domestic tax codes.

The study identified the fundamental advantages of providing EU businesses with a common consolidated corporate tax base for their EU-wide activities as follows:

- The compliance cost resulting from the need to deal with 27 tax systems within the single market would be significantly reduced;

- Transfer pricing problems within the group of companies would disappear;

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

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

The business representatives of the expert panel assisting the Commission emphasised the fundamental advantages of comprehensive proposals under which compliance costs would be reduced, many situations of double taxation would be avoided and many discriminatory situations and restrictions would be removed. The study furthermore highlights that the introduction of a comprehensive option would contribute to the reduction of administrative costs and that many remedial measures would make the fight against tax evasion and avoidance more efficient.

* *Additional Consultation and the CCCTB Working Group*

As early as 2003, the Commission services carried out a formal public consultation on the possibility of using IFRS/IAS as a starting point for arriving at a common set of corporate tax rules.

External consultation intensified after an informal ECOFIN Council in September 2004 led to the establishment of a Working Group on the CCCTB. The group consisting of technical experts from all Member States and met quarterly between November 2004 and April 2008 and went through the elements of the scheme in detail. It also met annually in extended format three times (i.e. December 2005, 2006 and 2007) to allow all key experts and stakeholders from the business, the professions and the academia to express their views. TAXUD had initialy proposed that the Working Group be Member States' experts and external stakeholders but Member States objected and the compromise solution was an annual extended meeting, quarterly meetings with Member States and frequent

separate ad hoc meetings between TAXUD and stakeholders. In addition, six separate sub-groups were established, which met three or four times each; five chaired by Member States (Germany, Italy, France, Spain, and Denmark) and one by TAXUD. To support the work of the group, the Commission services produced 66 technical documents for discussion covering every aspect of the CCCTB system.

The work on the CCCTB rapidly gained considerable visibility and the Commission services started to receive a fast growing number of invitations for meetings and presentations. Since then, around 15 front-line European and national business associations and think-tanks have sent in technical documents setting out their views on specific features of a CCCTB for the single market. Business Europe, in particular, has furnished the Commission with separate contributions containing detailed comments on the technical elements of almost every document submitted to the Working Group. The list of stakeholders[82] who took part in the extended-format meeting of the group on 10-11 December 2007 illustrates the extent of the consultation. Over the years the CCCTB has been discussed with a broad range of stakeholders. It is also noteworthy that, regardless of the fact that the project was less exposed to the public eye between Autumn 2008 and the beginning of 2010, contributions dealing with specific technical aspects (e.g. insurance) continued to be submitted to TAXUD.

Although the CCCTB Working Group forms the core of the work in order to widen the debate, particularly within the academic and business world, the Commission services also organised conferences in Brussels (April 2002) and Rome (December 2003). Another event, co-sponsored by the Commission and an academic institution, took place in Vienna in February 2008 and discussed in detail several highly technical items relevant to the CCCTB. The articles submitted to the conference were subsequently published in book form. Further, the literature in all high-tier international tax journals has covered almost every aspect of the issues emerging from the last official outline of the CCCTB[83].

From the establishment of the Working Group a specific CCCTB section of the website of DG TAXUD has been dedicated to the CCCTB and has all the key documentation in the field. In addition to the main policy documents, it includes all 66 papers produced for the Working Group coupled with summary records of the meetings. It also contains links to most of the technical input given by stakeholders on various technical aspects of the tax base.

The latest consultation session on the CCCTB took place on 20 October 2010 when the Commission Services held a CCCTB Workshop. The Workshop which included representatives of all 27 Member States, business associations, academics and think tanks[84] focused on four papers that the Commission services put on the table as a basis for discussion:

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82 EU AMCHAM (American Chamber of Commerce), CEA (Comité européen des assurances), CEPS (Centre for European Policy Studies), CFE (Confédération Fiscale Européenne), EATLP (European Association of Tax Law Professors), EBIT (European Business Initiative on taxation), EUROCHAMBRES (Association of European Chambers of Commerce), FBE (European Banking Federation), FEE (Fédération des Experts Comptables Européens), UEAPME (European Association of craft & small and medium sized enterprises), BUSINESSEUROPE and the OECD Secretariat.

83 Commission (EC), 'CCCTB: possible elements of a technical outline' (Working Document) CCCTB\WP\057\doc, 26 July 2007

84 AMCHAM (American Chamber of Commerce), Business Europe, CEA (Comité européen des assurances), CEPS (Centre for European Policy Studies), CFE (Confédération fiscale européenne), EATLP (European Association of Tax Law Professors), EBIT (European Business Initiative on Taxation), ETUC (European Trade Union Confederation), EUROCHAMBRES (Association of European Chambers of Commerce), FBE (European Banking Federation), FEE (Fédération des experts comptables européens), UEAPME (European

1. Eligibility Tests for Companies and Definition of a CCCTB Group;

2. Business Reorganisations;

3. Transactions and dealings between the Group and entities outside the Group;

4. Anti-Abuse Rules in the CCCTB.

The workshop allowed for constructive discussions about the policy initiatives. In particular, practical solutions to technical aspects on the application of the new rules were found.

Association of Craft & Small- and Medium-Sized Enterprises), OECD Secretariat and EESC (European Economic and Social Committee).

CCCTB Working Group Working Papers

http://ec.europa.eu/taxation_customs/taxation/company_tax/common_tax_base/index_en.htm

CCCTB/WP/001	*General Tax Principles (1.2)*
CCCTB/WP/001/Rev1	*General Tax Principles Revised (1.2)*
CCCTB/WP/002	*Draft Terms of Reference & Rules of Procedure (1.2)*
CCCTB/WP/003	*Draft Work Programme (1.2)*
CCCTB/WP/004	*Assets and Tax Depreciation (1)*
Annex CCCTB/WP/004	*Assets and Tax Depreciation - Annex (Table) (1)*
CCCTB/WP/005a	*Summary Record of Nov 2004 Meeting (1)*
CCCTB/WP/005)	*Intangible assets (2*
Annex1 CCCTB/WP/005	*Intangible assets Annex Table (2)*
Annex2 CCCTB/WP/005	*Annex – Potential Structure (2)*
CCCTB/WP/006	*Reserves, Provisions and Liabilities (2)*
CCCTB/WP/007	*Overview of SG1 January Meeting (2)*
CCCTB/WP/008	
CCCTB/WP/009	*Summary Record of March 2005 Meeting (2)*
CCCTB/WP/010	*Capital Gains (3)*
CCCTB/WP/011	*Overview of SG2 April Meeting (3)*
CCCTB/WP/012	*Overview of SG1 – Two meetings (3)*
CCCTB/WP/013)	*Summary Record of June 2005 Meeting (3*
CCCTB/WP/014	*Overview of SG1 July Meeting (4)*
CCCTB/WP/015	*Overview of SG2 June meeting (4)*
CCCTB/WP/016	*Concept of Tax balance Sheet (4)*
CCCTB/WP/017	*Taxable income (4)*
CCCTB/WP/018	*Summary Record of September 2005 Meeting (4)*
CCCTB/WP/019	*International aspects (5)*

CCCTB/WP/020	*Progress and future plan (5)*
CCCTB/WP/021	*Overview of SG2 October meeting (5)*
CCCTB/WP/022	*Overview of SG3 November meeting (5)*
CCCTB/WP/023	*Financial assets (5)*
Annex CCCTB/WP/023	*Annex 1 – Table (5)*
Annex CCCTB/WP/023	*Annex 2 – Table (5)*
CCCTB/WP/024	*Chair Record of 071205 Meeting (5)*
CCCTB/WP/025	*Summary Record of 081205 Meeting (5)*
CCCTB/WP/026	*Territorial scope of the CCCTB (6)*
CCCTB/WP/027	*Financial Institutions (6)*
CCCTB/WP/028	*Overview of SG3 February meeting (6)*
CCCTB/WP/029	*Overview of SG4 February meeting (6)*
CCCTB/WP/030	*Administrative and legal framework (questionnaire) (6)*
CCCTB/WP/031	*Summary Record of March 2006 Meeting (6)*
CCCTB/WP/032	*Overview of SG1 April 2006 meeting (7)*
CCCTB/WP/033	*Overview of SG4 April 2006 meeting (7)*
CCCTB/WP/034	*Overview of SG3 May 2006 meeting (7)*
CCCTB/WP/035	*Group Taxation (7)*
CCCTB/WP/036	*Point for discussion Administrative and Legal Framework (7)*
CCCTB/WP/037	*Summary Record of 1 June 2006 Meeting (7)*
CCCTB/WP/038	*Chair Record of 2 June 2006 Meeting (8)*
CCCTB/WP/039	*Business reorganisations (9)*
CCCTB/WP/040	*Scope of the CCCTB (9)*
CCCTB/WP/041	*Related parties in CCCTB (10)*
CCCTB/WP/042	*Dividends (9)*
CCCTB/WP/043	*Overview of SG3 June 2006 meeting (9)*

CCCTB/WP/044	*Overview of SG5 June 2006 meeting (9)*
CCCTB/WP/045	*Summary Record of 12 September 2006 Meeting (9)*
CCCTB/WP/046	*Progress and future plan (10)*
CCCTB/WP/047	*Formulary apportionment (10)*
CCCTB/WP/048	*Overview Copenhagen (10)*
CCCTB/WP/049	*Overview Madrid (10)*
CCCTB/WP/050	*Chair Record of 12 December 2006 Meeting (10)*
CCCTB/WP/051	*Summary Record of 13 December 2006 Meeting (10)*
CCCTB/WP/052	*Overview SG6 1-2 February 2007 (11)*
CCCTB/WP/053	*Overview Copenhagen 5-6 February 2007 (11)*
CCCTB/WP/054	*Summary on foreign passive income (11)*
CCCTB/WP/055	*Summary Record of 13 March 2007 Meeting (11)*
CCCTB/WP/056	*Overview SG6 4 June 2007 (12)*
CCCTB/WP/057	*CCCTB: Possible elements of a technical outline (12)*
CCCTB/WP/057	*ANNOTATED CCCTB: Possible elements of a technical outline (13)*
CCCTB/WP/058	*Input from national tax administrations (12)*
CCCTB/WP/059	*Summary Record of 27-28 September 2007 Meeting (12)*
CCCTB/WP/060	*Sharing mechanism: Possible elements of a technical outline (13)*
CCCTB/WP/061	*Administrative Framework: Possible elements of a technical outline (13)*
CCCTB/WP/062	*Explanatory note on the comitology procedure*
CCCTB/WP/063	*Summary Record of 12 December 2007 Meeting*
CCCTB/WP/064	*Summary Record of 10-11 December 2007 Meeting*
CCCTB/WP/065	*Anti-abuse rules*
CCCTB/WP/066	*Various detailed aspects of the CCCTB*
CCCTB/WP/067	*Request of input from national tax administrations for the*

	Impact Assessment of the reforms at the EU level of corporate tax systems
CCCTB/WP/068	*Summary Record of 14-15 April 2008 Meeting (13)*

Annex 2. The framework of the acquis communautaire in the field of corporate income taxation

The framework of the *acquis communautaire* in the area of corporate income taxation is composed of legislation, the ECJ jurisprudence and other acts in the area of company taxation.

* EU legislative acts in the field of corporate income taxation

Secondary legislation in the area of direct taxation is not extensive. Legislative acts take the form of Directives as prescribed by the Treaties (i.e. Article 115 of the Treaty on the Functioning of the European Union (TFEU) which replaced Article 94 of the Treaty on the European Community (TEC)). Two "packages" of EC legislation, adopted in 1990 and 2003, address some of the tax obstacles that place barriers to the achievement of the single market. Concerning company taxation, the Council has so far adopted three directives:

The Merger Directive[85] aims at mitigating the tax burden arising from cross-border restructuring operations of companies within the EU.

The Parent-Subsidiary Directive[86] ensures that certain cross-border payments of dividends do not suffer economic double taxation within the EU.

The Interest and Royalties Directive[87] provides for the elimination of double taxation of certain interest and royalty payments between associated companies which are resident in different Member States, by exempting such payments from withholding tax in the State of source.

These three Directives are supplemented by the Arbitration Convention[88] which addresses the problems of transfer pricing in transactions that involve goods, services and intangibles between associated companies. This instrument has not yet yielded significant results, although several recent Communications containing guidelines should render its application more effective (see infra).

* Case-law of the Court of Justice of the European Union

The number of cases in the area of company taxation referred to the Court of Justice of the European Union (ECJ) has grown considerably over the last 10 years. After some 150 decisions in

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85 Council Directive 2009/133/EC of 19 October 2009 on the common system of taxation applicable to mergers, divisions, partial divisions, transfers of assets and exchanges of shares concerning companies of different Member States and to the transfer of the registered office of an SE or SCE between Member States *(codified version, OJ L 310, 25.11.2009, p 34)*.

86 Council Directive 90/435/EEC of 23 July 1990 on the common system of taxation applicable in the case of parent companies and subsidiaries of different Member States *(OJ L 225, 20.8.1990, p. 6–9)*.

87 Council Directive 2003/49/EC of 3 June 2003 on a common system of taxation applicable to interest and royalty payments made between associated companies of different Member States *(OJ L 157, 26.6.2003, p. 49–54)*.

88 Convention 90/436/EEC of 23 July 1990 on the elimination of double taxation in connection with the adjustment of profits of associated enterprises – Final Act – Joint Declarations – Unilateral Declarations *(OJ L225, 20.8.1990, p. 10–24)*.

this area[89], there can be no doubt that the **case-law of the ECJ has significantly influenced the shaping of company tax policy in the EU**.

Some of the cases that the ECJ has ruled on in this area concerned the application and interpretation of the direct tax directives (i.e. Parent-Subsidiary or Merger Directives). However, the vast majority of cases deal with the compatibility of corporate tax provisions of the Member States with the fundamental freedoms of the EC Treaty, in particular the freedom of establishment (the right of companies to establish themselves by setting up branches, subsidiaries or agencies in other Member States (Art. 49 TFEU)), the free movement of services and free movement of capital. Regarding multinational groups of companies, the Court has issued landmark judgments on the tax treatment of branches and subsidiaries, cross-border losses, the application of anti-abuse rules in the EU and the taxation of outbound and inbound dividends.

Case-law developments can contribute to the completion of the single market. The judicial process however has its limitations, as it is rather time-consuming, expensive and focuses on individual situations. It thus does not produce generally applicable solutions. As a result, taxpayers often face considerable uncertainty as to how to interpret the principles of the jurisprudence of the ECJ when structuring cross-border activities within the EU. Furthermore, since the Court only rules on the specific questions it has been addressed to, its jurisprudence cannot offer a systematic tool for tackling features of the Member States' corporate tax systems which are in breach of EU law[90].

It follows that it would not be advisable to rely solely on the judicial process to secure compliance with EU law. It is necessary to work in parallel and try to resolve problems through legislation, particularly where those are common to a number of Member States.

*** Other EU acts and initiatives in the field of corporate income taxation**

Besides EU hard law and the jurisprudence of the ECJ, several other initiatives have been taken by the Commission in recent years to remove obstacles to the freedom of movement. As part of the framework of the two-track strategy launched in 2001, the Commission announced a series of targeted measures in the area of corporate taxation, aimed at removing specific corporate tax barriers in the short term. Most of these targeted measures have since been adopted:

- a proposal for a Code of Conduct on transfer pricing documentation for associated enterprises in the EU[91];

- a proposal for a Code of Conduct for the effective implementation of the EU Arbitration Convention[92];

- a proposal for a revised Code of Conduct for the effective implementation of the Arbitration Convention[93];

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89 See the 2008 study "*The Impact of the Rulings of the European Court of Justice in the area of Direct Taxation*", Policy Department - Economic and Scientific Policy, European Parliament (IP/A/ECON/ST/2007-27).

90 In 2004, a Price Waterhouse Coopers study concluded that possible violations of EC freedoms existed in all (then 25) Member States. See Press Release, PWC LLP, 14 October 2004.

91 COM(2005)543.

92 Code of conduct COM(2004)297 for the effective implementation of the Convention on the elimination of double taxation in connection with the adjustment of profits of associated enterprises *(OJ C 176, 28.7.2006, p. 8–12).*

93 COM (2009)472.

- guidelines for the use of Advance Pricing Agreements (APAs) in the EU[94];

- a Communication for a possible Home State Taxation pilot scheme for SMEs[95];

- a Communication on cross-border loss relief[96]; this issue has also been the object of a Parliament resolution[97];

- a Communication on exit taxation and the need for co-ordination of Member Sates' tax policies[98];

- a Communication on the application of anti-abuse measures in the area of direct taxation – within the EU and in relation to third countries[99];

- The fight against tax fraud and tax evasion in the area of direct taxation has also been the object of recent initiatives[100].

Some of these initiatives have been more successful than others but many of them have so far not led to any action by Member States. Indeed, even being part of the *status quo,* they have had no practical impact. The effective implementation by Member States is a long-term exercise. Considering that these instruments are of a non-binding legal nature, the results currently remain uncertain. Therefore, their overall practical impact on removing remaining tax obstacles has been insufficient.

94 COM(2007)71.
95 COM(2005)702, accompanied by the corresponding Impact Assessment (SEC(2005) 1785).
96 COM(2006)824.
97 European Parliament, Resolution of 13 December 2007 on *Tax Treatment of Losses in Cross-Border Situations*, Report of 30 November 2007, Committee of Economic and Monetary Affairs.
98 COM (2006)825.
99 COM (2007) 785.
100 See among others, COM (2010)156/01.

Annex 3. The samples of EU-based multinational groups from the Amadeus and ORBIS databases

3.1 Description of EU-based multinational groups operating in the non-financial sector based on the Amadeus database

The **Amadeus** database has been used for some of the quantitative analysis in this Impact Assessment (February 2006 version). Amadeus contains standardized annual accounts of approximately 8 million companies in 38 countries, including all EU Member States. It also contains information on (domestic and cross-border) linkages between companies in its so-called "ownership" database. These features imply that this dataset is useful for cross-border company analysis. As an indicative figure, it can be said that Amadeus reports information on about 14000 'EU-based multinational groups' (as defined below). This doesn't prevent from raising, however, the difficult question of how representative the results of such an analysis will be for the total actual population of companies with cross-border linkages in the EU, since data collection reported in this dataset sometimes is biased, as it differs between countries and depends on the institutional settings in each country. Unfortunately, a database with information on all EU multinational companies (or a geography-wise 'representative' sample of them) and their foreign affiliates does not exist in Europe.

The Amadeus database has been first used to gain some insight into the EU-based companies that will most likely be affected by the alternative tax systems under scrutiny in this Impact Assessment: EU-based multinational groups[101]. Internal research in DG TAXUD has dealt with the database in order to extract the relevant data **to obtain a picture of EU-based multinational groups**. For the purpose of this study, an EU multinational group exists when an EU-based company owns (at different possible ownership thresholds – see below) at least one subsidiary in a Member State other than that of the parent company. A first objective of this analysis has been to provide a thorough description of the existing 'EU-based multinational groups'. For example, it has been of interest to know: how many such EU multinational groups exist, their break-down across Member States (ie the geographical distribution of parent companies with foreign subsidiaries, the main destination of foreign direct investment of parent companies in the form of majority-owned affiliates across EU MS…), the average number of Member States in which an EU multinational group operates, the average number of subsidiaries of EU multinationals (domestic and foreign - both EU-based and non-EU), main sectors of economic activities in which the EU multinational groups operate, etc.

Thus, using the 'ownership' database of Amadeus, the information has been arranged by 'EU multinational groups' (ie matching companies that belong to the same multinational group). For each of the companies that is a member of a multinational group, the particular data extracted from the database has been: country of residence, ownership percentage, cost and number of employees per company and financial data for the years 2002, 2003, 2004: profit (loss) before tax, operating revenue/turnover, export turnover, fixed assets (tangible and intangible), added value, etc (the data extracted for each group has been used for further quantitative assessments based on this dataset, as explained in this report).

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[101] Obviously, in the cases where the policy alternatives under scrutiny are *'compulsory'* all EU-based companies subject to corporate taxation will be affected by the relevant tax system: that is, not only EU-based multinational groups, but also EU-based domestic (national) companies/groups will be concerned. This has been taken into account when evaluating the relevant options. Anyhow, the EU-based multinational groups require special attention because they are affected by all (optional and compulsory) policy alternatives analysed and because they are the economic agents most directly concerned by the various alternative policy options.

Two samples of such EU multinational groups in the 27 Member States have been selected from Amadeus: (i) a sample of multinational groups whose parents are large size enterprises (i.e. LSEs with more than 250 employees) and (ii) a sample of multinational groups whose parents are small/medium-sized enterprises (SMEs) (i.e. with less than 250 employees).

For the first category (EU multinational groups whose parents are large companies) different sub-samples have been analyzed by varying the ownership threshold from 50% to 75% and 100% (in all subsidiary levels of the parent) in order to test how the composition of the groups changes when ownership thresholds are increased or decreased (See Table A1 in this Annex).

These results show that by increasing the ownership thresholds the sample size does not decrease enormously, that is, most subsidiaries of EU multinational groups are owned at very high levels of ownership (e.g. 85% of the sample remains when changing the ownership threshold from 50% to 100%).

The picture of the main characteristics of **EU-based multinational groups with 75% ownership** has been analysed in greater detail (See Table 2 in this Annex), since this is the proposed ownership threshold for consolidation. For this **sample with 2060 groups in the 27 Member States**, the average number of subsidiaries per parent is 25.95, of which 11.11 (43%) on average are domestic subsidiaries (established in the same country as the parent company), 10.06 (38.5%) on average are subsidiaries in an EU Member State other than that of the parent company and 4.78 (18.5%) are subsidiaries established in a non-EU country. A further analysis of these figures has been carried out, in order to get a better idea of the frequency distribution of the number of subsidiaries/parent. When compared to the average of the distribution (25.95 subsidiaries/parent) this analysis shows that most EU multinational groups have a 'small' number of subsidiaries (6 or less), but at the same time there are a few groups that have a very large number of subsidiaries biasing the average upwards.

Further investigation has been done on other issues to complete the picture of EU-based multinational groups (75% ownership threshold). For example, the following features can be highlighted:

- 48.67% of the subsidiaries of the EU-based multinational groups are owned directly by the parent company at the first level.

- On average, **parent companies have subsidiaries in four EU Member States** (other than that of the parent home State), thus, they have to deal with as many corporate tax rules. Some parents reach the maximum number of EU foreign destinations which is 26.

- In most cases, neighbouring countries are the main destination of foreign investment of parents in form of majority owned subsidiaries.

- The so-called sandwich situations (i.e. situations when an EU parent/subsidiary owns a non-EU company, which in turn owns an EU-based subsidiary) have also been investigated. Within the sample of 2.060 parents only 48 parents in 11 Member States (a total of 59 situations) held EU-based subsidiaries through non-EU companies.

- The main activities of all parents per country in the selected 75% ownership sample have also been examined and grouped in 62 sectors according to the NACE international classification system. 24.9% of the parents operate in ‘Other business activities’, and after that the sector with the largest number of parents is ‘Wholesale trade and commission trade, except of motor vehicles and

motorcycles' (7.33%). The Amadeus database does not contain any information on companies working in the financial and insurance field (thus the analysis in this part is restricted to the non-financial sector).

The other sample of EU multinational groups analysed is that of parent companies which have less than 250 employees, i.e. parents are small and medium-sized enterprises. Ownership threshold is set at 75% ownership. The total sample of SMEs parents meeting the above criteria in the Amadeus database is 18096, out of which a sample of 471 parents and groups has been extracted and analysed (See Table 3 in this Annex). This sample shows that the average number of subsidiaries per parent in these groups is 5.41, which is considerably less than the average for the MNEs. Of these, on average, 1.62 are domestic companies (in the same Member State as the parent), 2.25 are foreign subsidiaries in other EU Member States and 1,54 are subsidiaries in non-EU countries.

Table A1. Total LSE parents and subsidiaries in varying ownership thresholds (Amadeus database)

	Table A1.1. Total 50% in AMADEUS				Table A1.2. Sample 50%				Table A1.3. Sample 75%				Table A1.4. Sample 100%			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
	Country of LSE Paren	Total LSE Parents	Total Subs of the LSE Parent	Total Parents+Subs	Country of LSE Paren	Total LSE Parents	Total Subs of the LSE Parent	Total Parents+Subs	Country of LSE Paren	Total LSE Parents	Total Subs of the LSE Parent	Total Parents+Subs	Country of LSE Parent	Total LSE Parents	Total Subs of the LSE Parent	Total Parents+Subs
1	AT	168	1606	1774	AT	168	1608	1776	AT	146	1181	1327	AT	135	881	1016
2	BE	373	4619	4992	BE	150	2901	3051	BE	135	2246	2381	BE	104	1212	1316
3	BG	1	3	4	BG	1	2	3	BG	1	2	3	BG	1	1	2
4	CY	7	45	52	CY	7	45	52	CY	7	37	44	CY	6	26	32
5	CZ	43	109	152	CZ	43	108	151	CZ	36	76	112	CZ	31	48	79
6	DK	317	5876	6193	DK	317	5842	6159	DK	307	5015	5322	DK	300	4610	4910
7	EE	8	71	79	EE	8	71	79	EE	8	55	63	EE	6	40	46
8	FI	171	2534	2705	FI	171	2534	2705	FI	161	2132	2293	FI	150	1807	1957
9	FR	864	52173	53037	FR	150	15416	15566	FR	141	11274	11415	FR	120	6106	6226
10	DE	1168	25637	26805	DE	150	7946	8096	DE	137	5889	6026	DE	130	4844	4974
11	GR	33	331	364	GR	33	333	366	GR	29	239	268	GR	26	137	163
12	HU	12	66	78	HU	12	67	79	HU	11	47	58	HU	6	29	35
13	IE	98	1307	1405	IE	98	1307	1405	IE	92	1056	1148	IE	90	819	909
14	IT	851	7677	8528	IT	150	3597	3747	IT	139	2423	2562	IT	114	1588	1702
15	LV	3	8	11	LV	3	8	11	LV	3	7	10	LV	2	4	6
16	LT	2	5	7	LT	2	5	7	LT	1	2	3	LT	1	2	3
17	LU	35	556	591	LU	35	559	594	LU	33	478	511	LU	33	386	419
18	MT	0	0	0	MT	0	0	0	MT	0	0	0	MT	0	0	0
19	NL	802	13596	14398	NL	150	7569	7719	NL	144	5946	6090	NL	136	4945	5081
20	PL	31	196	227	PL	31	196	227	PL	27	143	170	PL	26	83	109
21	PT	54	1083	1137	PT	54	1076	1130	PT	47	774	821	PT	41	512	553
22	RO	6	24	30	RO	6	18	24	RO	4	11	15	RO	4	8	12
23	SK	6	28	34	SK	6	28	34	SK	5	20	25	SK	4	16	20
24	SI	20	71	91	SI	20	71	91	SI	19	63	82	SI	18	45	63
25	ES	485	4323	4808	ES	150	4654	4804	ES	143	2825	2968	ES	111	1375	1486
26	SE	433	10731	11164	SE	150	4898	5048	SE	148	4363	4511	SE	145	3996	4141
27	UK	984	135778	136762	UK	150	8801	8951	UK	136	7153	7289	UK	122	6285	6407
	Total:	6975	268453	275428	**Total:**	2215	69660	**71875**	**Total:**	2060	53457	**55517**	**Total:**	1862	39805	**41667**

N.B.: P=Parents; S=Subsidiaries

Table A2. Total LSE parents and subsidiaries and their averages for 75% ownership threshold (Amadeus database)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Country of LSE parent	Total Parents in AMADEUS	Abb.	LSE Parents Sample	LSE Subs in Sample	Total LSE Parents + Subs Sample	Average N° of Subs per Parent (5/4)	N° of Domestic Subs	Average N° of Domestic Subs per Parent (8/4)	EU Foreign Subs (Total EU Subs - Domestic Subs)	Average N° of EU Foreign Subs per Parent (10/4)	Non EU Subs	Average N° of Non-EU Subs per Parent (12/4)
1	Austria	168	AT	146	1181	1327	8.09	484	3.32	606	4.15	91	0.62
2	Belgium	373	BE	135	2246	2381	16.64	601	4.45	1189	8.81	456	3.38
3	Bulgaria	1	BG	1	2	3	2.00	0	0.00	2	2.00	0	0.00
4	Cyprus	7	CY	7	37	44	5.29	11	1.57	25	3.57	1	0.14
5	Czech Rep	43	CZ	36	76	112	2.11	27	0.75	49	1.36	0	0.00
6	Denmark	317	DK	307	5015	5322	16.34	1180	3.84	2717	8.85	1118	3.64
7	Estonia	8	EE	8	55	63	6.88	33	4.13	21	2.63	1	0.13
8	Finland	171	FI	161	2132	2293	13.24	827	5.14	1045	6.49	260	1.61
9	France	864	FR	141	11274	11415	79.96	4612	32.71	4396	31.18	2266	16.07
10	Germany	1168	DE	137	5889	6026	42.99	2502	18.26	1955	14.27	1432	10.45
11	Greece	33	GR	29	239	268	8.24	106	3.66	104	3.59	29	1.00
12	Hungary	12	HU	11	47	58	4.27	10	0.91	34	3.09	3	0.27
13	Ireland	98	IE	92	1056	1148	11.48	354	3.85	617	6.71	85	0.92
14	Italy	851	IT	139	2423	2562	17.43	869	6.25	989	7.12	565	4.06
15	Latvia	3	LV	3	7	10	2.33	3	1.00	4	1.33	0	0.00
16	Lithuania	2	LT	1	2	3	2.00	0	0.00	2	2.00	0	0.00
17	Luxembour	35	LU	33	478	511	14.48	48	1.45	301	9.12	129	3.91
18	Malta	0	MT	0	0	0	0.00	0	0.00	0	0.00	0	0.00
19	Nehterlands	802	NL	144	5946	6090	41.29	1493	10.37	2649	18.40	1804	12.53
20	Poland	31	PL	27	143	170	5.30	101	3.74	39	1.44	3	0.11
21	Portugal	54	PT	47	774	821	16.47	490	10.43	215	4.57	69	1.47
22	Romania	6	RO	4	11	15	2.75	4	1.00	7	1.75	0	0.00
23	Slovakia	6	SK	5	20	25	4.00	12	2.40	7	1.40	1	0.20
24	Slovenia	20	SI	19	63	82	3.32	18	0.95	29	1.53	16	0.84
25	Spain	485	ES	143	2825	2968	19.76	1560	10.91	692	4.84	573	4.01
26	Sweden	433	SE	148	4363	4511	29.48	1689	11.41	2019	13.64	655	4.43
27	United King	984	UK	136	7153	7289	52.60	5846	42.99	1019	7.49	288	2.12
	Total in Amadeus:	6975	**Sample:**	2060	53457	**55517**	25.95	**22880**	11.11	**20732**	10.06	**9845**	4.78

N.B.: Subs = Subsidiaries

Table A3. Total parents and subsidiaries for SMEs (Amadeus database)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Country of the SME parent	Abb.	Total EU SME Parents in Amadeus	Total SME Subs (to these EU SME Parents) in Amadeus	Total EU SME Parents + respective Subs in Amadeus	Sample EU SME Parents	Sample SME Subs	Total sample Parents + Subs	Aver N° of subs per parent in the sample	N° of Domestic Subs	Average N° of Domestic Subs per Parent	Foreign Subs (Total EU Subs - Domestic Subs)	Average N° of EU Foreign Subs per Parent	Non EU Subs	Average N° of Non-EU Subs per Parent
1	Austria	AT	555	1604	2159	10	25	35	2.50	11	1.10	14	1.40	0	0.00
2	Belgium	BE	2640	7793	10433	10	94	104	9.40	12	1.20	77	7.70	5	0.50
3	Bulgaria	BG	7	16	23	7	16	23	2.29	10	1.43	6	0.86	0	0.00
4	Cyprus	CY	3	3	6	3	7	10	2.33	2	0.67	5	1.67	0	0.00
5	Czech Re	CZ	42	47	89	42	55	97	1.31	4	0.10	50	1.19	1	0.02
6	Denmark	DK	1467	5295	6762	10	124	134	12.40	60	6.00	54	5.40	10	1.00
7	Estonia	EE	54	67	121	54	72	126	1.33	16	0.30	56	1.04	0	0.00
8	Finland	FI	195	404	599	10	39	49	3.90	3	0.30	32	3.20	4	0.40
9	France	FR	1684	9738	11422	20	249	269	12.45	84	4.20	105	5.25	60	3.00
10	Germany	DE	2267	9265	11532	20	270	290	13.50	132	6.60	124	6.20	14	0.70
11	Greece	GR	34	53	87	34	75	109	2.21	29	0.85	46	1.35	0	0.00
12	Hungary	HU	7	8	15	7	9	16	1.29	1	0.14	8	1.14	0	0.00
13	Ireland	IE	621	1373	1994	20	65	85	3.25	10	0.50	49	2.45	6	0.30
14	Italy	IT	1118	1507	2625	20	122	142	6.10	17	0.85	65	3.25	40	2.00
15	Latvia	LV	6	11	17	6	11	17	1.83	4	0.67	7	1.17	0	0.00
16	Lithuania	LT	13	20	33	13	20	33	1.54	4	0.31	15	1.15	1	0.08
17	Luxembou	LU	66	679	745	10	547	557	54.70	0	0.00	25	2.50	522	52.20
18	Malta	MT	0	0	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00
19	Nehterlan	NL	2433	9156	11589	20	156	176	7.80	44	2.20	81	4.05	31	1.55
20	Poland	PL	24	65	89	24	69	93	2.88	33	1.38	36	1.50	0	0.00
21	Portugal	PT	48	97	145	48	142	190	2.96	79	1.65	62	1.29	1	0.02
22	Romania	RO	10	8	18	10	10	20	1.00	0	0.00	10	1.00	0	0.00
23	Slovakia	SK	6	4	10	6	6	12	1.00	0	0.00	6	1.00	0	0.00
24	Slovenia	SI	7	13	20	7	13	20	1.86	1	0.14	10	1.43	2	0.29
25	Spain	ES	1042	1921	2963	20	72	92	3.60	30	1.50	33	1.65	9	0.45
26	Sweden	SE	1761	8092	9853	20	224	244	11.20	153	7.65	56	2.80	15	0.75
27	United Kir	UK/GB	1986	12769	14755	20	55	75	2.75	25	1.25	28	1.40	2	0.10
		Total EU27:	18096	70008	88104	471	2547	3018	5.41	764	1.62	1060	2.25	723	1.54

3.2 Description of EU-based multinational groups operating in the financial sector based on the Orbis database

The analysis of EU-based multinational groups operating in the financial sector has been done using the commercial Orbis database. Orbis is a global database which contains standardized annual accounts of over 50 million companies worldwide. It also contains information on domestic and cross-border linkages between companies in its so-called "ownership" database which is useful for cross-border company analysis. All EU-based multinational groups operating in the financial sector that have met initially set criteria and that have provided financial information have been extracted from the database for analysis. The financial data in the Orbis database has been collected directly from the companies, from official bodies or from associated information providers.

The initially set criteria are related to the definition of an EU-multinational group. An 'EU-multinational group operating in the financial sector' is defined as a group of related companies (with a direct ownership threshold of 75%– as specified by the CCCTB proposal) whose members are established and operate in at least two different Member States (MSs) of the EU and such that either the parent of the group or/and some of its subsidiaries are financial companies[102] (while the rest of the companies in the group may be non-financial companies). The dataset used for analysis contains only those subsidiaries that operate in an EU MS – as opposed to the industrial company database [see first part of this annex] which contains third country companies, as well.

Two samples of 'EU groups operating in the financial sector' have been compiled using the original 'ownership' information from the database. These samples correspond to:

(i) a sample of EU multinational groups of which the parents are large-sized enterprises (LSEs), i.e. with more than 250 employee. This sample will be referred to as 'EU large multinational groups operating in the financial sector' or 'LSE groups' from here onwards.

(ii) a sample of EU multinational groups of which the parents are small/medium-sized enterprises (SMEs), i.e. with less than 250 employees. This sample will be referred to as 'EU small multinational groups operating in the financial sector' or 'SME groups' from here onwards.

The companies have been arranged on a group-by-group basis, following the exact 'ownership' structure of the groups. For each of the companies that is a member of a multinational group, the particular data extracted from the database has been:

- country of residence,
- ownership percentage,
- cost and number of employees per company,
- financial data for the years 2002, 2003, 2004: profit (loss) before tax, operating revenue/turnover, tangible fixed assets, total investment, gross premium income, net investment income, etc.

An important objective of the analysis has been to provide a thorough description of the existing 'EU-based multinational groups operating in the financial sector'. For example, it has been of

[102] Financial institutions cover insurance companies and banks.

interest to know: how many such EU multinational groups exist, their break-down across Member States (i.e. the geographical distribution of parent companies with foreign subsidiaries), the average number of subsidiaries in EU multinational groups, share of financial and non-financial companies, etc.

The dataset contains 6771 groups (5102 LSE and 1669 SME groups) and 107113 companies (89251 of them in LSE groups and 17862 in SME groups). Financial and non-financial companies' variables are presented by three accounting schedules – for banks usually a banking schedule, for insurance companies usually an insurance schedule and for non-financial companies an industrial schedule. (More than 80% of companies have an industrial accounting schedule.)

The current datasets comprise a potential ca. 7.7 million entries (107113 companies x 18 financial variables [the average for the three accounting schedules] x 4 years) including missing data. Financial data missing from the Orbis database has been imputed for the purpose of analysis. In the case of individual data points missing among the financial variables of companies, a new value was imputed by deductive imputation, using auxiliary variables, a regression method or 'donor imputation'. When all financial data of a particular company were missing, representativeness of the sample was maintained by re-weighting existing data.

The total number of financial companies in the sample is 24060 of which 19517 are in LSE groups and 4543 (19%) are in SME groups. This means that the average number of financial companies per LSE group is 3,83 and 2,72per SME group. The total number of banks is 1118 and the number of insurance companies is 1132 , more than 90% of them belonging to LSE groups.

The number of parents that are themselves financial companies is 2533 among LSEs (49,6% of all parents) and 1147 among SMEs (70,3%). 4,7% of the groups contain only financial companies and 3,8% of groups have only 1 financial company.

In LSE groups the average number of subsidiaries is 16.49, while in SME groups this figure is 9.70. It is noteworthy that for LSE financial groups, the number of subsidiaries is much less than the figure found among LSE groups in the industrial company database (25.95 – see first part of this annex); whereas among SME groups, the financial database has a much higher figure (being only 5.41 for industrial SME groups) .

Similarly to the industrial database, most groups have only a small number of subsidiaries. The median is 3 with 31% of groups having 1 subsidiary and only a quarter of them having at least 10. The share of subsidiaries that are in countries different from the parent is 42 %. 36% of foreign subsidiaries are located in countries neighbouring the country of the parent. 30 % of the subsidiaries are owned directly by the parent company of the group.

On average, parent companies have subsidiaries in 2.07 Member States apart from the Member State of the parent, thus they have to deal with more than 3 tax codes.

Table A.4 Large-size financial groups and their averages for 75% ownership threshold (ORBIS database)

	(1)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Country of LSE parent	Abb.	LSE Parents Sample	LSE Subs in Sample	Total LSE Parents + Subs Sample	Average N° of Subs per Parent (5/4)	N° of Domestic Subs	Average N° of Domestic Subs per Parent (8/4)	EU Foreign Subs (Total EU Subs - Domestic Subs)	Average N° of EU Foreign Subs per Parent (10/4)
1	Austria	AT	114	1351	1465	11.85	559	4.90	792	6.95
2	Belgium	BE	803	4297	5100	5.35	984	1.23	3313	4.13
3	Bulgaria	BG	3	9	12	3.00	6	2.00	3	1.00
4	Cyprus	CY	196	1211	1407	6.18	38	0.19	1173	5.98
5	Czech Rep	CZ	9	37	46	4.11	22	2.44	15	1.67
6	Germany	DE	330	10847	11177	32.87	6854	20.77	3993	12.10
7	Denmark	DK	243	2132	2375	8.77	760	3.13	1372	5.65
8	Estonia	EE	2	2	4	1.00	0	0.00	2	1.00
9	Spain	ES	110	2850	2960	25.91	2033	18.48	817	7.43
10	Finland	FI	44	1368	1412	31.09	445	10.11	923	20.98
11	France	FR	274	10142	10416	37.01	5182	18.91	4960	18.10
12	UK	GB	549	18390	18939	33.50	15436	28.12	2954	5.38
13	Greece	GR	32	332	364	10.38	171	5.34	161	5.03
14	Hungary	HU	13	78	91	6.00	31	2.38	47	3.62
15	Ireland	IE	147	1935	2082	13.16	592	4.03	1343	9.14
16	Italy	IT	239	3883	4122	16.25	1973	8.26	1910	7.99
17	Lithuania	LT	6	31	37	5.17	6	1.00	25	4.17
18	Luxembou	LU	359	2550	2909	7.10	128	0.36	2422	6.75
19	Latvia	LV	5	12	17	2.40	2	0.40	10	2.00
20	Malta	MT	16	41	57	2.56	1	0.06	40	2.50
21	Nehterland	NL	1327	16172	17499	12.19	9658	7.28	6514	4.91
22	Poland	PL	3	25	28	8.33	20	6.67	5	1.67
23	Portugal	PT	35	425	460	12.14	280	8.00	145	4.14
24	Romania	RO	2	9	11	4.50	4	2.00	5	2.50
25	Sweden	SE	233	5985	6218	25.69	2871	12.32	3114	13.36
26	Slovenia	SI	5	30	35	6.00	21	4.20	9	1.80
27	Slovakia	SK	3	5	8	1.67	0	0.00	5	1.67
		Total	5102	84149	**89251**	16.49	**48077**	9.42	**36072**	7.07

Table A.5 SME financial groups and their averages for 75% ownership threshold

	(1)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Country of LSE parent	**Abb.**	**LSE Parents Sample**	**LSE Subs in Sample**	**Total LSE Parents + Subs Sample**	**Average N° of Subs per Parent (5/4)**	**N° of Domestic Subs**	**Average N° of Domestic Subs per Parent (8/4)**	**EU Foreign Subs (Total EU Subs - Domestic Subs)**	**Average N° of EU Foreign Subs per Parent (10/4)**
1	Austria	AT	48	463	511	9.65	237	4.94	226	4.71
2	Belgium	BE	206	1480	1686	7.18	525	2.55	955	4.64
3	Bulgaria	BG	1	5	6	5.00	4	4.00	1	1.00
4	Cyprus	CY	1	1	2	1.00	0	0.00	1	1.00
5	Czech Rep	CZ	1	1	2	1.00	0	0.00	1	1.00
6	Germany	DE	81	1572	1653	19.41	1122	13.85	450	5.56
7	Denmark	DK	92	862	954	9.37	466	5.07	396	4.30
8	Estonia	EE	3	14	17	4.67	11	3.67	3	1.00
9	Spain	ES	79	669	748	8.47	449	5.68	220	2.78
10	Finland	FI	18	256	274	14.22	152	8.44	104	5.78
11	France	FR	89	998	1087	11.21	478	5.37	520	5.84
12	UK	GB	61	2193	2254	35.95	1971	32.31	222	3.64
13	Greece	GR	2	5	7	2.50	1	0.50	4	2.00
14	Hungary	HU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
15	Ireland	IE	10	80	90	8.00	11	1.10	69	6.90
16	Italy	IT	191	1629	1820	8.53	942	4.93	687	3.60
17	Lithuania	LT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
18	Luxembou	LU	9	31	40	3.44	0	0.00	31	3.44
19	Latvia	LV	1	5	6	5.00	3	3.00	2	2.00
20	Malta	MT	1	4	5	4.00	3	3.00	1	1.00
21	Nehterland	NL	631	4284	4915	6.79	2796	4.43	1488	2.36
22	Poland	PL	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23	Portugal	PT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24	Romania	RO	2	2	4	1.00	0	0.00	2	1.00
25	Sweden	SE	140	1634	1774	11.67	1086	7.76	548	3.91
26	Slovenia	SI	1	4	5	4.00	3	3.00	1	1.00
27	Slovakia	SK	1	1	2	1.00	0	0.00	1	1.00
		Total	**1669**	**16193**	**17862**	**9.70**	**10260**	**6.15**	**5933**	**3.55**

3.3 The effects of formula apportionment on the distribution of corporate tax bases

The exercise has consisted of simulating for a sample of 750 multinational industrial groups extracted from Amadeus and 2073 multinational financial groups extracted from Orbis, their taxable profits in each country of the EU, both under the current tax conditions and under alternative scenarios of 'consolidation + apportionment'. The assumptions for simulating each of these scenarios have been the following:

* Benchmark case: in what concerns loss offsetting provisions, the current tax bases are calculated assuming that (i) there is national loss offset regimes in the 18 Member States that currently allow so and (ii) when domestic compensation is not possible, carry-forward of losses at the individual companies' level is allowed. There is no international loss offset system in place. The taxable profits of all groups are then aggregated by country. This yields what we call the 'current national tax bases' for the sample. Table A.6 shows country tax shares in the sample of industrial and financial groups and an overall share, calculated as the weighted average of the two samples. The weighting factors for each country are the shares of corporate tax revenues from financial and non-financial companies. (These data are missing for Cyprus, Luxembourg and Malta and have been replaced by the overall EU shares.)

* Alternative scenarios of 'consolidation + apportionment': in what concerns loss offsetting provisions (cross-border) consolidation has been assumed at the level of each multinational group. Thus, under this scenario, losses of a group company in a given year could be offset against contemporary profits of any other group companies (either in the same country of the loss-making group company or in other countries)[103]. The EU consolidated tax base obtained for each multinational group in this way has then been distributed across countries according to different apportioning formulae. The following six apportioning formulae have been tested:

> *1/3 'Cost of employees' – 1/3 'Total Fixed Assets'[104]['*Assets*[105]' for financial groups]– 1/3 (Proxy) 'Sales by Destination[106],
>
> *1/6 'Cost of employees' – 1/6 'Number of Employees' - 1/3 'Total Fixed Assets'['*Assets*' for financial groups] – 1/3 (Proxy) 'Sales by Destination'
>
> * 1/3 'Cost of employees' – 1/3 'Total Fixed Assets' ['*Assets*' for financial groups]– 1/3 'Turnover' ['Sales by origin']

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[103] Once the loss is offset in a given year, it is not carried-forward to next year: so, in the simulations double counting of the losses is excluded.

[104] Excluding intangible and financial fixed assets.

[105] For banks: 'Loans'/10 + 'Fixed assets'; for insurance companies: 'Total investment'/10; for industrial companies within financial groups, 'Total fixed assets' minus 'Total intangible assets' (as for industrial groups)

[106] Companies do not report the place of destination of their sales in their financial accounts. Therefore the simulation of this factor cannot be based on firm-specific data. The alternative approach taken to 'roughly' simulate the effects of the mechanisms including 'sales by destination' has been to use a 'macro factor': that is, one third of the groups' total taxable profits has been shared by reference to the relative position of each country in the aggregated Consumption Expenditure macro-variable (ie an aggregated proxy for the destination of sales by companies). This is clearly an extreme simplification, because the definition of the 'sales by destination' factor would be more complex than this approach (e.g. spread throw-back rule when the company has no physical presence in the country of destination, etc.). This calls for extreme caution in interpreting the results.

* 1/6 ‘Cost of employees’ – 1/6 ‘Number of Employees’ - 1/3 ‘Total Fixed Assets’[*'Assets'* for financial groups] – 1/3 ‘Turnover’ ['Sales by origin']

* ½ ‘Cost of employees’ – ½ ‘Total Fixed Assets’ [*'Assets'* for financial groups]

* ¼ ‘Cost of employees’ – ¼ ‘Number of Employees’ – ½ ‘Total Fixed Assets’[*'Assets'* for financial groups]

Table A.7 compares the current tax bases' distribution with the apportioning factors distribution by country for the sample of 750 MNEs in 2004 (see Section 5.2). Table A.8 and A.9 present the sample tax bases under the current scheme and the 6 apportionment mechanisms for industrial and financial groups, respectively. Figures A.1 and A.2 show for these two samples how country shares of the EU-total tax base evolve under the various apportionment mechanisms. Table A.10 shows the net value of depreciation allowances of the current tax systems (as of 2007) and the common tax base for both a 20% and 25% depreciation rate for plant and machinery. Finally, Table A.11 reports the effects of "consolidation + apportionment" on the tax bases for different sharing mechanisms.

Table A.6 Country shares in current tax bases

	Share of the MS base in the EU total. Amadeus sample (2002-2004) - industrial groups	Share of the MS base in the EU total. Orbis sample (2002-2005) - financial groups	Share of financial groups in corporate tax revenues (Eurostat. 2002-2005)	Share of the MS sample tax base in the EU total. industrial and financial groups
Austria	4.7%	0.7%	17.4%	3.82%
Belgium	5.0%	7.8%	22.8%	5.62%
Bulgaria	0.0%	0.0%	13.0%	0.01%
Cyprus	0.0%	0.0%	:	0.03%
Czech Republic	0.2%	0.4%	14.3%	0.23%
Germany	18.3%	13.6%	34.8%	17.28%
Denmark	6.5%	4.0%	23.2%	5.97%
Estonia	0.2%	0.1%	8.9%	0.17%
Spain	2.5%	8.0%	15.6%	3.70%
Finland	9.2%	0.7%	8.2%	7.36%
France	8.5%	7.8%	22.6%	8.34%
Greece	0.8%	0.2%	8.6%	0.64%
Hungary	0.6%	0.4%	17.9%	0.55%
Ireland	3.8%	0.6%	28.3%	3.07%
Italy	6.4%	5.2%	26.2%	6.11%
Lithuania	0.1%	0.0%	2.4%	0.06%
Luxembourg	1.1%	0.7%	:	1.00%
Latvia	0.0%	0.0%	13.0%	0.04%
Malta	:	0.0%	:	:
Netherlands	7.1%	4.4%	25.7%	6.52%
Poland	2.3%	0.2%	15.3%	1.86%
Portugal	1.3%	1.1%	10.0%	1.22%
Romania	0.0%	0.1%	5.2%	0.07%
Sweden	5.1%	9.0%	20.5%	5.92%
Slovenia	0.1%	0.0%	17.6%	0.10%
Slovakia	0.0%	0.1%	6.4%	0.03%
UK	16.3%	34.8%	21.9%	20.30%
Total EU	100.0%	100.0%	21.8%	100.00%

Source: own calculations on the Amadeus and ORBIS databases.

Table A.7 Comparison of the current tax bases' distribution with the apportioning factors' distribution by country, 2002-2004 (NPV 2002)

Country	Share of cost of EMP in the EU total (%)	Share of Nr of EMP in the EU total (%)	Share of operating revenue in the EU total (%)	Share of fixed tangible assets in the EU total (%)	Share in the EU total current tax base
Austria	3.01	3.40	3.01	6.47	4.70
Belgium	2.90	2.83	2.62	2.95	5.00
Bulgaria	0.00	0.01	0.00	0.00	0.00
Cyprus	0.08	0.02	0.01	0.02	0.03
Czech Republic	0.09	0.70	0.22	0.39	0.19
Germany	28.09	27.24	32.18	24.41	18.32
Denmark	5.33	5.42	3.96	3.97	6.53
Estonia	0.04	0.54	0.14	0.09	0.21
Spain	3.03	3.23	2.04	2.70	2.50
Finland	7.50	6.79	5.16	4.10	9.21
France	5.54	4.68	6.79	12.23	8.49
Greece	1.49	0.36	0.23	0.26	0.76
Hungary	0.00	0.07	0.31	0.20	0.60
Ireland	1.93	1.96	2.15	0.91	3.76
Italy	4.04	3.96	5.04	4.52	6.36
Lithuania	0.13	0.13	0.08	0.09	0.08
Luxembourg	0.68	0.16	0.31	0.21	1.09
Latvia	0.12	0.29	0.04	0.03	0.04
Malta	n.a.	n.a.	n.a.	n.a.	n.a.
Netherlands	1.31	1.40	10.14	2.31	7.08
Poland	0.00	2.51	2.20	2.62	2.31
Portugal	1.01	1.38	1.65	1.83	1.27
Romania	0.00	0.24	0.06	0.08	0.05
Sweden	5.04	4.75	4.44	8.38	5.06
Slovenia	1.00	0.61	0.17	0.20	0.12
Slovakia	0.00	0.05	0.02	0.03	0.01
United Kingdom	28.57	27.27	17.04	20.98	16.24
Total EU	100	100	100	100	100

Source: calculations on the Amadeus and ORBIS databases.

Table A.8 Comparison of the current tax bases with 'consolidation+apportionment' tax bases for different apportioning mechanisms, 2002-2004 (NPV 2002) , in millions of Euros and % change, industrial groups

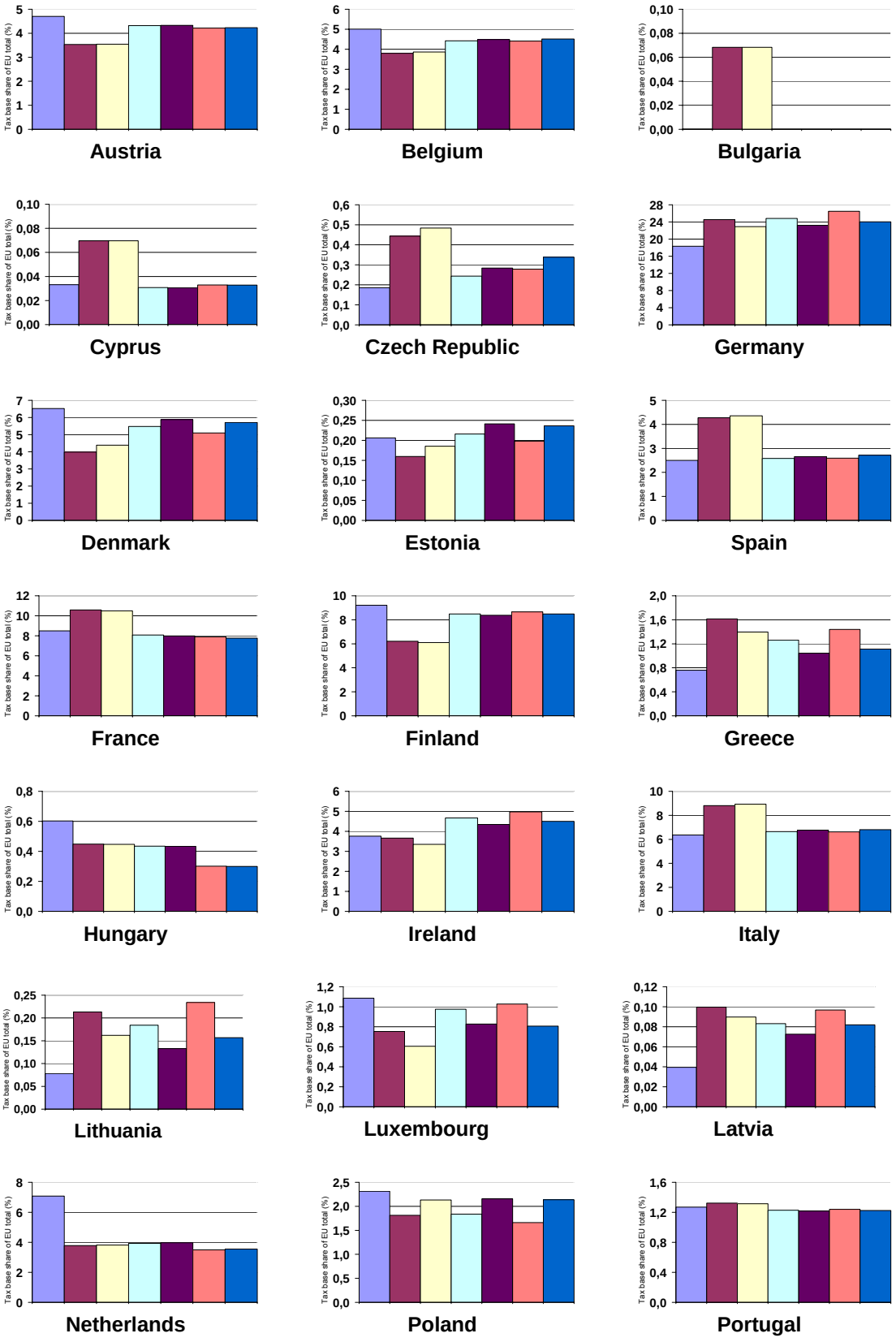
		1/3 cost of employees+ 1/3 fixed tangible assets+ 1/3 sales by destination		*1/6 cost of employees+ 1/6 N°of employees+ 1/3 fixed tangible assets+ 1/3 sales by destination*		*1/3 cost of employees+ 1/3 fixed tangible assets+ 1/3 sales by origin*		*1/6 cost of employees+ 1/6 N°of employees+ 1/3 fixed tangible assets+ 1/3 sales by origin*		*1/2 cost of employees+ 1/2 fixed tangible assets*		*1/4 cost of employees+ 1/4 N°of employees+ 1/2 fixed tangible assets*	
Country	**Sample current tax base**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**
AT	4964	3626	-27.0%	3639	-26.7%	4424	-10.9%	4437	-10.6%	4326	-12.9%	4345	-12.5%
BE	5281	3899	-26.2%	3967	-24.9%	4533	-14.2%	4601	-12.9%	4529	-14.2%	4631	-12.3%
BG	0.117	.	.	.	.	.	.	.	.	.	.	.	.
CY	35	72	104.3%	71	104.0%	32	-10.0%	31	-10.3%	34	-3.3%	34	-3.8%
CZ	196	456	132.4%	497	153.3%	250	27.4%	291	48.3%	286	45.7%	347	77.1%
DE	19329	25194	30.3%	23528	21.7%	25449	31.7%	23786	23.1%	27181	40.6%	24681	27.7%
DK	6885	4088	-40.6%	4504	-34.6%	5612	-18.5%	6028	-12.4%	5236	-24.0%	5860	-14.9%
EE	218	164	-24.6%	190	-12.6%	221	1.6%	247	13.6%	203	-6.6%	243	11.4%
ES	2638	4389	66.4%	4473	69.6%	2643	0.2%	2727	3.4%	2662	0.9%	2788	5.7%
FI	9726	6377	-34.4%	6264	-35.6%	8696	-10.6%	8584	-11.7%	8887	-8.6%	8717	-10.4%
FR	8958	10863	21.3%	10774	20.3%	8281	-7.6%	8192	-8.5%	8100	-9.6%	7966	-11.1%
GR	802	1658	106.8%	1434	78.9%	1294	61.3%	1070	33.4%	1477	84.3%	1142	42.4%
HU	636	460	-27.7%	459	-27.9%	446	-30.0%	444	-30.1%	309	-51.4%	308	-51.6%
IE	3965	3763	-5.1%	3437	-13.3%	4783	20.6%	4450	12.2%	5107	28.8%	4618	16.5%
IT	6710	9040	34.7%	9164	36.6%	6815	1.6%	6939	3.4%	6797	1.3%	6984	4.1%
LT	82	219	165.6%	166	101.6%	189	129.1%	136	65.1%	240	191.2%	161	95.2%
LU	1145	773	-32.5%	621	-45.7%	999	-12.7%	848	-25.9%	1055	-7.9%	828	-27.7%
LV	42	102	144.4%	92	120.2%	85	103.7%	74	77.8%	99	137.3%	84	101.0%
MT	.	18	.	18	.	.	.	.	.	.	.	.	.
NL	7492	3878	-48.2%	3915	-47.7%	4031	-46.2%	4074	-45.6%	3589	-52.1%	3644	-51.4%

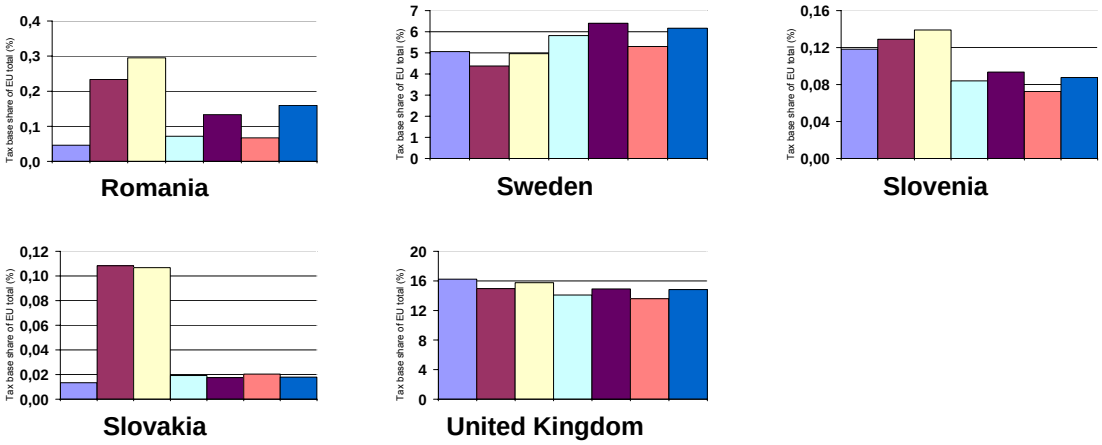
PL	2440	1861	-23.7%	2188	-10.3%	1883	-22.8%	2210	-9.4%	1705	-30.1%	2195	-10.1%
PT	1339	1359	1.5%	1349	0.7%	1258	-6.0%	1248	-6.8%	1272	-5.0%	1257	-6.1%
RO	49	240	391.5%	303	521.2%	73	50.4%	137	180.1%	69	41.5%	164	236.0%
SE	5338	4499	-15.7%	5094	-4.6%	5965	11.7%	6560	22.9%	5441	1.9%	6333	18.6%
SI	127	132	4.4%	143	12.6%	86	-32.0%	96	-24.4%	74	-41.3%	90	-29.0%
SK	14	111	685.7%	110	674.1%	20	39.2%	18	27.6%	21	47.7%	18	30.3%
UK	17162	15344	-10.6%	16184	-5.7%	14439	-15.9%	15279	-11.0%	13956	-18.7%	15215	-11.3%
Total EU	105573	102655	-2.8%	102655	-2.8%	102509	-2.9%	102509	-2.9%	102655	-2.8%	102655	-2.8%

Source: own calculations on the Amadeus database.

Figure A.1 Distribution of the cake by country (shares in total EU tax base): current tax base versus 'consolidation+apportionment'. Six different apportioning mechanisms, industrial groups

(Amadeus database)





- % of the total current tax base

- % of apportioned tax base (1/3 cost of employees+1/3 fixed tangible assets+1/3 sales by destination)

- % of apportioned tax base (1/6 cost of employees+1/6 N°of employees+1/3 fixed tangible assets+1/3 sales by destination)

- % of apportioned tax base (1/3 cost of employees+1/3 fixed tangible assets+1/3 sales by origin)

- % of apportioned tax base (1/6 cost of employees+1/6 N°of employees+1/3 fixed tangible assets+1/3 sales by origin)

- % of apportioned tax base (1/2 cost of employees+1/2 fixed tangible assets)

- % of apportioned tax base (1/4 cost of employees+1/4 N°of employees+1/2 fixed tangible assets)

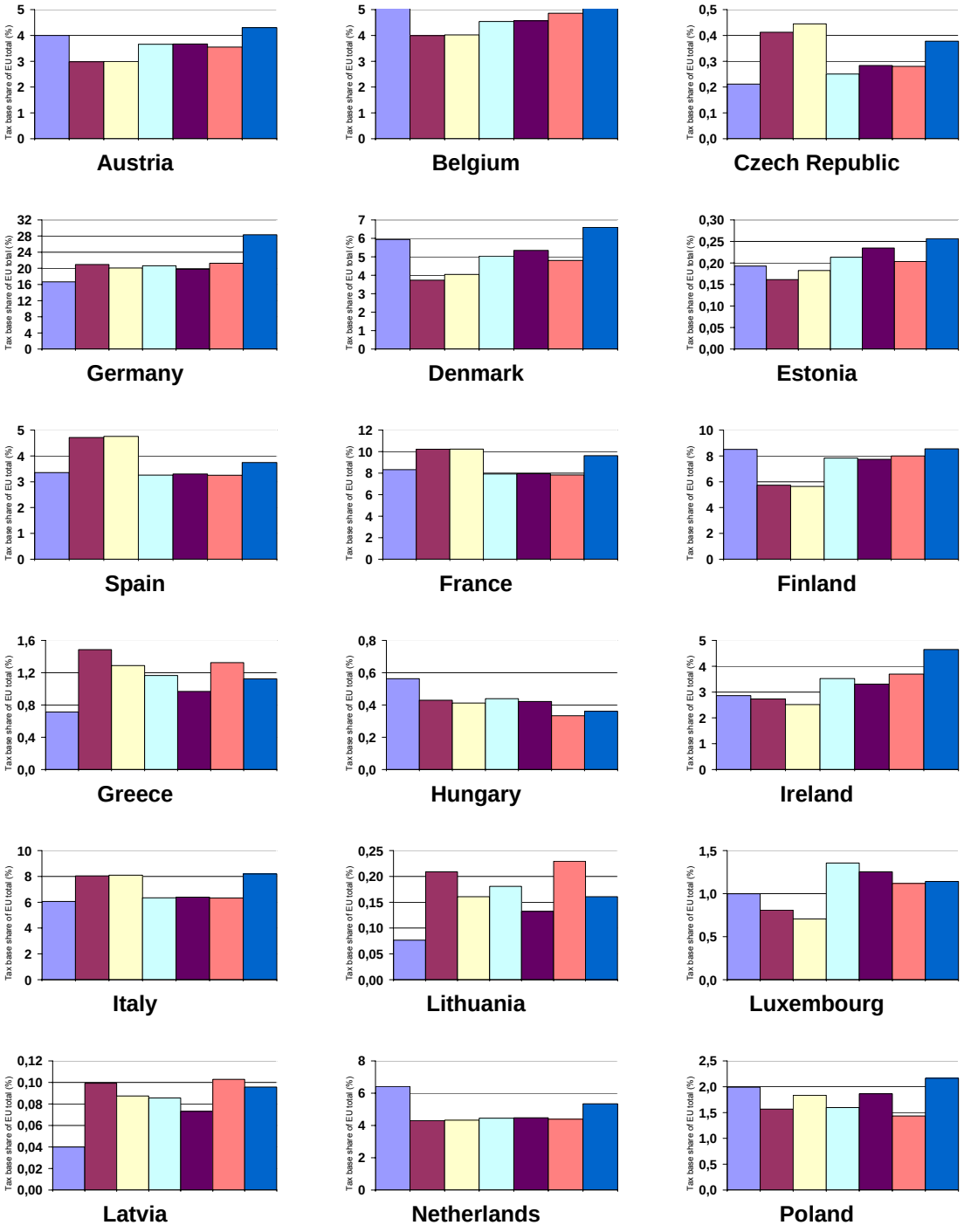
Table A.9 Comparison of the current tax bases with 'consolidation+apportionment' tax bases for different apportioning mechanisms, 2002-2005 (NPV 2005), in millions of Euros and % change, financial groups

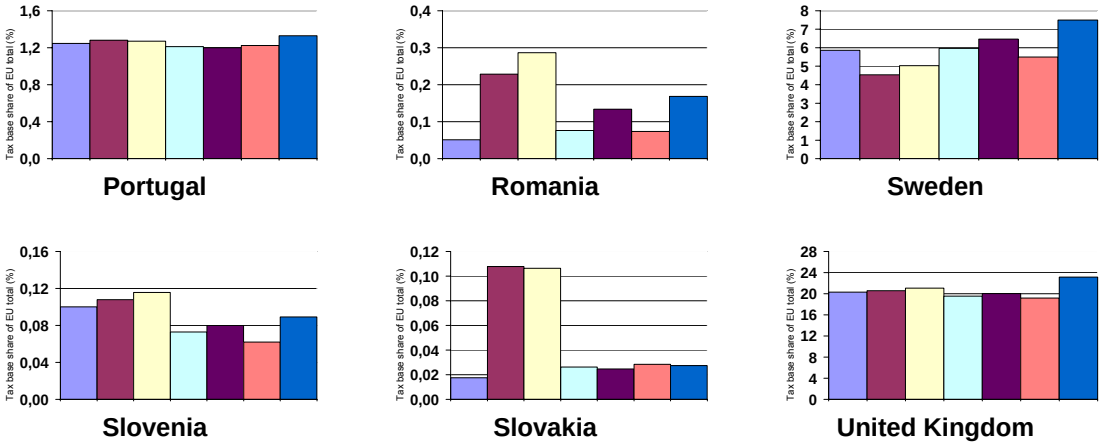
		2 1/3 'Cost of employees' – 1/3 'Assets'– 1/3 'Sales by destination'		4 1/6 'Cost of employees' – 1/6 'Number of Employees' - 1/3 'Assets' – 1/3 'Sales by destination'		3 1/3 'Cost of employees' – 1/3 'Assets'– 1/3 'Turnover'		5 1/6 'Cost of employees' – 1/6 'Number of Employees' - 1/3 'Assets' – 1/3 'Turnover'		1 ½ 'Cost of employees' – ½ 'Assets'		6 ¼ 'Cost of employees' – ¼ 'Number of Employees' – ½ 'Assets'	
Country	**Sample current tax base**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**	**'Consolidation + Apportionment' Tax Base**	**Relative change (%)**
AT	7641	3984	-47.9%	4050	-47.0%	5934	-22.3%	6000	-21.5%	4353	-43.0%	4453	-41.7%
BE	90195	52285	-42.0%	51024	-43.4%	55399	-38.6%	54139	-40.0%	71445	-20.8%	69554	-22.9%
BG	566	336	-40.6%	440	-22.3%	387	-31.6%	491	-13.2%	481	-15.1%	637	12.4%
CY	:	:	:	:	:	:	:	:	:	:	:	:	:
CZ	4224	2526	-40.2%	2393	-43.3%	3294	-22.0%	3160	-25.2%	3286	-22.2%	3086	-26.9%
DE	156367	159105	1.8%	165215	5.7%	143459	-8.3%	149569	-4.3%	129183	-17.4%	138348	-11.5%
DK	46175	32698	-29.2%	32760	-29.1%	40130	-13.1%	40192	-13.0%	42910	-7.1%	43003	-6.9%
EE	661	1968	197.7%	1726	161.1%	2131	222.3%	1889	185.7%	2901	338.9%	2538	284.0%
ES	92201	79314	-14.0%	77468	-16.0%	77872	-15.5%	76026	-17.5%	76751	-16.8%	73982	-19.8%
FI	8063	5365	-33.5%	5575	-30.9%	6620	-17.9%	6829	-15.3%	6954	-13.8%	7268	-9.9%
FR	89917	100846	12.2%	105198	17.0%	83054	-7.6%	87406	-2.8%	85861	-4.5%	92389	2.7%
GR	2603	1077	-58.6%	1283	-50.7%	1651	-36.6%	1856	-28.7%	1113	-57.3%	1421	-45.4%
HU	4364	3864	-11.5%	2820	-35.4%	5160	18.2%	4116	-5.7%	5422	24.2%	3857	-11.6%

IE	6887	4103	-40.4%	4674	-32.1%	7027	2.0%	7597	10.3%	5093	-26.0%	5949	-13.6%
IT	60213	66092	9.8%	64550	7.2%	61524	2.2%	59982	-0.4%	62044	3.0%	59730	-0.8%
LT	166	471	183.7%	1302	684.5%	538	224.4%	1370	725.2%	627	277.8%	1874	1029.1%
LU	7876	11328	43.8%	12033	52.8%	30541	287.8%	31246	296.7%	16199	105.7%	17256	119.1%
LV	493	1089	121.0%	809	64.2%	1142	131.8%	863	75.1%	1609	226.5%	1190	141.4%
MT	27	1	-97.6%	1	-97.6%	0	-99.8%	0	-99.8%	0	-100.0%	0	-100.0%
NL	51240	65195	27.2%	65159	27.2%	66480	29.7%	66444	29.7%	78384	53.0%	78330	52.9%
PL	2705	2312	-14.5%	2184	-19.3%	2938	8.6%	2810	3.9%	2116	-21.8%	1924	-28.9%
PT	12236	10251	-16.2%	9963	-18.6%	12033	-1.7%	11744	-4.0%	12260	0.2%	11826	-3.3%
RO	1611	1602	-0.5%	1469	-8.8%	1812	12.5%	1679	4.3%	2145	33.1%	1945	20.8%
SE	103706	57609	-44.4%	59545	-42.6%	73544	-29.1%	75480	-27.2%	70074	-32.4%	72978	-29.6%
SI	69	104	50.3%	69	-0.4%	222	222.4%	187	171.7%	145	110.3%	93	34.2%
SK	892	1127	26.4%	1126	26.2%	1431	60.5%	1430	60.3%	1644	84.4%	1643	84.2%
UK	401108	457604	14.1%	449393	12.0%	437728	9.1%	429517	7.1%	439257	9.5%	426941	6.4%
Total EU	1152206	1122257	-2.6%	1122257	-2.6%	1122257	-2.6%	1122257	-2.6%	1122257	-2.6%	1122257	-2.6%

Source: own calculations on the ORBIS database.

Figure A.2 Distribution of the cake by country (shares in total EU tax base): current tax base versus 'consolidation+apportionment'. Six different apportioning mechanisms, financial groups (Orbis database)





- % of the total current tax base

- % of apportioned tax base (1/3 cost of employees+1/3 fixed tangible assets+1/3 sales by destination)

- % of apportioned tax base (1/6 cost of employees+1/6 N°of employees+1/3 fixed tangible assets+1/3 sales by destination)

- % of apportioned tax base (1/3 cost of employees+1/3 fixed tangible assets+1/3 sales by origin)

- % of apportioned tax base (1/6 cost of employees+1/6 N°of employees+1/3 fixed tangible assets+1/3 sales by origin)

- % of apportioned tax base (1/2 cost of employees+1/2 fixed tangible assets)

- % of apportioned tax base (1/4 cost of employees+1/4 N°of employees+1/2 fixed tangible assets)

Table A.10 Net present value (NPV) of fiscal depreciation schemes

MSs (Ranked from Narrowest to Broadest Tax Base as in 'as-is')	**NPV Current systems (1)** **-2007**	**NPV CCTB-20 (2)**	Difference Current systems – CCTB-20 (2)-(1)	tax base change*	**NPV CCTB-25 (3)**	Difference Current systems – CCTB-25 (3)-(1)	tax base change*
Lithuania	49.53%	35.66%	13.87	27.48%	37.10%	12.43	24.63%
Latvia	46.17%	35.87%	10.3	19.13%	37.20%	8.97	16.66%
Slovenia	46.01%	41.31%	4.7	8.71%	42.90%	3.11	5.76%
Denmark	45.72%	35.69%	10.03	18.48%	36.70%	9.02	16.62%
Belgium	44.37%	32.48%	11.89	21.37%	33.50%	10.87	19.54%
Slovak Republic	44.30%	35.75%	8.55	15.35%	37%	7.3	13.11%
Romania	43.65%	39.51%	4.14	7.35%	41.10%	2.55	4.53%
Cyprus	41.78%	36.83%	4.95	8.50%	37.70%	4.08	7.01%
Greece	41.09%	32.58%	8.51	14.45%	33.70%	7.39	12.54%
Finland	40.46%	34.41%	6.05	10.16%	35.50%	4.96	8.33%
France	40.07%	31.27%	8.8	14.68%	32%	8.07	13.47%
Bulgaria	39.93%	34.68%	5.25	8.74%	35.90%	4.03	6.71%
Sweden	39.68%	32.14%	7.54	12.50%	33.10%	6.58	10.91%
Portugal	39.63%	32.89%	6.74	11.16%	34.10%	5.53	9.16%
Luxembourg	39.35%	32.55%	6.8	11.21%	33.50%	5.85	9.65%
United Kingdom	39.28%	33.29%	5.99	9.86%	34.30%	4.98	8.20%
Czech Republic	39.26%	35.74%	3.52	5.80%	37.10%	2.16	3.56%
Italy	38.04%	30.32%	7.72	12.46%	31.30%	6.74	10.88%
Poland	37.41%	38.04%	-0.63	-1.01%	39.40%	-1.99	-3.18%
Austria	36.83%	34.00%	2.83	4.48%	35.20%	1.63	2.58%
Ireland	35.79%	31.13%	4.66	7.26%	32.10%	3.69	5.75%
Netherlands	35.70%	31.99%	3.71	5.77%	32.90%	2.8	4.35%
Germany	35.67%	31.26%	4.41	6.86%	32.30%	3.37	5.24%
Hungary	35.32%	35.57%	-0.25	-0.39%	36.90%	-1.58	-2.44%
Spain	32.95%	31.72%	1.23	1.83%	32.60%	0.35	0.52%
Malta	28.79%	26.85%	1.94	2.72%	27.60%	1.19	1.67%
Estonia	0.00%	34.61%	-34.61	-34.61%	35.80%	-35.8	-35.80%
EU-27 Average	**37.90%**	**32.00%**	**5.9**	**9.50%**	**33.00%**	**4.9**	**7.89%**
Standard deviation	**8.90%**	**3.00%**			**3.20%**		

Notes: the NPV of fiscal depreciation schemes are expressed in % of the purchase price. The % change in the tax base is calculated subtracting the estimated NPVs from the normalized value of 1.

Source: calculations on the ORBIS database used to calibrate the CORTAX.

Table A.11 Comparison of the current tax bases with 'consolidation+apportionment' tax bases for different apportioning mechanisms.

Cross country distribution and change to the current tax base

	Sample current tax base	1/3 'Cost of employees' – 1/3 'Assets'– 1/3 'Sales by destination'		1/6 'Cost of employees' – 1/6 'Number of Employees' - 1/3 'Assets' – 1/3 'Sales by destination'		1/3 'Cost of employees' – 1/3 'Assets'– 1/3 'Turnover'		1/6 'Cost of employees' – 1/6 'Number of Employees' - 1/3 'Assets' – 1/3 'Turnover'		½ 'Cost of employees' – ½ 'Assets'		¼ 'Cost of employees' – ¼ 'Number of Employees' – ½ 'Assets'	
Country	Cross-country distribution	Cross-country distribution	Change	Cross-country distribution	Change	Cross-country distribution	Change	Cross-country distribution	Change	Cross-country distribution	Change	Cross-country distribution	Change
AT	4.00%	2.90%	-1.1	2.90%	-1.1	3.60%	-0.4	3.60%	-0.4	3.50%	-0.5	3.50%	-0.5
BE	5.60%	3.90%	-1.7	3.90%	-1.7	4.40%	-1.2	4.40%	-1.2	4.70%	-0.9	4.80%	-0.9
BG	0.00%	:	:	:	:	:	:	:	:	:	:	:	:
CY	:	:	:	:	:	:	:	:	:	:	:	:	:
CZ	0.20%	0.40%	0.2	0.40%	0.2	0.20%	0	0.30%	0.1	0.30%	0.1	0.30%	0.1
DE	16.70%	20.40%	3.7	19.50%	2.8	20.10%	3.4	19.20%	2.5	20.70%	4	19.40%	4
DK	5.90%	3.60%	-2.3	3.90%	-2	4.90%	-1	5.20%	-0.7	4.70%	-1.2	5.10%	-1.2
EE	0.19%	0.16%	-0.03	0.20%	0.01	0.20%	0.01	0.20%	0.01	0.20%	0.01	0.20%	0.01
ES	3.40%	4.60%	1.2	4.60%	1.2	3.20%	-0.2	3.20%	-0.2	3.20%	-0.2	3.20%	-0.2
FI	8.50%	5.60%	-2.9	5.50%	-3	7.60%	-0.9	7.50%	-1	7.80%	-0.7	7.60%	-0.7
FR	8.30%	9.90%	1.6	10.00%	1.7	7.70%	-0.6	7.70%	-0.6	7.60%	-0.7	7.70%	-0.7
GR	0.70%	1.40%	0.7	1.30%	0.6	1.10%	0.4	0.90%	0.2	1.30%	0.6	1.00%	0.6
HU	0.60%	0.40%	-0.2	0.40%	-0.2	0.40%	-0.2	0.40%	-0.2	0.30%	-0.3	0.30%	-0.3
IE	2.90%	2.70%	-0.2	2.50%	-0.4	3.40%	0.5	3.20%	0.3	3.60%	0.7	3.30%	0.7
IT	6.10%	7.80%	1.7	7.90%	1.8	6.20%	0.1	6.20%	0.1	6.20%	0.1	6.20%	0.1
LT	0.10%	0.20%	0.1	0.20%	0.1	0.20%	0.1	0.10%	0	0.20%	0.1	0.20%	0.1
LU	1.00%	:	:	:	:	:	:	:	:	:	:	:	:
LV	0.00%	0.10%	0.1	0.10%	0.1	0.10%	0.1	0.10%	0.1	0.10%	0.1	0.10%	0.1
MT	:	:	:	:	:	:	:	:	:	:	:	:	:
NL	6.40%	4.20%	-2.2	4.20%	-2.2	4.30%	-2.1	4.30%	-2.1	4.30%	-2.1	4.30%	-2.1
PL	2.00%	1.50%	-0.5	1.80%	-0.2	1.60%	-0.4	1.80%	-0.2	1.40%	-0.6	1.80%	-0.6
PT	1.20%	1.20%	0	1.20%	0	1.20%	0	1.20%	0	1.20%	0	1.20%	0
RO	0.10%	0.20%	0.1	0.30%	0.2	0.10%	0	0.10%	0	0.10%	0	0.20%	0
SE	5.90%	4.40%	-1.5	4.90%	-1	5.80%	-0.1	6.30%	0.4	5.30%	-0.6	6.10%	-0.6
SI	0.10%	0.10%	0	0.10%	0	0.10%	0	0.10%	0	0.10%	0	0.10%	0
SK	0.00%	0.10%	0.1	0.10%	0.1	0.00%	0	0.00%	0	0.00%	0	0.00%	0

UK	20.30%	20.00%	-0.3	20.50%	0.2	19.00%	-1.3	19.40%	-0.9	18.70%	-1.6	19.40%	-1.6
Total EU	100.00%	97.30%	-2.7	97.30%	-2.7	97.20%	-2.7	97.20%	-2.7	97.30%	-2.7	97.30%	-2.7

Source: own calculations on the Amadeus and ORBIS databases.

Annex 4. The European Tax Survey

In order to have a better understanding of the impact of taxation on companies' decisions and activities, and potential costs that may arise for the lack of coordination in this area at EU level, the European Commission's Taxation and Customs Union Directorate-General launched a European Tax Survey in 2003. 700 companies active in the EU participated in the Survey providing information on a large number of tax compliance related issues[107]. Company responses included quantitative estimates of their compliance costs and opinions on a number of issues related to tax systems.

Companies from the then EU-15 countries had the opportunity to participate in the survey and the 700 companies that participated cover 14 EU Member States. In order to correct for under- or over-representation of some countries the responses of companies were weighted in order to reflect the number of companies of the same size in their country. However, due to the relatively low number of responses, the results presented did not pretend to provide a fully representative picture of the EU. This did not preclude, however, drawing interesting and innovative insights from the considerable amount of information provided by the 700 companies involved in the survey.

The European Tax Survey contained both quantitative and qualitative questions, which are briefly summarised here.

Main results of the quantitative analysis

The first part of the study bore on a quantitative analysis of data concerning the perceived total absolute compliance costs of companies. These compliance costs consisted of company taxation and Value Added Tax (VAT) compliance costs in the EU and company taxation compliance costs outside the EU. The first stage of this quantitative analysis presented the weighted perceived compliance costs of the EU companies. The second stage presented a series of regression analyses.

* Compliance costs relative to sales are larger for SMEs than for large companies

The data provided by companies on their perceived compliance costs, taxes paid and sales produced the following main results:

- Weighted total absolute compliance costs were estimated at EUR 1.460.000 for large companies. This corresponds to 1.9% of taxes paid and at 0.02% of sales, respectively. The figures for large companies are consistent with figures presented in other studies.

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[107] The European Tax Survey was launched on the 1st of September 2003 and closed on the 31st of January 2004. In order to take part in this survey companies needed to register as a member of the European Business Test Panel (EBTP) set up by the Commission's Internal Market Directorate-general. The EBTP has been introduced to provide companies the opportunity to express their views on new legislative proposals and policy initiatives under consideration by the Commission. The European Tax Survey covered the 2141 EU companies that were registered at the time in the European Business Test Panel. Furthermore, not all registered companies in the EBTP responded to the questionnaire. At the closure date of the survey 700 EU companies across 14 Member States of the EU had responded (no companies from Luxembourg participated in the survey and for most of the topics, information for France was not available); that is, 32.7% of the registered EU companies participated in the survey. This figure is relatively high compared to participation rates in other international surveys of administrative burdens.

- Weighted total absolute compliance costs were estimated at EU 203.000 for Small and Medium-sized Enterprises (SMEs). This amount corresponds to 30.9% of taxes paid and to 2.6% of sales, respectively.

- Econometric regressions provided significant and recurrent evidence that total, VAT and company taxation compliance costs increase with company size and impose a higher relative burden on smaller companies. These results are in line with established findings in the economic literature.

* Cross-border activity leads to higher tax-related compliance costs for companies

Furthermore, the econometric analysis of the replies provided convincing evidence of the importance of cross-border activities for compliance costs and highlighted some of the variables that are correlated with compliance costs:

- Compliance costs are higher for companies with at least one subsidiary in another EU Member State compared with companies without subsidiaries in another Member State.

- Compliance costs increase with the number of subsidiaries abroad.

In the context of an analysis focusing on the impact of taxation on the functioning of the Internal market, these results need to be particularly stressed. The econometric results based on the data provided by the 700 EU companies participating in the European Tax Survey provided quantitative evidence that there is an additional cost for companies that are active cross-border in the EU. Significant results in this respect recurred in the various estimated models.

Main results of the qualitative analysis

The quantitative analysis was complemented by a qualitative analysis. The latter aimed to provide better information on the sample companies' opinions on a number of tax related issues and to facilitate the interpretation of the quantitative results.

Companies participating in the European Tax Survey were asked to indicate whether a number of tax requirements lead to difficulties. In relation to foreign-sourced income, the results highlighted that large companies with a branch or a subsidiary in another EU Member State have particular difficulties with regard to audits and litigations. Furthermore, transfer pricing appeared as a major tax obstacle. The estimates highlighted that transfer pricing is an important issue for 81.5% of large companies, in particular when it comes to dealing with documentation requirements, which are a difficulty for 81.9% of large companies.

To sum up, the evidence obtained from the responses provided in the European Tax Survey strongly indicates that **compliance costs of EU companies increase when they undertake cross-border activities in the EU**. These costs also increase when company activities increase, for example by setting up new subsidiaries in other EU Member States, ceteris paribus.

Annex 5. The basic elements defining the comprehensive policy options consisting in a common consolidated corporate tax base

The following provides for a description of the policy option for a **Common Corporate Tax Base (CCTB)**, and for an **optional Common Consolidated Corporate Tax Base** (**CCCTB**). The other policy options analysed in this Impact Assessment are also implicitly described here, by selecting or dropping the corresponding elements (i.e. a compulsory system would ignore the element of optionality).

5.1 **Common Corporate Tax Base (CCTB)**

The basic elements of a Common Corporate Tax Base.

* The rules for defining the common tax base

- There is no formal link between the base and International Accounting Standards/IFRS. The rules for the common tax base would therefore define the tax base itself but not the methodology for adjusting the accounts (sometimes called the 'bridge') to arrive at the tax base. That would not be possible as companies will potentially be starting from financial accounts prepared under 27 different national GAAP. However, it should be noted that the work for defining the common tax base has made constant reference to IAS/IFRS. Further, unless uniform treatment is explicitly provided for in the legislation, the tax base would be computed by reference to the general principles in the Directive.

- Resident taxpayers (i.e. EU-resident companies) shall be subject to corporate tax on their worldwide income. Non-resident taxpayers (i.e. third country companies) shall be subject to tax on business income attributable to their EU-located PE(s), as defined in the OECD Model (subject to existing treaty obligations with third countries).

- The tax base shall be calculated as revenues less exempt revenues, deductible expenses and other deductible items. As a matter of principle, the tax base would be calculated for each tax year.

- Revenues include proceeds of any kind, whether monetary or non-monetary. That is, not only trading income but also proceeds from disposals of assets and rights, interest, dividends and other profit distributions, royalties, subsidies and grants, gifts, compensation and ex-gratia payments.

- Deductible expenses shall mean all expenses incurred by the taxpayer for business purposes in the production, maintenance or securing of income, including costs of research and development or costs for raising equity or debt for business purposes. The definition is accompanied by an exhaustive list of non-deductible expenses.

- Fixed assets are all tangibles, those intangibles acquired for a value and financial assets where they are capable of being valued independently and are used in the business in the production, maintenance or securing of income for more than 12 months. Such assets would be depreciated. However, where the cost of its acquisition, construction or improvement is less than EUR 1,000, an asset would not be treated as a fixed asset and would be immediately deductible.

- Fixed assets with a useful life longer than 15 years shall be depreciated on an individual basis whereas short- to medium-term assets shall be pooled for depreciation purposes.

- Tangible assets not subject to wear and tear and obsolescence such as land, fine art, antiques, or jewellery and intangible assets with an indefinite life and financial assets shall not be depreciated unless the taxpayer demonstrates that they have permanently decreased in value; by exception, financial assets which, if disposed of, give rise to exempt gains would not be depreciable under any circumstances.

- Income and expenses shall be recognised on an accruals basis in the tax year to which they relate. Generally speaking, the expense should be established and the amount known in order to be accrued. However, when an amount arising from a legal obligation or a likely legal obligation relating to activities or transactions carried out in the current or previous tax years, such as potential warranty claims, can be reliably estimated, the expense would be deductible in the current tax year. An appropriate deduction shall be allowed for a bad debt receivable by the taxpayer when certain conditions are met.

- Income and expenditure shall be measured by reference to:

- the monetary consideration for the relevant transaction, such as the price of goods or services,

- the market price where the consideration for the transaction is wholly or partly non-monetary,

- the arm's length price in the case of transactions between related parties,

- the fair value of financial assets and liabilities held for trading.

- Tax base, income and expenses shall be measured in EUR or translated into EUR on the last day of the tax year.

- Inventories shall be valued on the last day of the tax year at the lower of cost and net realisable value. The total amount of deductible expenses for a tax year would be increased by the value of inventories at the beginning of the tax year and reduced by the value of inventories at the end of the tax year.

- CCTB losses shall be eligible for carry forward indefinitely. No loss carry-back shall be allowed and the oldest loses shall be used first. Transitional arrangements may be necessary for losses incurred under the National system where a CCTB would be mandatory.

- A CCTB would not involve a consolidation of tax results or the apportionment of the tax base using the three factor formula.

- A CCTB would not solve the major issues facing companies operating cross border such as loss relief, double taxation or remove barriers to the smooth functioning of the Internal Market.

5.2 Optional **Common Consolidated Corporate Tax Base (CCCTB)**

The **optional Common Consolidated Corporate Tax Base** aims to provide groups of companies with the option to apply a common set of rules across the EU for determining their taxable base, which would be consolidated for their EU-wide activities. The scheme consists of three basic elements: (i) optionality, (ii) common rules to determine the taxable income and (iii) consolidation and allocation of taxable shares by formulary apportionment (FA). The administrative framework envisaged for the CCCTB is also briefly described

* Scope

The Directive shall apply to EU companies listed in an annex which are subject to national corporate income taxes (or similar subsequently introduced taxes) listed in another annex. It would also apply to third country companies which have a similar form to EU companies and which maintain a taxable presence in the EU through a PE.

* Optionality

Under an optional system, eligible companies, resident in the EU, may opt for the common rules. Eligible companies not resident in the EU may opt in respect of their EU-located PEs. The option shall be valid for 5 years and be automatically renewed for successive periods of 3 years unless notice is given to the contrary. Companies that fulfil the requirements for consolidation must either all opt into the CCCTB or not apply the system at all.

* The rules for defining the common tax base

- There is no formal link between the base and International Accounting Standards/IFRS. The rules for the common tax base would therefore define the tax base itself but not the methodology for adjusting the accounts (sometimes called the 'bridge') to arrive at the tax base. That would not be possible as companies will potentially be starting from financial accounts prepared under 27 different national GAAP. However, it should be noted that the work for defining the common tax base has made constant reference to IAS/IFRS. Further, unless uniform treatment is explicitly provided for in the legislation, the tax base would be computed by reference to the general principles in the Directive.

- Resident taxpayers (i.e. EU-resident companies) shall be subject to corporate tax on their worldwide income. Non-resident taxpayers (i.e. third country companies) shall be subject to tax on business income attributable to their EU-located PE(s), as defined in the OECD Model (subject to existing treaty obligations with third countries).

- The tax base shall be calculated as revenues less exempt revenues, deductible expenses and other deductible items. As a matter of principle, the tax base would be calculated for each tax year.

- Revenues include proceeds of any kind, whether monetary or non-monetary. That is, not only trading income but also proceeds from disposals of assets and rights, interest, dividends and other profit distributions, royalties, subsidies and grants, gifts, compensation and ex-gratia payments.

- Deductible expenses shall mean all expenses incurred by the taxpayer for business purposes in the production, maintenance or securing of income, including costs of research and development or costs for raising equity or debt for business purposes. The definition is accompanied by an exhaustive list of non-deductible expenses.

- Fixed assets are all tangibles, those intangibles acquired for a value and financial assets where they are capable of being valued independently and are used in the business in the production, maintenance or securing of income for more than 12 months. Such assets would be depreciated. However, where the cost of its acquisition, construction or improvement is less than EUR 1,000, an asset would not be treated as a fixed asset and would be immediately deductible.

- Fixed assets with a useful life longer than 15 years shall be depreciated on an individual basis whereas short- to medium-term assets shall be pooled for depreciation purposes.

- Tangible assets not subject to wear and tear and obsolescence such as land, fine art, antiques, or jewellery and intangible assets with an indefinite life and financial assets shall not be depreciated unless the taxpayer demonstrates that they have permanently decreased in value; by exception, financial assets which, if disposed of, give rise to exempt gains would not be depreciable under any circumstances.

- Income and expenses shall be recognised on an accruals basis in the tax year to which they relate. Generally speaking, the expense should be established and the amount known in order to be accrued. However, when an amount arising from a legal obligation or a likely legal obligation relating to activities or transactions carried out in the current or previous tax years, such as potential warranty claims, can be reliably estimated, the expense would be deductible in the current tax year. An appropriate deduction shall be allowed for a bad debt receivable by the taxpayer when certain conditions are met.

- Income and expenditure shall be measured by reference to:

- the monetary consideration for the relevant transaction, such as the price of goods or services,

- the market price where the consideration for the transaction is wholly or partly non-monetary,

- the arm's length price in the case of transactions between related parties,

- the fair value of financial assets and liabilities held for trading.

- Tax base, income and expenses shall be measured in EUR or translated into EUR on the last day of the tax year.

- Inventories shall be valued on the last day of the tax year at the lower of cost and net realisable value. The total amount of deductible expenses for a tax year would be increased by the value of inventories at the beginning of the tax year and reduced by the value of inventories at the end of the tax year.

- CCCTB losses shall be eligible for carry forward indefinitely. No loss carry-back shall be allowed.

* Consolidation

A **2-part test** determines the entitlement to participation in the group. The deciding factors are **control** (>50% of voting rights) and either **ownership** (>75% of capital), or **rights to**

profits (>75% of rights giving entitlement to profit). EC-located branches (of third-country companies) are treated as individual group members in the allocation of their apportioned share and all inbound and outbound group payments. The 2 thresholds have to be met **throughout the year**. Otherwise, the company has to leave the group. There is also a **9-month minimum requirement** for being a group member (i.e. the taxpayer joins when the 2 thresholds are met but, if those are not reached for at least 9 months without interruption, the taxpayer will be treated as never having been part of the group).

- **Intra-group transactions are eliminated**, meaning that no pricing adjustments will be required in line with the 'arm's length' principle. Further, **no withholding tax or other source taxation** will apply to transactions within the same group.

- **Business reorganisations:**

A. Companies entering the group

The **underlying rationale** is to create a **bridge** between the national tax system and the CCCTB scheme. The aim is to strike a **balance** between MS **individual taxing rights** and the concept of a **consolidated shared tax base.**

(iii) **Pre-consolidation trading losses** are **ring-fenced** and carried forward to be set off against the taxpayer's apportioned share. The idea behind this is that the MS participating in the consolidated group do not have to bear the cost of losses already incurred;

(iv) **Hidden reserves:** the capital gains are **taxable upon realisation** and **shared** across the group;

The draft proposal contains **rules put in place to protect the taxing rights of individual MS** in connection with values largely built up under their national tax systems (i.e. before a company opted for consolidation);

A **proxy (i.e. R&D, marketing and advertising costs over a specified period)** is used to deal with the problem of **self-generated intangible assets.** Those are difficult to identify because they are not registered and do not appear separately in companies' accounts.

B. Companies leaving the group

(iii) **Group trading losses**: **nothing** is attributed to the **leaving company**; losses produced during the period of consolidation remain **at group level**;

(iv) **Hidden reserves:** capital gains are **taxable upon realisation** at the level of the **company leaving the group**;

The draft proposal contains **rules put in place to protect the consolidated tax base** in connection with values largely built up during the period of consolidation. Namely, since all group members have borne part of the cost linked to the creation of those values, they should be given a taxing right over the gain when realised.

A **proxy** is used to deal with the problem of **self-generated intangible assets:** the concern is that potential future profits may risk not **being taxed at all under the tax**

system that succeeds consolidation. Further, those profits will have been funded by the group in the sense that they gave rise to expense deductions shared by all MS over the past years.

C. Reorganisation within a group

(iv) **Trading losses** incurred during consolidation have **no impact** from a tax point of view;

(v) **Pre-consolidation** losses remaining unrelieved continue to be **ring-fenced**;

- **Hidden reserves: tax neutrality** is the overarching principle [coupled with certain **interventions** in the **allocation of taxing rights** within the group for the purpose of avoiding stripping the 'departing' MS of its taxing entitlement (if no branch is left in its territory as a result of the reorganisation)].

*Transactions between the group and entities outside the group

- **Relief by exemption** will be given for third-country located **branch income**; inbound **dividend** distributions; and the proceeds from the **disposal of shares** held in a company outside the group.[108]

- **Relief by credit** for inbound **interest** and **royalty** payments; the credit is **shared** among the group members according to the **formula** (without inclusion in the consolidated base).

- **Withholding taxes** charged on **outbound interest and royalties** will be **shared** among the group members according to the **formula** (without inclusion in the consolidated base); in the case of **dividends**, the withholding tax will **not** be **shared** (since, contrary to interest and royalties, dividends have not led to a previous deduction borne by all group companies).

- **Transactions between associated enterprises** will be subject to **pricing adjustments** in line with the **'arm's length'** principle.

*Anti-Abuse

- A **General Anti-Abuse Rule** (GAAR) is supplemented by measures designed to curb abusive practices of a cross-border nature:

(i) **Limitations** apply **to the deductibility of interest** paid to associated enterprises in a low-tax third country which does not exchange information with the Member State of the payer; specific rules define the concept of a 'low-tax third country';

(ii) **Controlled Foreign Companies** (CFCs)[109] legislation requires that the CFC, resident in a low-tax third country, is **controlled** at more than **50%** of its voting

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108 A number of **anti-avoidance provisions** apply to curb potentially abusive tax practices. An example is the '**switch-over clause**': **exemption switches over to credit** where the received dividends, the entity of which the shares are disposed of or the branch were subject to low or no taxation in the state of source. Specific rules define the concept of 'low taxation'.

109 For the purpose of the Draft Proposal, a CFC is a company under the 'definitive influence' of a group member which is tax resident in a low-tax third country without exchange of information. Further, the

rights, **owned** at more than **50%** of its capital and gives more than **50% profit entitlement** to the taxpayer. In addition, **30% of CFC income** should be '**tainted**'.

*Formulary Apportionment (FA)

- The consolidated tax base shall be shared through a formula, uniform to all Member States, between each individual taxpayer of a group and each EU permanent establishment which is situated in a different jurisdiction from that of the taxpayer's headquarters.

- The consolidated tax base of a group shall only be shared when it is positive.

- The FA comprises 3 equally-weighted factors (i.e. assets, payroll and sales)[110]:

(i) **Labour** is computed based on both **payroll** and the **number of employees** (each item counts for half);

(ii) **Assets** consist of **all fixed tangible assets**, meaning that intangibles and financial assets are excluded from the FA; the reason for this exclusion mainly lies with the mobile nature of those assets and the risks of circumventing the system;

(iii) **Sales** are taken into account to increase the taxing entitlement of the **MS of destination.**

To apportion the tax base to a given jurisdiction, the company must have a taxable presence (i.e. a PE or subsidiary).

*Administration

- The **'one-stop-shop'** practice will allow groups with a taxable presence in more than one MS to deal with **a single tax authority across the EU** (i.e. principal tax authority (PTA)), being that of the EU parent of the group termed 'principal taxpayer'. A consolidated tax return will be filed with that authority.

- The draft proposal contains procedural rules on various matters:

(i) How taxpayers should submit their **notice to opt** into the CCCTB and subsequently their **annual tax returns**;

(ii) Amended assessments shall be issued by the PTA, in agreement with the other concerned tax authorities, and shall be enforced by individual tax authorities.

(iii) A **ruling mechanism,** coupled with an **interpretation panel** and a scheme for the **exchange of information,** shall be operated by the competent authority (CA) in each group member;

CFC does not engage in genuine commercial activity which, in the Draft Proposal, is evidenced by the fact that it earns more than 30% of its income from certain sources identified as 'tainted' (e.g. passive income from interest and royalties coming from transactions with associated companies at more than 50%).

110 There is provision for **sector-specific formulae;** in practice, those are adjustments of the mainstream FA customised to serve features peculiar to certain industries (i.e. credit institutions, insurance undertakings, shipping, inland waterways transport and air transport and the oil and gaz industry).

(iv) **Audits** shall be **initiated and coordinated** by the PTA; CAs of other group members may also request the initiation of audits; the PTA and all relevant CAs shall have to agree, by joint decision, to the scope and content of an audit as well as the group members to be audited. The PTA shall be compiling the results of all audits carried out locally ahead of issuing an amended assessment;

(v) In terms of **dispute settlement,** disputes **between MS** shall be referred to **Arbitration** whilst those between **taxpayers and MS** shall be dealt with by an **Administrative Appeals Body** at a first instance and, at a second instance, shall have to be brought before the **national courts of the principal taxpayer**.

Annex 6. The European Tax Analyzer

The European Tax Analyzer is a model for calculation, analysis and comparison of tax bases size / effective company tax burden of different tax systems for a representative 'model' company. It follows the so-called model-firm approach which means that it uses real company data as a basis for the calculation (i.e. in the current version, data derived from balance sheets and profit and losses accounts is taken from the *Amadeus* database). With the help of a computer-based model, the development of this 'model' company is simulated over a period of ten years. Besides other business and economic variables –such as corporate planning, interest rates, etc- the relevant corporate tax provisions are taken into account for simulating the development of the 'model' company over the ten years period. The following *major tax base provisions* have been taken into account for implementing different tax systems in these simulations: depreciation allowances, valuation of inventories, production costs, costs for R&D as part of production costs, provisions for future pension payments, provisions for legal obligations (e.g. warranty claims), systems for the relief of dividends' double taxation and domestic loss relief. For the sake of cross-country and cross-tax system comparability, it is assumed that companies in each country or system show identical business data before any taxation. Due to this necessary assumption, any differences between pre and post-tax data in the model can be solely attributed to the different tax systems included for comparison (eg. different provisions defining the tax base).

In the version used for this study, the following *major tax base provisions* (unrelated to consolidation) have been taken into account for implementing different tax systems: depreciation allowances, valuation of inventories, production costs, costs for R&D as part of production costs, provisions for future pension payments, provisions for legal obligations (e.g. warranty claims), systems for the relief of dividends' double taxation and domestic loss relief.

The tax bases of these model companies have been measured, under the different tax scenarios, by the '*Future Value of the Tax Base*' concept: that is, the sum of all yearly tax bases as evaluated at the end of the simulation period of 10 years. The benchmark case has taken into account the EU Member States' tax provisions as the law stood for the fiscal year 2006. Table A.1 reports the values of such tax bases, alongside the % change when all provisions of the common tax base (CCTB) are implemented simultaneously, under two different rates applicable for pool depreciation on machinery and equipment, namely 20% and 25%[111].

[111] These results have been subject to a sensitivity analysis. It consisted in changing the economic model assumptions that serve to define the structure of the "model" company (for instance the capital, labour, inventory intensities or the profitability ratios) so as to characterise "model" companies for different sectors or subgroup of countries. The results show that in sectors such as energy, manufacturing, service/trade and transport the tax base would tend to increase even more in the event of a common tax base, while in sectors such as commerce and construction the new common tax base would not increase as much as for the average EU-27 "model" company (but still it would be broader than under most current national rules). Also, "model" companies have been characterised for the EU-15 (average company of the old Member States) and the EU-12 (average company of the new Member States). The results show that, on average, the broadening of the future value of the tax base in the EU-12 exceeds the EU-27 average broadening, while the opposite holds true for the EU-15 (where the broadening ranges, on average, below the EU-27 average). Finally, instead of taking the fiscal rules of 2006 as benchmark, the major tax reforms in five countries (France, Germany, Italy, Netherlands and Spain) which became effective in 2007 and 2008 have been implemented as "current national rules": as these reforms already resulted in a broadening of the tax base, the average increase of the tax base in the

Table A.12 Future Value of Tax Base in Case of National Tax Base Rules versus a Common Corporate Tax Base (Large and SME Companies)

Large model company				SMEs model company			
Member State (*)	Future Value Tax Base			Member State (*)	Future Value Tax Base		
	National rules (2006) **(Mio €)**	% Change CCTB-20%	% Change CCTB-25%		National rules (2006) **(Mio €)**	% Change CCTB-20%	% Change CCTB-25%
HU	41.7	12.3	0.72	HU	1.08	15.4	2.85
FR	55.43	9.8	1.98	FR	2.36	5.3	1.4
DE	74.05	4.8	1.85	DE	2.68	2.9	1.54
BE	78.55	3	0.34	AT	2.87	4.3	2.11
AT	81.19	5.9	2.45	BE	2.94	1.5	0.13
ES	85.05	4.6	1.89	ES	3.07	2.6	1.42
SL	89.26	8.6	2.95	SL	3.17	8.3	4.04
DK	91.36	3.8	1.31	DK	3.29	2.4	1.1
LU	93.42	3.7	1.52	LU	3.35	2.3	1.16
UK	93.45	0.2	-2.2	UK	3.36	0.7	-0.59
SE	93.6	4.4	2.19	SE	3.36	2.7	1.62
LT	93.7	11.1	3.58	LT	3.38	10.5	4.93
LV	93.84	11.3	3.75	IT	3.39	8.8	3.51
BG	94.64	13.1	5.58	LV	3.4	10.4	4.83
PT	94.67	10.6	3.28	GR	3.41	10.3	4.94
IT	94.72	8.8	1.63	NL	3.41	1.3	0.29
FI	95.06	9.4	2.16	PT	3.41	9.9	4.53
RO	95.16	4.9	2.4	FI	3.42	9.2	3.8
NL	95.66	2.2	0.14	BG	3.43	11.8	6.26
GR	95.9	9.1	1.96	RO	3.44	2.5	1.64
CZ	95.97	9.9	2.7	CZ	3.45	9.5	4.13
SK	96.26	9.8	2.5	PL	3.46	8.8	3.42
PL	97.46	7.7	0.48	MT	3.46	5.4	1.64
MT	98.18	3.8	-1.11	SK	3.46	9.5	4.03
IE	101.06	-1.5	-3.64	IE	3.54	-0.8	-1.82
EE	103.22	2.6	0.7	EE	3.6	1.8	0.57
CY	104.98	-6.7	-11.68	CY	3.74	-6.9	-10.68
EU-Ø	89.91	**6.2**	**1.09**	**EU-Ø**	3.22	**5.57**	**1.96**

event of a CCTB is smaller, compared to this new "current" situation, for both the EU-27 large and SME company.

(*) Ranked from the narrowest to the broadest tax base in 'as-is' case.

Source: simulations based on the European Tax Analyzer model.

Annex 7. The impact of corporate income tax reforms at the EU level on European business taxpayers: case studies from a sample of multinational groups operating in the EU

At the request of the European Commission TAXUD, Pricewaterhouse Coopers has completed a study on the impact of income tax reforms at the EU level on European business taxpayers. The study had two tasks: i) to quantify the impact of alternative tax scenarios on the size of multinationals' taxable profits and on their effective tax rates and ii) to quantify the impact of the alternative tax scenarios on the size of multinationals' tax related compliance costs.

The required analysis has been addressed through the collection of relevant data from a sample of multinational groups operating in the EU. In order to source the necessary inputs from groups and perform each part of the study a questionnaire was designed, which were completed by the participating multinational groups.

The sample: In carrying out this exercise, the contractor first sourced multinationals willing to participate in the exercise. Data has been collected from 21 multinational groups operating in the EU. Of the 21 multinational groups participating in the study, 13 multinationals participated in the taxable profits and effective tax rate study and 17 multinationals participated in the impact on corporate income tax compliance cost study. 9 multinationals participated in both parts of the study.

The participating multinational groups have operations across the 27 Member States and represent a number of economic sectors (banks, electricity, food retail, insurance, leisure goods, media & entertainment, oil & gas, pharmaceuticals, technology & hardware, telecommunications). All multinational groups, except one, requested complete anonymity regarding their participation and data.

The following describes in more detail the methodology followed for each of the two tasks of the study.

Simulation of effective taxable profits under different tax scenarios

One questionnaire was created to gather the relevant input data for the simulation of the taxable profits under different tax scenarios:

- the current national tax system

- a common corporate tax base (CCTB) and

- a common consolidated corporate tax base (CCCTB).

For this part of the study data was requested for two years, to reduce the impact of unusual circumstances in any given year. The two year base period was calendar 2005/2006 for all companies in the sample with the exception of one for which the base period was calendar 2006/2007. Electronic templates were sent to the Heads of Tax (Global or European) and data was gathered in the period from 9 April to 20 June 2008. Discussions were held with participating MNCs in conference calls and on a one-to-one basis to deal with any issues arising in connection with the completion of the templates. Help-lines were also available throughout the period and were well used. The data provided by MNCs has been sense

checked by PwC and queried where relevant to eliminate inconsistencies and amended where there were errors. However, PwC has not verified or validated the data provided and does not give any representations or warranties as to the accuracy of the results of the study.

For the base case (current system) companies were requested to provide data on their national GAAP (or IFRS where permissible) profits before tax (PBT or EBT), their national tax regime cash tax charges, and therefore their national GAAP/tax effective cash tax rate (ETRs). Companies were also requested to provide national taxable profits by country.

Companies were also requested to provide details of brought forward local tax losses and any national tax rules limiting the utilisation thereof e.g. where only a certain level (EUR 1 million) of losses can be fully used in the succeeding year (Germany) with only partial utilisation above EUR 1 million, or where there is a time bar on loss carry forward (e.g. Italy 5 years, The Netherlands 9 years, etc) limiting the use of their carry forward tax losses in the review period.

For the CCTB and CCCTB scenarios, companies were provided with a summary of CCCTB/WP57 (CCCTB: Possible Elements of a Technical Outline), CCCTB/WP60 (CCCT: Possible Elements of the Sharing Mechanism) and CCCTB/WP61 (CCCTB: Possible Elements of the Administrative Framework).

Companies were also provided with a template for each of the 27 EU countries, and requested to populate the template with the EBT of their companies/permanent establishments in each Member State (in aggregate for each Member State) and to enter the principal adjustments envisaged under WP57 to arrive at that country's element of that group's CCCTB base, prior to aggregation to effect cross-border consolidation and formulary apportionment of the resulting CCCTB taxable profit back to participating Member State companies.

Companies were also requested to provide data on employees (headcount and Euro amount of payroll), property (tangible assets: tax residue brought forward from national tax systems, and including loan book receivables for banks) and sales by destination.

In collating the results of the participating MNCs, two main methods have been used for this part of the analysis. The first, the 'non-aggregated' approach, weights all MNCs equally regardless of size. The second, the 'aggregated' approach, sums together the results of MNCs, thus giving greater weighting to larger MNCs.

The size effects on the *average* (where all MNCs are equally weighted) and in the *aggregate* tax bases under the CCTB and CCCTB options are reported in table A.3. Table A.4 shows the results on the distribution of the tax bases under the CCCTB with different apportionment factors.

Table A.13 Change (% points) in *average* and *aggregate* tax bases of sampled MNEs by MS under CCTB and CCCTB, compared to status-quo.

	CCTB			**CCCTB**	
MS	Change in **average** tax base	Change in **aggregate** tax base		Change in **average** tax base	Change in **aggregate** tax base
Belgium	3%	3%		1%	1%
Denmark	(0%)	(0%)		0%	0%
France	(1%)	(2%)		(5%)	(4%)
Germany	3%	4%		0%	(1%)
Greece	(0%)	(0%)		(0%)	(0%)
Ireland	1%	1%		(2%)	(4%)
Italy	1%	2%		(2%)	0%
Luxembourg	5%	1%		4%	1%
Netherlands	0%	(1%)		0%	(0%)
Poland	(1%)	(0%)		(1%)	(1%)
Portugal	0%	(0%)		0%	0%
Spain	(3%)	1%		2%	1%
Sweden	1%	(9%)		(0%)	(3%)
UK	2%	1%		8%	11%
Other MS	(0%)	(0%)		(0%)	(0%)
Total EU sample	**11%**	**3%**		**5%**	**(2%)**

Source: PWC survey

Table A.14 Changes in average tax base (with respect to as-is) by country under different weighting of CCCTB apportionment factors (average over 2 years)

	BE	DK	FR	DE	GR	IR	IT	LU	NL	PL	PT	ES	SE	UK	Other
CCTB	1%	0%	-2%	4%	0%	0%	2%	0%	-2%	0%	0%	-3%	0%	0%	0%
CCCTB SM1	1%	0%	-5%	0%	0%	-3%	-2%	3%	0%	-1%	0%	1%	0%	6%	0%
CCCTB SM2	2%	0%	-6%	0%	0%	-2%	-3%	3%	1%	-1%	0%	-1%	0%	6%	0%
CCCTB SM3	3%	0%	-6%	1%	0%	-3%	-2%	4%	0%	-1%	0%	1%	-1%	6%	0%
CCCTB SM4	1%	0%	-5%	0%	0%	-3%	-2%	3%	0%	-2%	0%	1%	-1%	7%	0%
CCCTB SM5	2%	0%	-6%	0%	0%	-2%	-3%	4%	2%	-2%	0%	-1%	0%	7%	0%

Average percentage distribution of apportionment factors within the EU

	BE	DK	FR	DE	GR	IR	IT	LU	NL	PL	PT	ES	SE	UK	Other co
Number of employees	8%	1%	14%	8%	1%	0%	6%	6%	7%	3%	1%	4%	4%	37%	0%
Payroll	8%	1%	13%	9%	0%	0%	5%	6%	8%	1%	0%	4%	4%	41%	0%
Fixed Assets	1%	1%	11%	16%	0%	4%	3%	6%	10%	1%	0%	3%	6%	38%	0%
Sales	3%	0%	12%	10%	0%	2%	6%	6%	6%	1%	0%	10%	5%	30%	0%

Sharing mechanisms (SM) are as follows:

- SM**1**: Number of employees (1/6), Cost of employees (1/6), Assets (1/3), Sales by Destination (1/3);
- SM**2**: Number of employees (1/4), Cost of employees (1/4), Assets (1/2);
- SM**3**: Number of employees (1/6), Cost of employees (1/6), Assets (1/3), Sales by Origin (1/3);
- SM**4**: Cost of employees (1/3), Assets (1/3), Sales by Destination (1/3);
- SM**5**: Cost of employees (1/2), Assets (1/2).

Source: PWC survey

Examination of compliance costs under different tax scenarios

Another questionnaire was created to estimate the corporation tax compliance costs of companies under different tax scenarios:

- the current national tax system

- a common corporate tax base (CCTB) and

- a common consolidated corporate tax base (CCCTB).

Quantitative survey

The questionnaire assisted MNCs to establish their cost of corporate income tax compliance, within the EU, under current national tax systems. MNCs were provided with a definition of compliance and a list of corporate income tax compliance activities. The questionnaire asks for data country by country within the EU, for each MNC, covering both internal time spent on tax compliance activities and feed paid to external providers for compliance services. Internal time includes dedicated tax resource plus resource in the shadow tax department (those in business functions such as accounting, finance, shared services and transfer pricing) who also undertake corporate income tax compliance activities.

The questionnaire provides MNCs with information showing how the list of compliance activities will change in each alternative scenario (CCTB or CCCTB). It then asked MNCs to provide data on how they expect the time spent and the cost of external advisors fees in relation to these activities to change under two further scenarios, a switch over to a fully consolidated CCCTB and alternatively to the more limited case, the CCTB, where there is no consolidation but an implementation of a common tax base calculation in each country. The study assumes full implementation of these scenarios across the 27 countries within the EU. A copy of the schedule defining and listing corporate income tax compliance activities and how they would change across the different scenarios is provided at the end of this Appendix.

The questionnaire also asked MNCs whether they expect to incur one off costs on the switch over to each alternative scenario.

The compliance cost time measures were later expressed in monetary terms. The method used for this analysis is a form of standard cost approach where a standard salary cost by grade of staff, and by country was applied. Most of the data were provided by Monks (a specialist unit within PwC which deals with employee rewards) and partly came from publicly available survey databases. The methodology used is considered to underestimate the costs involved, rather than to overestimate.

Electronic questionnaires were provided to MNCs, and data has been gathered in the period from 9 April to 3 July 2008. A total of 17 MNCs participated in the study, with subsidiaries in 26 out of the 27 Member States. They are considered to represent a reasonable cross section of business tax payers, in terms of size of business, industry sector and spread of activities across the EU. Among the 17 participants, 16 MNCs provided quantitative data on the base case scenario, 9 on the CCCTB and the CCTB scenario and 14 provided qualitative data.

Data was requested for one year, and participants were asked to assume a normal year of operation in the alternative scenarios, say year 3 of the new regime, rather than a start up year for CCTB or CCCTB in the alternative scenarios.

Three areas of activities (keeping the additional records required for tax purposes, transfer pricing documentation and preparing tax computations) are viewed by participants on average as the most time consuming activities with regard to the base case national tax systems.

On average for participants more than 30% of these external costs relate to each of the preparation of tax returns and transfer pricing documentation. Just over 15% relates to other international aspects of the tax regime.

The key findings from the response to the qualitative questions were that the majority of companies find the current regimes difficult. The areas which the greatest number of participants found difficult were transfer pricing (creating and maintaining transfer pricing documentation and facing several different audits on transfer pricing in member states), gathering data and calculating taxable profits under the tax rules in the different member states, contacting several different tax administrations and facing several different audits and litigation processes, and keeping up to date with the different tax laws and regulations.

The results for scenario 2 show an important difference between the predicted impact of time spent in the country where the principal taxpayer (PTP) and the principal tax authority (PTA) are located and in other countries. It is anticipated that the time in the PTP will increase by 15% and time spent in other countries will reduce by 23%. Overall, a reduction by 8% of time spent on tax compliance activities is anticipated.

Participants predicted a 6% reduction on average in fees paid to external providers for tax compliance services. The main reductions were expected to arise on tax return services and on international aspects of the tax regime (other than transfer pricing documentation). Participants also predicted an increase in licence fees for compliance software.

The qualitative results on the CCCTB show a mixed response from the participants. Seven see a CCCTB as less burdensome overall, five as more burdensome and one as equally burdensome. The areas which the greatest number of participants thought would be more burdensome are keeping records for and dealing with the formulary apportionment and gathering data and calculating taxable profits. The majority felt that keeping up to date with the rules and regulations, single filing of the tax return and dealing with a single tax authority, and applying for clearances and rulings would be less burdensome.

Qualitative survey

In addition to providing 'quantitative data', participants were asked a series of questions in relation to each of the base case and the two alternative scenarios to establish their views on the current system and the alternative proposals (ie 'qualitative data'). Electronic questionnaires were provided to MNCs, and data has been gathered in the period from 9 April to 3 July 2008. Participants were asked to identify the following tax compliance activities as 'An important difficulty', 'A moderate difficulty' or 'Not a difficulty' under the existing system:

- Creating and maintaining the additional records required for tax purposes in the several different EU Member States

- Creating and maintaining the documentation required for compliance with transfer pricing rules in the several different EU Member States
- Gathering data and calculating taxable profits under the tax rules in the several different EU Member States
- Multiple filing of the tax returns for the several different EU Member States
- Contacting several different tax administrations or tax officials from the several different EU Member States
- Facing several different audits and litigation processes of the several different EU Member states
- Facing several different audits relating to transfer pricing in the different EU Member States
- Dealing with intra-EU procedures for resolution of transfer pricing disputes
- Applying for clearances and rulings from the several different EU Member States is:
- Keeping up to date with the different tax laws and regulation in the several different EU Member States
- Calculating the tax numbers required for financial reporting using the tax rules of the several different EU Member States
- Implementing our transfer pricing policy to ensure that transactions with relevant policies in the different EU Member States are carried out at arm's length
- Overall, the costs of dealing with several different national corporation tax systems within the EU

Afterwards, participants specified whether the following activities would be '**more burdensome', 'less burdensome' or 'equally burdensome'** in a CCCTB or CCTB scenario as in the current system.

- Creating and maintaining the additional records required for tax purposes for a common consolidated tax base across the EU
- Creating and maintaining the documentation required for the formulary apportionment
- Gathering data and calculating taxable profits under a CCCTB (or CCTB) system
- Single filing of the tax return for all EU income
- Contacting a single 'principal tax administration for all EU activities

- Audits and the procedures for resolving disputes with tax administrations concerning all EU income
- Dealing with the formulary apportionment of profits across the EU
- Dealing with common procedures for the resolution of profits' allocation disputes
- Applying for clearances and rulings
- Keeping up to date with a single set of tax laws and regulations across the EU
- Calculating the tax numbers required for financial reporting using the tax rules for a CCCTB (or CCTB)
- Overall, the requirements of a CCCTB (or CCTB) system

For both parts of the survey briefings were held with participating MNCs in conference calls, and on a one to one basis, to deal with any issues arising in connection with the completion of the questionnaires. Help-lines were also available throughout the period and have been well used. Findings from the study are factual, and represent the views of business based on the assumptions given to them in the questionnaire and in supplementary relevant documents. The data provided by MNCs has been sense checked and queried where relevant to eliminate inconsistencies and amended where there are errors, for example where data has been incorrectly entered in the wrong data box. However, PwC has not verified or validated the data provided and does not give any representations or warranties as to the accuracy of the results of the study.

Impact of corporate income tax reforms at EU level on compliance costs of European business taxpayers

Corporate income tax compliance activities and what is expected to change

Compliance activities include all activities relating to complying with tax rules and obligations of EU member states. Compliance activities do not include (i) keeping tax books or records which are required for financial accounting or reporting purposes or preparing the tax entries for the accounts; (ii) tax planning or mitigation; (iii) tax advice (for example to the business or on transactions) or (iv) management of the tax team.

A list of corporate income tax compliance activities under scenario 1, the base case, is given below, together with how these would change in the alternative scenarios. Participants are asked to provide data for each of the 9 areas of activity.

Scenario 1: Base case - current national tax systems	**What will change - Alternative scenario 2 - CCCTB**	**What will change - Alternative scenario 3 - CCTB**
1) Record Keeping		
• Creating and maintaining any additional records required for tax purposes only. (Does not include records which are created and maintained primarily for accounting purposes)	• Records must be kept in Euros, requiring translation for non Euro countries in the EU.	• Records must be kept in Euros, requiring translation for non Euro countries in the EU.
• Creating and maintaining records for tax depreciation	• Records required for tax depreciation for a single pool of assets within the EU (if no long term assets with a life of 15 years or more).	• Records required for a single pool of assets per country (if no long term assets with a life of 15 years or more).
2) Transfer pricing documentation		
• Creating and maintaining documentation required for compliance with transfer pricing, including transfer pricing policy,	• No transfer pricing documentation will be required for transactions with consolidated companies within the EU.	• No change to scenario 1, base case.

economic analysis and legal agreements.	• However there will be additional record keeping requirements for the formulary apportionment 1) Head count and payroll by country 2) Tax net book value of tangible property 3) Third party sales by destination country within the EU	
3) Preparation of tax computations		
(Different rules in 27 Member States) • Gathering data for tax purposes from existing records	• Gathering data for the CCCTB system	• Gathering data for the CCTB system
• Calculating taxable profit • Calculating tax depreciation	• Single calculation of EU taxable profits including tax depreciation and consolidating country profits and losses • Calculations of the apportionment of the taxable profits between taxable entities and member states.	• Country by country calculation of taxable profits and of tax depreciation but using EU wide set of rules. No cross country consolidation except where available under current rules in scenario 1.
• Application of controlled foreign company rules	• Elimination of controlled foreign company rules within the EU. Single set of rules for outbound from the EU	• Elimination of controlled foreign company rules within the EU. Single set of rules for outbound from the EU.

• Application of thin cap rules	• Common thin cap rules within the EU. Single set of rules for inbound from outside the EU.	• Common thin cap rules within the EU. Single set of rules for inbound from outside the EU.
• Application of transfer pricing rules	• Elimination of transfer pricing rules for consolidated companies within the EU. Country by country rules for transactions with related parties outside the EU.	• Country by country rules for all transactions with related parties, inside and outside the EU.
• Application of the rules relating to the taxation of foreign profits	• Elimination of taxation of foreign profits within the EU. Exemption for foreign profits outside the EU for shareholdings of 10% or more (or credit if low tax). • Credit system within or outside of the EU for shareholdings of less than 10%. Credits are apportioned through the formulary apportionment. Country by country streaming for credits in respect of countries outside the EU.	• Elimination of taxation of foreign profits within the EU. Exemption for foreign profits outside the EU for shareholdings for 10% or more (or credit if low tax). • Credit system within or outside of the EU for shareholdings of less than 10%. Country by country streaming for credits in respect of countries outside the EU.
• Making tax claims and elections	• Self assessment under single set of rules, no tax claims and elections required. • Calculations required relating to the set off of pre CCCTB losses continue to	• Self assessment country by country under single set of rules, no tax claims and elections required. • Calculations required relating to the set off of pre CCTB losses continue to be required under

• Calculations relating to set off of losses • Calculations relating to national group consolidation	be required under national tax rules. • No calculations for national group consolidation required. • Apportionment calculations required for companies joining and leaving the CCCTB group.	national tax rules. • No change to scenario 1, base case.
4) Tax returns and payments		
(Different deadlines in different Member States) • Completing the tax return (multiple filing) • Submitting the return form (for each group member) • Making corporate income tax payments including payments on account • Withholding tax at source on payments made.	• Single consolidated tax return filed with Principal Tax Authority for the entire CCCTB group ('one stop-shop') • Payment of corporate income tax by country. • No requirement to withhold tax on payments within the EU. No change to current requirements to withhold tax on payments outside the EU.	• Single tax return filed by country • Payment of corporate income tax by country • No requirement to withhold tax on payments within the EU. No change to current requirements to withhold tax on payments outside the EU.
5) Dealing with the tax		

authorities		
(Different processes in the 27 MS) • Dealing with queries raised by tax authorities • Dealing with tax audits and investigations • Resolution of tax disputes including appeals and tax litigation.	• Verification of the consolidated tax return by a Principal Tax Authority • Central EU ruling body gives decisions on application of the new rules. • New administrative appeal process with clear and common deadlines against decisions of the Principal Tax Authority • Judicial appeals governed by the rules of the member state of the principal tax authority.	• Central EU ruling body gives decisions on application of the new rules for calculations of taxable profits. • Otherwise no change to Scenario 1, base case. • No change to scenario 1, base case.
6) Mutual agreement procedures on transfer pricing		
• Competent authority and / or arbitration on transfer pricing	• Competent authority and arbitration procedures eliminated within the EU. Outside the EU they remain as Scenario 1, base case.	• No change to Scenario 1, base case.
7) Clearances and rulings		
• Application for advance clearances and rulings on the tax treatment of	• Advance clearances and rulings, just once for the whole group of consolidated companies not	• Advance clearances and rulings, just once for all the CCTB companies

specific items • Advance pricing agreements	applicable within the EU. • APAs not applicable within the EU. APAs for transactions with outside the EU will involve the Principal Tax Authority.	within the EU. • No change to procedures for Advance Pricing agreements.
8) Learning and education		
(Up to 27 different tax systems) • Keeping up to date with changes to tax rules and regulations • Training staff on tax rules and obligations	• EU wide common tax system with less frequent changes than with 27 National Tax Systems.	• EU wide common rules for calculating taxable profits with less frequent changes than with 27 National Tax Systems.
9) Any other compliance activities (please specify)		

Annex 8. The tax experts' study on tax compliance costs for businesses going cross-border – comparison of current situation and a situation after reform at EU level of corporate income tax systems

8.1 Objective and scope of the study

The study has provided empirical evidence on the possible impact on the corporate income tax compliance costs of a reform at EU level of the corporate income tax system. It has identified and estimated the corporate tax compliance costs for a representative large and medium standard company located in the EU that enters a market by making a new investment through the set-up of a representative medium subsidiary in another Member State under the following three different scenarios:

– The current situation with 27 different national tax codes, current administrative framework and practices

– The scenario where a common corporate tax base is in place in all the 27 Member States (CCTB)

– The scenario where a common consolidated corporate tax base is in place in all the 27 Member States (CCCTB)

The study has focused on the following corporate tax compliance costs for entering the territory of another Member State through the establishment of a new medium sized production entity.

– One-off costs related to learning the new corporate tax code or search costs for hiring a new tax adviser (only relevant in the current situation scenario);

– The re-occurring costs to comply with the annual corporate tax filing requirements:

1. record keeping for corporate tax purposes only
2. transfer pricing documentation
3. preparation of corporate tax computations
4. filing of tax returns and making corporate tax payments and prepayments
5. dealing with the tax authorities during corporate tax audits
6. mutual agreement procedures on transfer pricing
7. advanced clearances and rulings
8. learning and education of tax code changes
9. any other cross-border corporate tax compliance formality

These one off and the re-occurring costs have been estimated under the three different scenarios featuring the current so-called ACT, the CCTB and the CCCTB regime at the level of the representative parent and subsidiary. It has been assumed that the parent company is

already working for some years under the respective tax codes. This means that no one-off costs for the switch to the CCTB or CCCTB should be taken into account, when the tax experts estimate the related compliance time and costs.

8.2 Methodology

The study has been based on the assessments of tax experts who are part of the European network of Deloitte. From their contacts with the tax business Deloitte tax experts are aware of the internal costs of an enterprise when fulfilling corporate tax compliance. Moreover, Deloitte, as one of the major service providers in corporate tax, including corporate tax compliance, was able to provide a fair estimate of corporate tax compliance costs that are outsourced under the three different scenarios.

The ***defining*** of a large and a medium sized representative standard parent company and one medium representative subsidiary with their relevant characteristics has been done by Deloitte Belgium for the entire territory of the European Union. They involved experts from Corporate Finance and Transfer Pricing teams of Deloitte.

The definition of the representative large and medium parent company and the representative medium subsidiary included a simplified profit and loss account and a balance sheet. Both have been computed on the basis of the Amadeus database. The individual company datasets have been grouped applying the criteria of the European Commission recommendation for the delineation of small-, medium- and large-sized companies concerning turnover, number of employees and balance sheet total. For these data subsets the median is calculated for each item in the profit and loss account and the balance sheet. Additionally the definition of the representative investment in a new subsidiary included a description of the relations between the parent and the subsidiary that trigger tax compliance obligations.

In order to avoid asking tax experts in all 27 Member States and with respect to the principle of proportionality and the limited financial resources that could be used within the EU budget for this study, only **6 Member States were selected** to be investigated. As wage levels for the taxation clerks and experts fulfilling the compliance obligations are an important determinant of compliance costs, it was assumed that the main criterion to select the relevant countries for the study would be to cover countries with different wage levels of intergroup and external tax advisers. In addition, the size of inbound and outbound FDI was another important factor to select the relevant countries for the study.

Thus, the large and medium parent company were assumed to be located in

- high wage country: FR;
- medium wage country: ES;
- low wage country: HU;

The medium sized subsidiary were assumed to be located in

- high wage country: DE;
- medium wage country: EL;

– low wage country: PL

The ***estimation of corporate tax compliance costs*** in the three tax scenarios has been split into two steps: the measurement of corporate tax compliance time and the monetarisation of total compliance time into compliance costs.

I) The ***measurement of compliance time*** for the different corporate tax compliance activities has been done for a large/medium representative parent company located in France, Spain or Hungary making an investment in a medium subsidiary respectively located in Germany, Greece or Poland. The measurement was performed in these 6 Member States on the basis of expert assessment. Deloitte Belgium prepared a questionnaire and an additional learning document that explains the proposed single set of tax base rules in the CCTB and CCCTB tax scenarios mainly based on the elements described in CCCTB WP57, CCCTB WP60 and CCCTB WP61 issued by the Commission services.

In addition to the compliance time the experts estimated to which share the different compliance activities would be done by external companies (outsourced) or internally. For the internal activities they estimated in addition which of the activities were performed across low/medium/high skill workers.

The measurement has been done at the **level of the parent** for the following investment flows.

- *Baseline investment**:***

  The corporate tax compliance time was measured at the level of a parent located in France (FR), Spain (ES) or Hungary (HU), which makes an investment in a subsidiary located in Greece (EL).

- *Alternative investment:*

  In a second step, the compliance time of the parent was measured for sensitivity analysis under an alternative investment scenario. The purpose of this sensitivity analysis was to assess whether the location of the investment has any bearing on corporate tax compliance time, that is, it should answer the question: does the time needed for corporate tax compliance change depending on where the parent company invests? In this alternative scenario the parent, located in FR, ES and HU was assumed to make an investment in subsidiaries located in Germany and Poland, instead of Greece.

Furthermore, the measurement has been done at the **level of the subsidiary** for the following investment flows.

- *Baseline investment:*

  In the subsidiary baseline investment scenario the corporate tax compliance time was measured for a multinational group with a medium-sized subsidiary located in Germany (DE), Greece (EL) and Poland (PL) taking in consideration that the parent entity, large or medium sized, is located in Spain (ES).

- *Alternative investment:*

Similar to the case above, the purpose of this sensitivity analysis was to assess whether the location of the parent has any bearing on the corporate tax compliance time of the whole group, that is, it should answer the question: does the time needed for corporate tax compliance for the whole group change depending on where the parent company is located? Thus, in this alternative scenario, the subsidiaries located in DE, EL and PL will be held by a parent, large or medium size, located in FR and HU, instead of ES.

Additionally, the measurement provided further sensitivity analysis based on additional questions:

- What would be the changes if the parent and the subsidiary belonged to different industrial sectors and

- What would be the changes in compliance time if the investing company was just a single company.

II) The ***monetarisation*** of the total compliance time in the baseline and alternative investment flows was done by multiplying it with the appropriate wage level. It considered which share of the total compliance time would be outsourced and which share would be dealt internally in the group. The country experts determined the average wage level for the external advisors per hour. For the in-house part the experts determined how the compliance tasks are allocated to low-medium-high skill employees in the parent or subsidiary in order to apply appropriate wage levels based on statistical evidence (which one?) .

The measurement data of time and cost for the 10 corporate tax compliance task at the level of the parent and the subsidiary was consolidated by summing up the compliance time of the parent and the subsidiary to obtain the result on a group level for all three scenarios. For the analysis of the CCCTB it was assumed that the parent entity would file the consolidated return and has the contacts with Principal Tax Authority. Under this assumption the subsidiary would only perform residual corporate compliance tasks. For sensitivity measurement purposes also data from the respective country teams were requested in case the aforementioned functions would be switched between the parent and the subsidiary.

Annex 9. The assessment of the possible administrative costs for national tax administrations in the EU linked to the implementation of reforms at the EU-level of corporate taxation systems

Member States – through the CCCTB Working Group- were asked to answer to this "**ad hoc questionnaire**" prepared by the Commission Services. This questionnaire invited national tax administrations to provide information on the present size of tax-related administrative costs as well as the variation of different types of administrative costs following the implementation of the different policy options. The methodology used is in line with the model of 'assessment of administrative costs of legislation', in this case for public authorities, as described in Annex 10 of the Impact Assessment Guidelines.

EUROPEAN COMMISSION
DIRECTORATE-GENERAL
TAXATION AND CUSTOMS UNION
Analyses and tax policies
Analysis and coordination of tax policies

Brussels, 11 September 2007
TAXUD E1, AAG/AB

Annex to CCCTB\WP\058\doc\en
Orig. EN **DRAFT**

THE ASSESSMENT OF THE POSSIBLE ADMINISTRATIVE COSTS

FOR NATIONAL TAX ADMINISTRATIONS IN THE EU

LINKED TO THE IMPLEMENTATION OF REFORMS AT THE EU-LEVEL OF CORPORATE TAXATION SYSTEMS

Explanatory note

The European Commission intends to tackle most of the existing cross-border tax obstacles within the single market by proposing a new system of corporate taxation in the EU, according to which a new set of rules will govern the calculation of firms' corporate tax bases. In accordance with current practice, such a Commission legislative proposal has to be accompanied by an Impact Assessment (IA)[112], which should provide a description of the existing company tax obstacles, define a number of objectives to be achieved by the tax reforms, subject to analysis several alternative policy options that could address the existing problems and assess their respective economic, environmental and social impacts. In that regard, the possible impact on the tax administrations' costs of each of the alternative policy options for reform (compared to the current situation) is an important effect that the IA exercise should try to evaluate.

[112] SEC(2005) 791, 15.06.2005, with March 2006 update.

The following scenarios are proposed as possible alternative tax policy options that could be subject to analysis in the IA: (i) an optional Common Corporate Tax Base (CCTB) for which only (but all) 'EU multinational groups' are assumed to opt, (ii) a CCTB that all EU-based companies subject to corporate taxation are assumed to adopt, (iii) an optional Common Consolidated Corporate Tax Base (CCCTB) for which only (but all) groups qualifying for consolidation are assumed to opt, and (iv) a CCCTB that all EU-based companies subject to corporate taxation are assumed to adopt[113].

In order to assess the impacts of each of these policy options on tax administrations' costs, compared to the current situation or 'no change' scenario, the following draft questionnaire has been designed. It is intended to collect from tax administrations information on the administrative costs that the 27 Member States' (MS) national tax administrations may incur/save following the implementation of a new system of calculating the corporate tax bases, as defined by the previous alternative policy options.

We should be grateful if you would answer as many of the questions as possible. No individual replies will be published or made available to the public. Costs should be representative for the whole of your administration and the currency used should be indicated. Please use separate sheets of paper if you wish to make further comments.

You are invited to submit your comments to the European Commission no later than (date)……., preferably by e-mail to:

European Commission

DG Taxation and Customs Union

Contact person: Mr./Ms. XXX

E-mail: XX

Phone: XX

[113] The definitions of 'EU multinational groups' and 'groups qualifying for consolidation' can be found in CCCTB/WP057 and CCCTB/WP058.

DRAFT QUESTIONNAIRE ON THE POSSIBLE ADMINISTRATIVE COSTS

FOR NATIONAL TAX ADMINISTRATIONS IN THE EU

LINKED TO THE IMPLEMENTATION OF REFORMS AT THE EU-LEVEL OF CORPORATE TAXATION SYSTEMS

Contact information:

Country:….....…….....

Name of national tax administration:….....…….....

Contact person (in case of technical questions):….....…….....……

Tel. (incl. country code):…..... .....

E-mail:…..... .....

Q.1. Which is the currency that you will use when giving cost estimates?.....

*** GENERAL ASSESSMENT OF TAX ADMINISTRATION COSTS LINKED TO THE CURRENT SYSTEM OF CORPORATE TAXATION**

Q.2. Can you estimate in monetary terms the average <u>annual</u> costs of running the current national system of corporate taxation in your country (during the period 2002-2006)?

ANNUAL LABOUR COSTS			**ANNUAL OVERHEAD COSTS (equipments, supplies, etc)**	**TOTAL ANNUAL COSTS**
N° of employees (*)	Average annual salary	TOTAL LABOUR COSTS		

(*) Number of employees (in full-time equivalents) who work directly and indirectly in the corporate taxation section currently (both federal and subcentral levels).

*** ASSESSMENT OF TAX ADMINISTRATION COSTS LINKED TO THE ALTERNATIVE POLICY OPTIONS FOR TAX REFORM**

Q.3. <u>One off-costs</u> (i.e. costs that occur only once, at the implementation stage when switching to the relevant alternative policy option): Choose the one-off actions from the list below that you think would occur with the corresponding tax reform and give a cost estimate for each of the alternative policy options (if possible, with a breakdown between labour costs and other costs). For those actions that you do not expect to occur mark "N.A."

<u>One-off actions</u>	**LABOUR COSTS**	**OTHER COSTS**	**TOTAL COSTS**

A) Familiarising/training employees and companies with the new tax system 1) CCTB: only (but all) EU multinational groups opt in 2) CCTB: all EU-based companies adopt it 3) CCCTB: only (but all) EU groups qualifying for consolidation opt in 4) CCCTB: all EU-based companies adopt it			
B) Adaptation/construction of informatics systems 1) CCTB: only (but all) EU multinational groups opt in 2) CCTB: all EU-based companies adopt it 3) CCCTB: only (but all) EU groups qualifying for consolidation opt in 4) CCCTB: all EU-based companies adopt it			
C) Other significant one-off costs: * ……. 1) CCTB: only (but all) EU multinational groups opt in 2) CCTB: all EU-based companies adopt it 3) CCCTB: only (but all) EU groups qualifying for consolidation opt in 4) CCCTB: all EU-based companies adopt it * …… 1) CCTB: only (but all) EU			

multinational groups opt in 2) CCTB: all EU-based companies adopt it 3) CCCTB: only (but all) EU groups qualifying for consolidation opt in 4) CCCTB: all EU-based companies adopt it			

If you have additional comments on the above, please elaborate here:

……
……
……

Q.4. Do you think that the one-off costs associated with the alternative policy options would depend on the number of companies opting for the reform?

NO	YES, to a small extent	YES, to certain extent	YES, to a large extent

Further comments on the above:

……
……

Q.5. <u>Recurring -costs</u> (i.e. costs that are repeated in subsequent years). **The following tries to assess just *those categories of recurring costs that would be affected* by a switch to any of the alternative policy options (either because they would increase or decrease with respect to the current situation). The average[114]/expected[115] <u>annual</u> <u>amount of each of these categories of recurring costs should be reported for each of the policy options</u>, including the 'no change scenario'** (if possible, with a breakdown between labour costs and other costs). This will enable to calculate the additional costs or savings of each alternative option compared to the current system.

[114] In the 'no change' scenario for the period 2002-2006.
[115] In the alternative policy options.

Categories of recurring-costs that could be affected by a tax reform:	**LABOUR COSTS**	**OTHER COSTS**	**TOTAL COSTS**
A) General management of the system[116] 1) No change 2) CCTB: only (but all) EU multinational groups opt in 3) CCTB: all EU-based companies adopt it 4) CCCTB: only (but all) EU groups qualifying for consolidation opt in 5) CCCTB: all EU-based companies adopt it			
B) Coordination with other tax administrations 1) No change 2) CCTB: only (but all) EU multinational groups opt in 3) CCTB: all EU-based companies adopt it 4) CCCTB: only (but all) EU groups qualifying for consolidation opt in 5) CCCTB: all EU-based companies adopt it			
C) Costs related to intra-EU transfer pricing (monitoring, resolving disputes, etc) 1) No change 2) CCTB: only (but all) EU multinational groups opt in 3) CCTB: all EU-based companies adopt it 4) CCCTB: only (but all) EU groups qualifying for consolidation opt in 5) CCCTB: all EU-based companies adopt it	**LABOUR COSTS**	**OTHER COSTS**	**TOTAL COSTS**

[116] In particular, take into account in the assessment of these costs that the policy options 1), 3) and 5) require the management of just one system of corporate taxation (either the national one under 1) or the EU common one under 3) and 5)) while options 2) and 4) require the management of two different systems of corporate taxation (the national one together with the EU common one).

Significant recurring costs that may be affected (saved/increased) by a switch to any of the alternative policy options: *…… 1) No change 2) CCTB: only (but all) EU multinational groups opt in 3) CCTB: all EU-based companies adopt it 4) CCCTB: only (but all) EU groups qualifying for consolidation opt in 5) CCCTB: all EU-based companies adopt it *…… 1) No change 2) CCTB: only (but all) EU multinational groups opt in 3) CCTB: all EU-based companies adopt it 4) CCCTB: only (but all) EU groups qualifying for consolidation opt in 5) CCCTB: all EU-based companies adopt it			

If you have additional comments on the above, please elaborate here:

……
……
……

Q.6. Do you expect the recurring costs that would be affected by any of the alternative policy options to increase/decrease in the future (beyond inflation), for instance because of organisational or technological adaptations? In case, please express changes in percentage

	YES Decline Increase	NO	DO NOT KNOW

1) No change 2) CCTB: only/all EU multinational groups opt in 3) CCTB: all EU-based companies adopt it 4) CCCTB: only/all EU groups qualifying for consolidation opt in 5) CCCTB: all EU-based companies adopt it				

Q.7. Do you think that the recurring costs associated with the alternative policy options would depend on the number of companies opting for the reform?

NO	YES, to a small extent	YES, to certain extent	YES, to a large extent

*** GENERAL QUESTIONS**

Q.8. Please describe how (if applicable) you assess the administration costs' increments/savings of <u>domestic</u> tax reforms.

……
……
……
……

Q.9. Please comment on any other issues that you consider relevant to the administration costs that would be incurred/saved as a result of the tax changes. Give specific examples and explain the associated costs.

……
……
……
……

Annex 10. The CORTAX model

The CORTAX model is a computable general equilibrium model for the EU, describing the macro-economic implications of tax reforms. The calibration of CORTAX is based on the ORBIS database, which contains micro information from European firms. This Annex discusses the features of CORTAX and demonstrates how ORBIS is used in its calibration.

Structure of CORTAX

CORTAX is an applied general equilibrium model that describes the 27 countries of the European Union, plus the US and Japan. It is designed to simulate the economic implications of unilateral and multilateral corporate tax policies as well as the harmonisation of these policies. The model is heavily inspired by the OECDTAX-model of Sørensen (2001; 2004ab; 2007). An earlier version of CORTAX was used for European tax policy analysis in Bettendorf et al. (2006, 2007) and Van der Horst et al. (2007). A detailed description of the structure and parameterisation of the model can be found in Bettendorf and van der Horst (2008).

The structure of each country is the same. Countries are linked to each other via trade in goods markets, international capital markets and multinational firms. Below, the model structure of each country is discussed in more detail as well as the international linkages.

Households

Following the overlapping generations model of Diamond, households are assumed to live for two periods. One may interpret one period to cover 40 years. Behaviour within each 40-year period is assumed to be constant.

Households make their decisions regarding work, consumption and saving by maximizing a life-time utility function subject to an intertemporal budget constraint. When young (i.e. the first period), households choose to allocate their time between leisure and work. When old (i.e. the second period) household do not work but only consume. Young households receive after-tax wage income and lump-sum transfers. This income at a young age is allocated over consumption and savings. Savings are invested in a mix of bonds and stocks, which are assumed to be imperfect substitutes and which yield different rates of return. In the second period, households are retired. Consumption at old age is financed by the assets saved from the first period plus an after-tax rate of return and by lump-sum transfers. Moreover, the older generation is assumed to own the fixed factor used by firms. Therefore, the old receive the economic rents.

Household optimization yields expressions for labour supply, savings and the optimal asset portfolio. Asset returns are determined on world markets and residence-based taxes on capital are not explored in this study. Therefore, saving distortions are not affected by the policies explored here. The most important distortions in household behaviour are related to the consumption/leisure choice. Labour supply behaviour in CORTAX is governed by the usual income and substitution effects. In particular, a higher income tends to raise the demand for leisure and thus reduces labour supply. A higher wage rate for a given level of income raises the price of leisure and thus tends to cause substitution from leisure into consumption. This increases labour supply. Most empirical studies suggest that substitution effects dominate income effects so that the uncompensated elasticity of labour supply is positive.

Firms

CORTAX distinguishes between two types of firms: domestic firms and multinationals. One representative domestic firm and one representative multinational headquarter is located in each country. The multinational owns a subsidiary in each foreign country. With 29 countries in CORTAX, there are thus 30 different firms operating in each country, namely the representative domestic firm, the representative headquarter and 28 subsidiaries that are owned by the headquarters in the other countries.

Each firm is assumed to maximise its value subject to the accumulation constraints and a production function. Thereby, the multinational considers the sum of the values of its headquarter and all subsidiaries. The production function features three primary factors: labour, capital and a location-specific fixed factor (e.g. land). Labour is immobile across borders and wages are determined on national labour markets. Capital is assumed to be perfectly mobile internationally so that the return to capital (after source taxes) is given for each country on the world capital market. The location-specific fixed factor is supplied inelastically. Its income reflects an economic rent. Rents earned by subsidiaries accrue to the headquarter in the parent country, which is assumed to wholly own the subsidiary. The multinational enterprises are assumed to be wholly owned by households in the origin county. It implies that countries can partly export the tax burden to households abroad by taxing subsidiaries.

In calibrating the model of the firm, capital and labour parameters are determined by national accounts data on labour and capital income shares. The fixed factor is – somewhat arbitrarily – set at 2.5% of value-added in each country. This value ensures that CORTAX yields a reasonable value for the corporate tax-to-GDP ratio. A sensitivity analysis with respect to the size of the fixed factor is performed.

The initial size of subsidiaries in CORTAX is determined by data on bilateral foreign direct investment (FDI) stocks. In particular, these stocks determine the size of the fixed factor in each subsidiary. Given the fixed factor, multinationals decide on how much capital and labour to employ in each of their foreign subsidiaries. For domestic firms and multinational parents, the size of the fixed factor is calibrated at a fixed proportion of output so that reasonable figures for aggregate corporate tax revenues are obtained.

Firms finance their investment by issuing bonds and by retaining earnings (issuing new shares is excluded in CORTAX). The optimal financial structure depends on the difference between the after-tax cost of debt and equity. A corner solution is ruled out by including a financial distress cost associated with high debt positions. The marginal cost of debt finance increases in the debt share.

One important difference between production in a domestic firm and production in a multinational firm is that foreign subsidiaries need intermediate inputs in producing output. These intermediate inputs are supplied by the parent company. As there is only one homogeneous good in the model, the arms-length price for this intermediate input is equal to the market price of the numeraire good, i.e. equal to one. However, the parent company can charge a transfer price for intra-company deliveries that deviates from this arms-length price. In particular, a headquarter company has an incentive to set an artificially low (high) transfer price for supplies to subsidiaries in countries that feature a lower (higher) statutory corporate tax rate. In this way, the multinational is able to shift profits from high to low-tax countries, thereby reducing its overall tax liability. To ensure an interior solution, a convex cost function

is specified to capture the costs associated with manipulated transfer pricing. Hence, profit shifting to countries with very low corporate tax rates becomes increasingly costly at the margin.

CORTAX captures the costs that firms incur to comply with the corporate tax system. These costs are modelled as a share of the labour force in companies that are required for tax administration efforts. This overhead labour is specified as a fixed fraction of the number of workers in the production process. Therefore, compliance costs increase proportionally in the payroll of the firm.

Losses and loss carry forward

In CORTAX, representative firms are equal ex-ante. Ex-post, however, firms differ due to random shocks. Random shocks are assumed to occur in output or, equivalently, in the value of sales. In the good outcome, the revenue from sales is larger than in the bad outcome. In the latter case, profits become negative. Hence, ex-post there are both profit making firms and loss making firms. Still, as firms are equal ex-ante, the possibility of different ex-post outcomes introduces ex-ante uncertainty. It is assumed that firms are risk neutral and decide on their optimal levels of investment, employment, debt shares, and transfer prices before knowing whether they are subject to a negative shock. Hence, they base their input decisions on expected output values and expected marginal productivities. The probabilities of profit and loss are assumed to be independent so that shocks for a firm are not correlated between years.

In today's corporate tax regimes in Europe, losses can be carried forward and offset against future profits within the same country. It implies that losses are treated asymmetric from profits for two reasons. First, the year at which losses can be offset is usually bounded so that some losses cannot be offset against future profits. Second, firms can only carry forward nominal losses, i.e. without indexation. Due to discounting, the value of these losses declines over time. In CORTAX, it is assumed that losses can be carried forward one year. If the company makes a loss in two consecutive years, the first-year loss dries up and cannot be offset against profits in the future. Although this may underestimate the current opportunities for loss compensation (losses can usually be carried forward more than one year), the assumption of uncorrelated shocks tends to overestimate the amount of losses that can be offset.

Government

Government behaviour in CORTAX is exogenous, hence, the government does not optimize its policies and exogenous tax and expenditure parameters are simply modified. In performing simulations with CORTAX, the government budget is balanced, i.e. the government does not run a surplus or deficit after a reform. On the revenue-side of the government budget constraint, tax revenues consist of indirect taxes on consumption and direct taxes on various sources of income: corporate income, labour income, dividends, capital gains and interest. On the expenditure side of the constraint, there is government consumption, interest payments on public debt and lump-sum transfers. Government consumption and public debt are kept constant as a fraction of GDP. The initial labour and consumption tax rates are calibrated by using effective taxes computed from Eurostat (2007). The initial rates determine the distortions induced by changes in labour and consumption taxes.

Equilibrium

Equilibrium must hold on each market. On the goods market, a homogenous good that is traded on a perfectly competitive world market is assumed. Thereby, countries cannot exert market power so that the terms of trade is fixed. The goods price acts as a numeraire in the model. On asset markets, bonds of different origins are perfect substitutes and can be freely traded on world markets. Accordingly, the return to these assets is fixed for an individual country. The same holds for equity. Debt and equity are, however, imperfect substitutes. The current account equals the change in the net foreign asset position for each country (including rest of the world), due to Walras law.

As labour is immobile internationally, wages are determined nationally. In the version of CORTAX used in this study, the national labour markets are competitive so that wage adjustments ensure equality between labour supply and demand.

Welfare

Compensating variation is computed to measure the welfare effects of policy changes. The compensating variation is equal to the transfer that should be provided to households to maintain their utility at the pre-reform level. A positive compensating variation implies a welfare loss, i.e. an excess burden from taxation. In presenting the welfare effects of reforms, a minus has been put for the compensating variation so that a positive value denotes an increase in welfare. This is denoted by the welfare effect and expressed in terms of GDP.

The welfare effects of a tax reform differ from the impact on economic aggregates such as private consumption or gross domestic product. This is because utility depends also on leisure. More employment may raise income, consumption and gross domestic product, but the decline in leisure reduces these benefits in terms of welfare. Moreover, an increase in gross domestic product may be accompanied by an inflow of foreign capital, the return of which flows to foreign owners, rather than domestic residents. It is also why GDP differs from gross national income, which is generally perceived to be a better proxy for national welfare. Welfare may also be affected by multinational profit shifting which raises income but leaves the gross domestic product unchanged.

Extensions: tax havens and discrete location

An important element in corporate tax analysis is the distortionary impact of high statutory corporate tax rates. The basic CORTAX model captures the impact of high corporate tax rates on transfer price manipulation of multinationals among the 29 countries. Yet, this may underestimate the extent to which high corporate tax rates erode corporate tax bases. The reason is twofold. First, high tax rates may affect the discrete location of profitable investment by multinationals. Recent literature stresses that this decision margin is relevant (see e.g. Devereux and Griffith, 2003; Devereux and Lockwood, 2006; De Mooij and Ederveen, 2008). Second, CORTAX ignores profit shifting vis a vis countries outside the group of 29, most notably outside tax havens. To capture these two mechanisms, CORTAX has been extended by modelling outside tax havens and discrete location choices. This section discusses the main features of these two extensions.

Outside tax havens

Profit shifting in the basic version of CORTAX occurs via transfer pricing within multinational groups in the 29 countries in the model. This profit shifting is proportional to initial FDI stocks. Yet, not all forms of profit shifting are linked to FDI. Indeed,

multinationals have a variety of other ways to shift profits to low-tax locations, such as via royalty payments, cost and income allocations or debt shifting. Moreover, profit shifting will not be restricted to the 29 countries modelled in CORTAX. Especially shifting to outside tax havens might be relevant in practice.

To remedy these shortcomings of CORTAX, a simple but straightforward extension by modelling an outside tax haven has been introduced. The idea is that multinationals face an extra decision margin, namely how much effort to put in shifting profits to the tax haven. On the one hand, these efforts create a cost for the multinational, e.g. to set up a tax haven subsidiary, deal with tax haven authorities and settle possible disputes with the home fiscal authority. These costs are assumed to increase in a convex way with the amount of effort. On the other hand, profit shifting yields a benefit to the firm that is proportional to the difference between the statutory corporate tax rate in the country where it operates and the corporate tax rate in the outside tax haven. This benefit is a proportional reduction in the tax base in the home country of the company. In the optimum, multinationals set the marginal benefit from profit shifting equal to its marginal cost. The inclusion of a tax haven implies that a higher corporate tax rate in a country induces a larger erosion of its corporate tax base via more substantial profit shifting.

Discrete location

In the basic version of CORTAX, rents are due to a location-specific fixed factor in production. Yet, many rents are not location-specific but firms-specific, e.g. due to brand names, patents or market power in the entire single market. Firm-specific rents may well move across international borders. A tax on rents may therefore change the location of production (Devereux and Griffith, 2003). To capture mobile rents in CORTAX, a straightforward extension has been provided by making the size of the fixed factor owned by multinationals dependent on the statutory tax rate. In this way, CORTAX captures the impact of the corporate tax system on the discrete location choice of profitable investment.[117]

In modelling the impact of tax rates on the location choice of multinationals, two cases have been considered. First, non-European multinationals are assumed to invest in Europe, irrespective of the tax on rents, but the precise location within Europe is responsive to tax. In terms of the model, it is assumed that the firm-specific fixed factor of multinationals is fixed within the European Union, but it is not fixed for an individual country. The firm-specific rents are thus mobile within the EU, but not between Europe and other parts of the world. One motivation for this assumption is that Europe is a relatively closed market where multinationals need to be present, irrespective of tax.[118] Second, the case where the firm-specific fixed factor is mobile also between Europe and the rest of the world has been considered. In that case, also investment from Japan and the US can respond to the mean corporate tax rate adopted in European countries.

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117 The average effective tax rate (EATR) can be computed as a weighted average of the effective marginal tax and the statutory tax (Devereux and Griffith, 2003). By including an endogenous impact of statutory tax rates on mobile economic rents, CORTAX captures both components of the EATR separately. Together, the model thus contains the impact of the EATR on investment.

118 Another motivation is that Japan and the US adopt tax credit systems which render the tax rate in Europe less important as investors are ultimately taxed at the rate in their home country. It implies that multinational firms who decide about location choice consider the statutory tax in a country relative to the European average. Only if a country reduces its tax rate below the European average will it become more attractive as a location for profitable investment projects.

Calibration of CORTAX

CORTAX is calibrated for the 27 Member States of the European Union plus the US and Japan. Data for 2005 is used to replicate aggregates from national accounts data, such as consumption shares, labour-income shares, the average number of hours worked and foreign direct investment. Moreover, extensive use of information from the ORBIS database (see Annex 3) has been made. A full description of the calibration process is given in Bettendorf and Van der Horst (2006).

As a first exercise, calibration allows one to calculate the welfare effects of loss consolidation relative to loss carry forward (see section 5.1.2). To this purpose, the average loss probability has been calculated from the ORBIS database as equal to around 0.2. Hence, the aggregate ratio of loss/profit equals ¼. As the ratio of loss/profit probabilities matches the aggregate loss/profit ratio, the average loss in a loss-making firm is assumed to be equal to the average profit in a profit making firm. These values and assumptions are adopted in the calibration of CORTAX. The simulations show that, given the share of multinationals in the EU and the level of rates, consolidation alone would reduce the corporate tax burden by 15%[119]. In the steady state equilibrium of CORTAX, the reduction in the tax base is smaller because losses can be carried forward from the past. All in all, the decline in the aggregate total economy tax base in the steady state would be 4.5%[120].

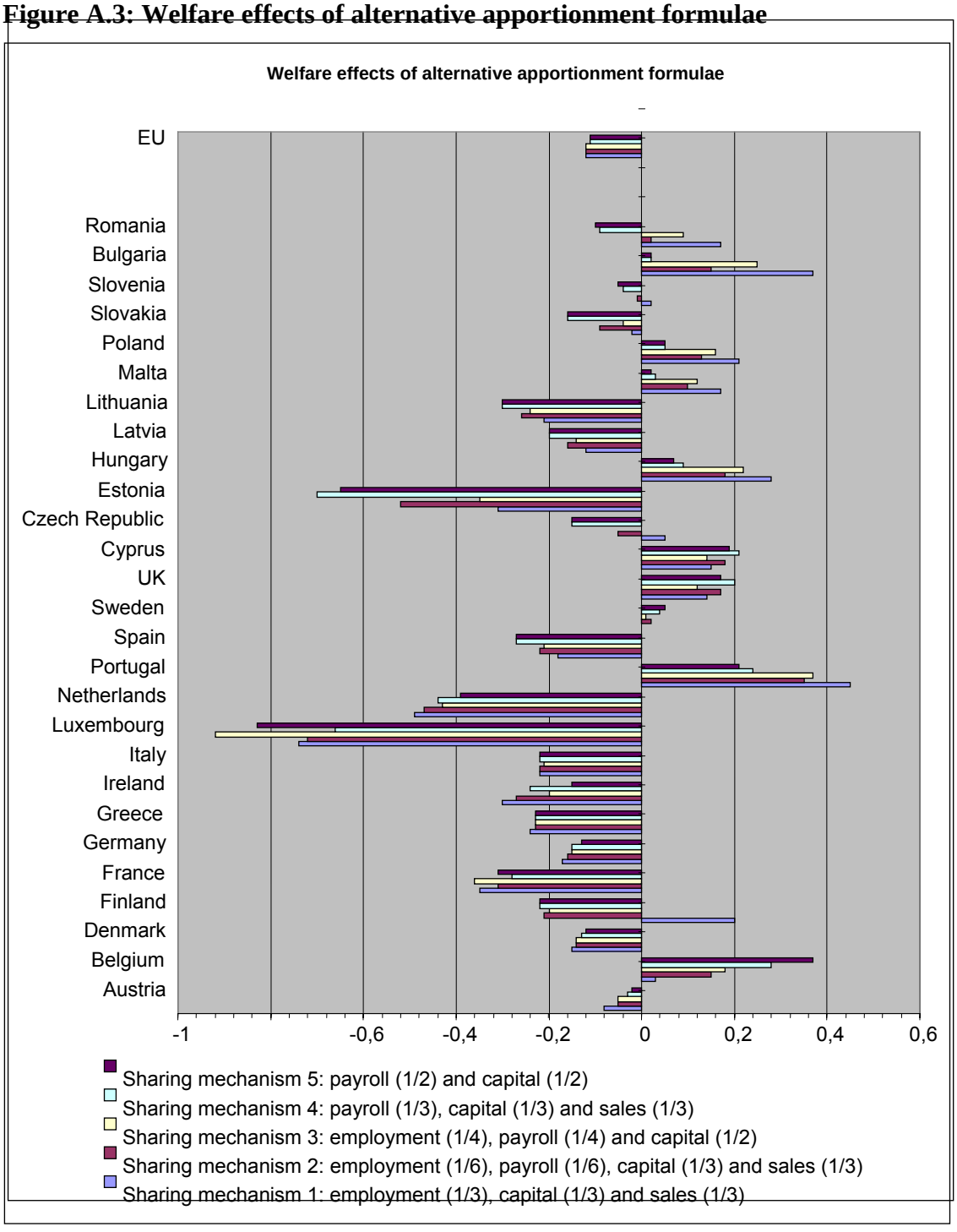
Secondly, it has been possible to calculate the welfare effects of alternative sharing mechanisms under the CCCTB taking into account firms' behavioural reactions. Table A.15 reports the impacts on the distribution of tax revenues, whereas the welfare effects are depicted in Figure A.3. Finally, panels a-d in Table A.16 show the effects of the alternative policy options on welfare, GDP, investment and employment, respectively.

---

119 To illustrate how much the corporate tax burden will fall under loss consolidation, the following example is considered in the CGE model. Suppose there are 100 firms. Among them, 80 make a profit of 1000 and 20 make a loss of 1000 (this corresponds to the loss probabilities and the loss size estimated from the ORBIS database and used for calibration in CORTAX). The total taxable base of profit making firms is therefore 80 000 if the losses cannot be offset and 60 000 if losses are offset immediately. Under loss consolidation, the tax base is thus 25% smaller. As the tax reduction applies only to multinational firms, this is applied to the share of multinationals in the economy, which is approximately 60% in Europe. Hence, the final value of 15% is obtained.

120 In CORTAX, 80% of the previous-year losses (i.e. the probability of profit) can be offset against profits in the next year (the other 20% dry up because no profits are made or the period for loss compensation expires). In the example, this equals a loss compensation of 16 000. Yet, these profits need to be discounted at, say 5% interest, which reduces its current value to 15 200. Compared to immediate loss offset under consolidation of 20 000, the value of losses drops by 4 800. It implies a reduction of the corporate tax base by 4 800 / 64 800 = 7.5% when moving from loss carry forward to loss consolidation. Using the share of multinationals (60% of all companies), the decline in the aggregate tax base of 4.5% is found.

Figure A.3: Welfare effects of alternative apportionment formulae



Notes: the graph uses the CCCTB-WG20 definition of the tax base, assumes that the CCCTB system is compulsory for all firms and is based on the basic version of CORTAX, which does not include tax havens and discrete location choices.

Source: simulation based on CORTAX.

Tables A.15 a-d: Changes in welfare, employment, investment and GDP from optional and compulsory CCTB and CCCTB, WG 20 and 25

16.a – welfare (expressed as %GDP)

	Optional CCTB		Compulsory CCTB		Optional CCCTB		Compulsory CCCTB	
	WG-20	WG-25	WG-20	WG-25	WG-20	WG-25	WG-20	WG-25
AT	-0.04	-0.03	-0.04	-0.01	-0.19	-0.17	-0.15	-0.11
BE	0.47	0.42	0.89	0.86	1.18	1.21	1.08	1.11
BG	-0.02	-0.01	-0.05	-0.02	0.09	0.10	0.05	0.07
CY	-0.02	-0.02	-0.01	-0.01	0.02	0.01	0.11	0.10
CZ	-0.02	-0.01	-0.02	0.01	-0.01	0.01	-0.03	0.01
DE	0.01	0.01	-0.07	-0.05	0.08	0.08	0.03	0.06
DK	0.04	0.04	-0.09	-0.07	-0.01	0.00	-0.11	-0.09
EE	0.01	0.02	-0.47	-0.45	0.13	0.15	-0.35	-0.32
ES	-0.04	-0.04	-0.05	-0.03	-0.10	-0.11	-0.12	-0.11
FI	-0.01	-0.01	-0.08	-0.06	-0.10	-0.09	-0.15	-0.12
FR	0.06	0.06	-0.01	0.00	-0.07	-0.09	-0.13	-0.14
GR	-0.04	-0.03	-0.16	-0.11	-0.08	-0.06	-0.19	-0.15
HU	-0.05	-0.03	-0.04	0.00	-0.02	0.00	-0.02	0.02
IE	-0.16	-0.14	-0.09	-0.06	-0.74	-0.73	-0.67	-0.65
IT	0.02	0.02	-0.06	-0.04	0.05	0.06	-0.01	0.01
LT	-0.07	-0.06	-0.26	-0.23	-0.04	-0.03	-0.23	-0.20
LU	0.31	0.21	0.86	0.62	-1.60	-1.71	0.17	-0.07
LV	-0.05	-0.04	-0.18	-0.16	-0.03	-0.01	-0.16	-0.13
MT	0.01	0.00	-0.04	-0.03	0.46	0.42	0.49	0.45
NL	-0.12	-0.11	0.01	0.00	-0.82	-0.82	-0.60	-0.63
PL	-0.01	0.00	0.02	0.06	0.04	0.06	0.06	0.11
PT	0.01	0.01	-0.05	-0.04	0.40	0.41	0.35	0.37
RO	-0.04	-0.03	-0.13	-0.11	0.08	0.10	-0.02	0.01
SE	0.04	0.04	-0.02	-0.01	0.06	0.06	0.07	0.08
SI	-0.02	-0.01	-0.06	-0.03	0.02	0.04	-0.01	0.03
SK	-0.03	-0.02	-0.14	-0.10	-0.02	0.00	-0.13	-0.08
UK	-0.02	-0.02	-0.01	-0.01	0.18	0.18	0.22	0.22
EU total	0.01	0.01	-0.01	0.00	0.02	0.02	0.00	0.02

Source: simulation based on CORTAX.

15.b – Employment (%)

	Optional CCTB		Compulsory CCTB		Optional CCCTB		Compulsory CCCTB	
	WG-20	WG-25	WG-20	WG-25	WG-20	WG-25	WG-20	WG-25
AT	0.00	0.01	-0.03	0.00	0.00	0.01	-0.05	-0.01
BE	-0.91	-0.90	-1.12	-1.11	-0.15	-0.16	-0.51	-0.50
BG	-0.02	-0.01	-0.03	-0.02	-0.01	0.00	-0.03	-0.02
CY	-0.02	-0.02	-0.06	-0.04	-0.21	-0.20	-0.30	-0.29
CZ	-0.01	0.00	-0.03	-0.01	0.01	0.03	0.04	0.07
DE	-0.06	-0.04	-0.15	-0.11	0.02	0.04	-0.06	-0.02
DK	-0.07	-0.07	-0.13	-0.12	-0.09	-0.08	-0.15	-0.13
EE	-0.03	-0.03	-0.05	-0.05	-0.02	-0.02	-0.08	-0.07
ES	-0.01	0.01	-0.03	0.00	0.06	0.09	0.10	0.14
FI	-0.06	-0.04	-0.12	-0.09	-0.05	-0.04	-0.09	-0.06
FR	-0.07	-0.07	-0.18	-0.16	-0.04	-0.03	-0.09	-0.06
GR	-0.03	-0.03	-0.12	-0.10	-0.01	0.00	-0.08	-0.05
HU	0.01	0.02	0.02	0.03	-0.01	0.00	0.00	0.02
IE	0.06	0.06	-0.05	-0.04	-0.15	-0.14	-0.30	-0.28
IT	-0.06	-0.05	-0.18	-0.15	-0.02	-0.01	-0.12	-0.09
LT	-0.04	-0.03	-0.12	-0.11	-0.04	-0.04	-0.13	-0.11
LU	-0.56	-0.41	-1.21	-0.90	2.20	2.55	1.11	1.60
LV	-0.03	-0.02	-0.09	-0.08	-0.05	-0.05	-0.12	-0.10
MT	-0.06	-0.04	-0.08	-0.06	0.14	0.18	0.10	0.15
NL	0.02	0.03	-0.21	-0.15	0.05	0.08	-0.30	-0.22
PL	0.00	0.01	0.01	0.04	0.01	0.03	0.04	0.07
PT	-0.03	-0.02	-0.06	-0.05	-0.08	-0.08	-0.15	-0.14
RO	-0.02	-0.02	-0.06	-0.05	-0.03	-0.02	-0.07	-0.06
SE	-0.06	-0.06	-0.13	-0.11	-0.06	-0.05	-0.15	-0.13
SI	-0.02	-0.01	-0.05	-0.03	-0.03	-0.01	-0.06	-0.03
SK	-0.04	-0.03	-0.08	-0.06	-0.05	-0.03	-0.07	-0.04
UK	-0.01	-0.01	-0.08	-0.06	-0.04	-0.03	-0.12	-0.10
EU total	-0.05	-0.04	-0.13	-0.10	-0.01	0.00	-0.08	-0.05

Source: simulation based on CORTAX.

15.c – investment (%)

	Optional CCTB		Compulsory CCTB		Optional CCCTB		Compulsory CCCTB	
	WG-20	WG-25	WG-20	WG-25	WG-20	WG-25	WG-20	WG-25
AT	-0.11	0.02	-0.31	0.04	-0.69	-0.53	-1.05	-0.65
BE	-4.61	-4.58	-5.92	-5.84	-3.05	-2.89	-5.05	-4.82
BG	-0.16	-0.10	-0.33	-0.20	-0.53	-0.44	-0.66	-0.50
CY	-0.16	-0.11	-0.31	-0.22	-1.45	-1.41	-1.76	-1.67
CZ	-0.13	0.00	-0.24	0.07	-0.65	-0.46	-0.62	-0.25
DE	-0.52	-0.39	-1.42	-1.06	-0.54	-0.38	-1.29	-0.91
DK	-0.84	-0.75	-1.74	-1.55	-1.78	-1.66	-2.62	-2.39
EE	-0.88	-0.84	-2.62	-2.52	-1.80	-1.66	-3.55	-3.35
ES	-0.16	-0.03	-0.36	-0.06	-0.40	-0.25	-0.50	-0.20
FI	-0.52	-0.40	-1.13	-0.88	-1.31	-1.17	-1.79	-1.50
FR	-0.79	-0.72	-1.84	-1.66	-1.40	-1.34	-2.40	-2.24
GR	-0.36	-0.28	-1.23	-0.95	-0.66	-0.58	-1.52	-1.21
HU	0.00	0.10	0.07	0.31	-0.68	-0.52	-0.57	-0.27
IE	-0.14	-0.06	-0.39	-0.24	-1.87	-1.78	-3.03	-2.81
IT	-0.59	-0.48	-1.73	-1.40	-0.78	-0.65	-1.86	-1.51
LT	-0.57	-0.52	-1.82	-1.66	-0.87	-0.79	-2.12	-1.93
LU	-2.26	-1.82	-3.20	-2.54	-0.07	0.94	0.77	1.85
LV	-0.40	-0.35	-1.25	-1.09	-0.72	-0.65	-1.58	-1.40
MT	-0.56	-0.41	-0.91	-0.64	1.58	1.70	1.59	1.83
NL	-0.47	-0.33	-1.08	-0.77	-1.97	-1.84	-3.33	-2.99
PL	0.05	0.16	0.22	0.52	-0.33	-0.17	-0.09	0.25
PT	-0.59	-0.47	-1.35	-1.07	-1.13	-0.93	-1.62	-1.28
RO	-0.36	-0.29	-1.03	-0.84	-0.69	-0.57	-1.29	-1.05
SE	-0.77	-0.66	-1.55	-1.31	-1.33	-1.18	-2.08	-1.81
SI	-0.22	-0.11	-0.56	-0.26	-0.44	-0.28	-0.74	-0.39
SK	-0.43	-0.33	-0.97	-0.73	-0.97	-0.80	-1.43	-1.12
UK	-0.61	-0.48	-1.49	-1.17	-0.93	-0.77	-1.73	-1.39
EU total	-0.54	-0.44	-1.25	-0.97	-0.88	-0.74	-1.55	-1.25

Source: simulation based on CORTAX.

15.d – GDP (%)

	Optional CCTB		Compulsory CCTB		Optional CCCTB		Compulsory CCCTB	
	WG-20	WG-25	WG-20	WG-25	WG-20	WG-25	WG-20	WG-25
AT	-0.11	-0.09	-0.21	-0.11	-0.60	-0.55	-0.64	-0.52
BE	0.17	0.04	1.08	1.04	2.12	2.10	0.91	0.92
BG	-0.11	-0.08	-0.18	-0.12	-0.76	-0.75	-0.76	-0.71
CY	-0.20	-0.15	-0.28	-0.22	-1.38	-1.38	-1.51	-1.49
CZ	-0.13	-0.09	-0.20	-0.08	-0.48	-0.42	-0.44	-0.31
DE	-0.03	-0.04	-0.37	-0.29	0.26	0.29	0.08	0.17
DK	0.05	0.06	-0.30	-0.25	-0.73	-0.72	-1.02	-0.97
EE	0.44	0.45	-0.23	-0.19	-1.08	-1.06	-1.84	-1.78
ES	-0.12	-0.10	-0.22	-0.14	-0.03	0.00	0.09	0.17
FI	-0.17	-0.14	-0.43	-0.34	-0.53	-0.49	-0.72	-0.63
FR	0.10	0.10	-0.29	-0.25	-0.15	-0.15	-0.31	-0.28
GR	-0.14	-0.11	-0.50	-0.39	-0.27	-0.24	-0.63	-0.50
HU	-0.18	-0.14	-0.18	-0.10	-0.92	-0.89	-0.85	-0.78
IE	-0.34	-0.28	-0.54	-0.46	-3.19	-3.16	-3.35	-3.28
IT	-0.03	-0.03	-0.43	-0.35	0.06	0.08	-0.24	-0.15
LT	-0.15	-0.13	-0.58	-0.52	-0.45	-0.43	-0.90	-0.83
LU	-1.17	-0.93	-2.08	-1.65	0.69	1.17	0.13	0.73
LV	-0.13	-0.11	-0.44	-0.38	-0.46	-0.44	-0.78	-0.72
MT	-0.14	-0.11	-0.28	-0.20	0.84	0.86	0.88	0.94
NL	-0.21	-0.18	-0.58	-0.47	-1.69	-1.65	-1.96	-1.85
PL	-0.10	-0.06	-0.04	0.06	-0.42	-0.37	-0.31	-0.20
PT	0.01	0.01	-0.14	-0.11	-0.52	-0.50	-0.63	-0.58
RO	-0.10	-0.08	-0.30	-0.24	-0.58	-0.56	-0.74	-0.68
SE	0.06	0.06	-0.17	-0.13	-0.34	-0.35	-0.52	-0.49
SI	-0.09	-0.07	-0.22	-0.13	-0.31	-0.27	-0.40	-0.29
SK	-0.17	-0.13	-0.41	-0.31	-0.76	-0.72	-0.97	-0.86
UK	0.05	0.03	-0.04	-0.04	-0.02	-0.05	-0.12	-0.12
EU total	-0.04	-0.03	-0.25	-0.18	-0.17	-0.15	-0.32	-0.25

Source: simulation based on CORTAX.

Annex 11. CCCTB WG working paper 4 and annex

EUROPEAN COMMISSION
DIRECTORATE-GENERAL TAXATION AND CUSTOMS UNION
Analyses and tax policies
Analysis and Coordination of tax policies

Brussels, 28 October 2004
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COMMON CONSOLIDATED CORPORATE TAX BASE WORKING GROUP (CCCTB WG)

ASSETS AND TAX DEPRECIATION

Meeting to be held on Tuesday 23 November 2004

Centre de Conférences Albert Borschette
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ASSETS AND TAX DEPRECIATION

I. Purpose of this paper

1. The treatment of assets and their depreciation is one of the main structural elements of the existing national tax bases and will be of any Common Consolidated Corporate Tax Base (CCCTB). As the CCCTB solution is intended to replace up to 25 national tax bases (at least for those companies who make use of it) it has to be agreed by up to 25 Member States (MS). Currently assets and depreciation are generally subject to different rules in each MS in the taxation accounts, and to varying degrees, in the financial accounts as well. However, the general objectives of both tax and accounting rules are often broadly similar and in the consolidated accounts of certain listed companies as from 2005 the same accounting rules will be applied across the EU – the International Accounting Standards and International Financial Reporting Standards (IAS) which have been endorsed for use in the EU.

2. The objective of this paper is to identify the key issues and some possible solutions for the tax depreciation of assets. As the first such paper on structural elements it also serves as a sort of 'test' of the working methods outlined in the work programme. The starting point for discussion is generally the accounting treatment permitted in the relevant IAS. The use of these IAS definitions, such as those in IAS 16, does not imply that the tax treatment should necessarily be the same as the one agreed for accounting purposes. By starting from the IAS definition the paper aims to use terms which should already be familiar to MS. Whether tax solutions can be derived from the IAS accounting treatment requires specific analysis on a case by case basis. In addition to the IAS analysis the paper also refers to some of the different approaches taken by individual MS in their national tax legislation. These references illustrate how the general accounting rules could be clarified, or amended, to take into account specific tax concerns and objectives. The sheer number of existing different treatments across the EU also illustrates the scale of the task of achieving a CCCTB, and gives an indication of the possibilities for simplification that a CCCTB could bring if consensus can eventually be achieved. Tables with more details on depreciation schemes and practices currently applied in MS are annexed.

3. The principle issues in both accounting and taxation for assets are their definition, the timing of the recognition of the assets, the determination of their valuation or carrying amounts, and the depreciation charges to be recognised in relation to them. Recognised assets cannot be immediately expensed and they are depreciated only when certain conditions are met (eg. in taxation after a business purpose test). The depreciation of assets is a measure which allocates the costs of the asset to the periods of time over which an asset is expected to be used by the enterprise (useful life). Assets are generally classified as either tangible or intangible, and within these two groups there are often further sub-divisions. This paper concentrates on the sub-set within tangible assets of 'property, plant and equipment' and considers each of the principle issues in turn before suggesting some possible solutions for discussion.

II. Assets, qualifying assets

4. Resources held and controlled by an enterprise for use in the production or supply of goods or services, for rental to others or for administrative purposes which are expected to be used during more than one period are recognised as assets[121]. Tangible, intangible and financial assets are distinguished. As noted above this paper elaborates further on tangible assets (hereafter assets), specifically property, plant and equipment. Intangible and financial assets will be discussed separately at a later stage.

5. For accounting purposes an item of property, plant and equipment should be recognised as an asset when it is probable that future economic benefit associated with the asset will flow to the enterprise and the cost of the asset to the enterprise can be measured reliably[122]. For tax purposes this definition is in principle accepted, but some of its elements are further developed. Assets subject to normal wear and tear, with a limited useful life and serving the realization of profits qualify for tax depreciation in most MS. A direct link between the asset and the realization of profits ('business purpose test') is explicitly required and underlined in most MS. A minimum useful life is also fixed in some MS (e. g. 1 or 3 years).

6. Assets that are not subject to wear and tear, i. e. assets that generally do not change (decrease) their value over time are not in principle depreciable for tax purposes. Land is often explicitly excluded. The value of land can be written down only if the fair market value has fallen permanently below the acquisition cost.

7. Assets of minor value or assets with a very short useful life may be expensed (100% of their cost may be written off) in the year of acquisition in most MS for both accounting and tax purposes. Whereas in accounting this is often based on the materiality principle, tax law gives more detailed guidance on what "minor value" or a "very short useful life" is. Guidance on what constitutes minor value may come from existing or standard practice in both tax and accounting, but for tax purposes it is more often determined by specific tax legislation. Generally a statutory definition satisfies legality and transparency requirements while the determination of minor value by reference to existing or standard practice is more flexible and often reflects the material, or immaterial, character of the case in question. Minor value currently ranges between EUR 200 and 1,300 in MS, although the upper figure seems to be rather exceptional (Czech Republic). Assets with a very short useful life regardless of acquisition costs are expensed in some MS (Denmark, Finland, Luxemburg, Sweden). A very short useful life is determined as 1 – 3 years in these MS. Sometimes the total value of assets so expensed may not exceed a certain limit per tax year (Finland).

III. Valuation of asset and depreciable basis

8. In accounting an asset is initially measured at its cost. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to the working condition for its intended use. Cost is understood as the amount of cash equivalents paid or the fair value of other consideration given to acquire an asset at the time of its acquisition or

[121] IAS 16 Para 6., IAS 38 Para 7.
[122] IAS 16 Para 7.

construction[123]. Tax solutions are derived from this principle, but may disallow some kinds of directly attributable costs from being included in the acquisition costs. Historical, production or acquisition costs (hereafter acquisition cost) are generally distinguished for tax purposes depending on whether an asset is purchased from a third party, produced by the enterprise itself or acquired by other means than purchase for monetary payment or in exchange for other benefits. Detailed rules on acceptable ways and procedures if assets are acquired for non monetary payment and the determination of a fair value are frequent in taxation. The acquisition cost for tax purposes is restricted for some assets (e. g. cars) generally as a result of a particular public policy applied in some MS (e. g. Belgium).

9. Subsequent to initial recognition an asset is carried at its acquisition costs less any accumulated depreciation. Acquisition costs decreased by depreciation charges give the residual value of an asset. Accounting also requires devaluation of an asset in case of any accumulated impairment losses and alternatively revaluation of an asset on a regular basis if its fair value increases[124]. Recognition of such changes in the residual value of a depreciable asset for tax purposes is rather exceptional and its impact on the tax base is usually excluded. On the other hand some MS require taxpayers to revalue their assets regularly for tax purposes as well (e. g. Greece, Hungary)[125]. It is currently proposed that revaluation and devaluation of assets will be further discussed at a later stage, under the tentative heading of Capital Gains.

10. If subsequent expenditure relating to an asset that has already been recognised (and has already been depreciated) is incurred, in accounting it should be added to the carrying amount of the asset when it is probable that future economic benefits, in excess to the originally assessed standard of performance of the existing asset will flow to the enterprise. All other subsequent expenditure is to be recognised as an expense in the period in which it is incurred. Subsequent expenditure on an asset is recognised in case of modification of an asset to extend its useful life or increase in its capacity, upgrading machine parts to achieve a substantial improvement in the quality of output or adoption of a new production processes enabling a substantial reduction in previously assessed operating costs. Expenditure on repairs or maintenance of an asset made to restore or maintain the future economic benefits that an enterprise can expect from the originally assessed standard of performance of the asset is expensed when incurred[126]. For the distinction whether it should be treated as an expense or as an asset it is important whether a new asset has been created by a subsequent expenditure. If so, it should be recognised as an asset and depreciated (either separately or as an increased residual value of the original asset) otherwise it can be fully expensed in the year when this expenditure incurred. Tax systems generally apply similar, although in some cases stricter, rules to distinguish between capital expenditure on assets eligible for tax depreciation over a number of years and revenue expenditure which is immediately deductible for tax purposes in full. As already mentioned some of them require companies to increase the residual value of the asset by the subsequent expenditure and others recognise a subsequent expenditure as a new distinct asset and depreciate it separately. For the appraisal of

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123 IAS 16 Para 6. and 15.
124 IAS 16 Para 28. and 29.
125 Unrealized gain is taxable under special tax in Greece.
126 IAS 16. Para 23. and following

the subsequent expenditure the same method should be applicable as was applied in case of originally acquired asset.

IV. Purpose of depreciation

11. Costs of assets acquired or produced and used by companies for their business are expensed over the period for which the asset is supposed to bring proceeds to a company through depreciation charges. The overall expenditure on the asset is thus systematically spread out to the asset's useful life.

12. The depreciable amount of an asset should be allocated on a systematic basis over its useful life. The depreciation charge for each period should be recognised as an expense unless it is included in the carrying amount of another asset[127]. This accounting principle is also recognised in tax depreciation. Tax solutions tend to be prescriptive as regards the method and the amount (either as a precise or a maximum amount) of the depreciation charge and leave much less room for the taxpayer's judgement and interpretation of the general rule.

13. Tax systems may occasionally introduce special depreciation schemes that do not necessarily follow this principal purpose of depreciation. The allocation of assets' acquisition costs are then spread out over a statutory period shorter (occasionally longer) than the assets' useful lives. Tax rules may provide for faster depreciation in order to promote and support a particular sector of economic activity, or activity within a particular region or designated area. Such measures have an incentive character. Members of the group might therefore wish to postpone discussion of this aspect to a later stage of the discussions when special incentive schemes in general are addressed.[128]

V. The right to claim depreciation

14. With regard to the question of who is entitled to claim depreciation charges two main approaches (with several variations) exist. According to the first one only the legal owner is allowed to depreciate assets. The second one gives the right to depreciate the asset to the person bearing the risk of the wear and tear of an asset regardless the legal title that such a person has to the asset ('economic owner').

15. In accounting terms a holder of an asset is generally supposed to recognise an asset in the balance sheet. Accordingly the lessee should recognise finance leases as assets and liabilities in his balance sheet at amounts equal at the inception of the lease to the fair value of the leased property or, if lower, at the present value of the minimum lease payments[129]. However a broad discussion on this topic has been ongoing.

16. Different solutions (in both tax and accounting at national level) have been adopted for leases, financial leases and usufruct holdings as well as for purchases of assets with a clause reserving ownership to a seller until the payment of full price ('reservation of title'). The purchaser is often allowed to depreciate the asset from the moment when he starts to use it for business, but if ownership is not subsequently

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127 IAS 16 Para 41.
128 Draft Work Plan, II, the last indent, CCCTB/WP/003
129 IAS 17 Para 12.

acquired any claimed depreciation charges have to be recaptured. Some MS who apply in principle the legal ownership approach allow an economic owner (e. g. a lessee) to depreciate the asset under certain conditions, e. g. if they qualify as the beneficial owner of the leased asset (Austria).

17. In most cases the legal successor is allowed to continue depreciation commenced by his predecessor (company reorganisations - mergers, acquisitions).

VI. Timing

18. In accounting an asset is depreciated over its useful life. The useful life of an asset is defined in terms of the asset's expected utility to the enterprise. The estimation of the useful life of an asset is a matter of judgement based on the experience of the enterprise with similar assets[130]. Whereas accounting leaves the door open for judgement of each individual case as much as possible tax law prefers to fix applicable principles. Actual practices are further discussed in section VII.

19. Companies depreciate assets on an annual basis in all MS. Different approaches occur in respect to the first year depreciation charge, the interruption of depreciation and the year in which an asset is alienated or sold.

20. A full annual tax depreciation charge applies in a tax year in which the asset is acquired or produced, even though the asset is held for only part of that year in some MS. In others if the asset in question is owned for more than 6 months full annual tax depreciation charge is allowed and if less, 50% of an annual tax depreciation charge can be deducted (e. g. Austria, Germany). Another possibility is to use 50% of an annual depreciation charge regardless of when the asset is acquired (e. g. Italy) or to create a special rate for the first year, which can lead to approximately the same result of 50% (Czech Republic). An accrual basis (1/12 for each month) could also be a solution for the first year. This approach is applied by several MS in case of tax year longer or shorter than 12 calendar months. For consistency a similar rule should be adopted for the year when the asset is alienated or sold (a full charge, 50% of the normal amount or the accrual basis).

21. If a depreciable asset is sold or otherwise alienated, the difference between the sale price and the tax residual value (acquisition value minus depreciation applied) is subject to corporate income taxation or capital gains taxation. The various methods used in MS will be analysed when the taxation of capital gains discussed. Roll over relief is granted for some kinds of asset especially if replaced by a new one.

22. Some MS allow companies to interrupt depreciation under certain conditions (Czech Republic, Lithuania, Latvia) thus allowing taxpayers to optimize their tax base for example to facilitate the utilization of allowances and credits that cannot be carried forward to following years. This sort of approach illustrates how in some MS the underlying purpose of tax depreciation is subtly different from that of accounting depreciation. In accounting the accent is on correctly matching expenses and revenues in accordance with the judgement of the enterprise, whereas in taxation there is less flexibility over the maximum amount of depreciation in any given year,

130 IAS 16 Para 41. and 44.

but more flexibility as regards the minimum amount. However, most MS do make depreciation compulsory in both profit and loss tax years (Belgium, Cyprus, France, Germany, Greece, Luxemburg, and Netherlands) and some MS actually impose a sanction on taxpayers who do not claim depreciation charges properly (France).

VII. Methods and mechanics

23. A variety of depreciation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life. Accounting rules do not prescribe exact methods for the depreciation of particular assets. The depreciation method used should reflect the pattern in which the asset's economic benefits are consumed by the enterprise127. The choice of the actual method is however a matter of judgement in the application of the established accounting principles.

24. As already mentioned in previous sections the level of judgement to be applied is much lower in the tax area. Tax depreciation rules tend to be much more specific. They fix a compulsory method in most cases. If a taxpayer believes that the statutory method does not reflect the actual situation a special scheme may be granted by tax authorities or approved by the court in some MS. It is sometimes possible to apply for an increase in the statutory (maximum statutory) depreciation charge in cases of more intensive use of an asset than is normal in the sector of activity or in case of extraordinary wear and tear (e. g. Belgium, Italy, Spain).

25. Some MS fix just maximum depreciation charges and the taxpayer is allowed to use any rate within the range between zero and the maximum rate. Such a measure makes the system very flexible, but as outlined above is sensitive to tax planning techniques.

26. Assets may be depreciated on an individual or pool basis. The latter approach allows the addition of the depreciable bases of all assets and the calculation of the depreciation charge as an overall figure. Some MS recognise only one group of assets (pool) covering essentially all depreciable assets (e. g. any plant, machinery or equipment), others categorise the assets in several groups (pools) and apply different rates to each of them. A significant number of MS (e. g. Belgium, Germany, Italy, Spain) require companies to depreciate (and record) each asset separately on an individual basis. The calculation of the depreciation charge on the pool basis is simpler than if it has to be calculated separately for each particular asset. However in case of sale or alienation of an asset a special rule for the calculation of the residual value of the sold or alienated asset is needed under the pool method. On the other hand the individual method of depreciation gives residual values of any asset at any time during the course of depreciation. A different regime for the taxation of any capital gains earned on the sale of an asset or the recapture of 'excessive' tax depreciation may follow from the application of these two methods.

27. Straight line or declining balance methods are two of the most common methods for the calculation of a depreciation charge. Under the straight line method the useful life of an asset (or pool of assets) is fixed at a certain number of years. The acquisition value (the depreciable basis) is spread out accordingly; usually at a flat rate (i. e. the same amount is deducted every year at a rate of 1/number of years). There exists an accelerated variation of the straight line method, under which the asset is depreciated at higher rates at the beginning of the asset's useful life. The base for the calculation

of the depreciation charge is the acquisition price of the asset in all depreciation years.

28. Under the declining balance method rates are usually higher than those used for straight line, but they apply to the acquisition value only in the first year of depreciation and in the following years they apply to the residual value of the asset. The asset is depreciated more quickly at the beginning of its useful life than under straight line method but its acquisition value is theoretically never expensed up to 100%. The declining balance method may be modified to a double declining balance method, when the basis for depreciation for every following year is calculated as the residual value minus double the annual depreciation charge. Another modification of the double declining method is also sometimes applied which is more a hybrid method combining features of both straight line and declining balance methods. It also derives the depreciation base from the residual value of the asset, but calculates the annual charges in a way that allows the taxpayer to deduct 100% of the acquisition costs by the end of useful life of the asset[131].

29. In respect to the combination of pool/individual depreciation with straight line or declining balance methods, it is worth noting that the use of the declining balance method and its variations if assets are depreciated on an individual basis may become cumbersome and potentially inefficient, especially in the later stages of an asset's useful life. The basis for depreciation (tax residual value) of each asset becomes very low as do the depreciation charges while individual records of each asset have to be kept. If the individual concept of depreciation of assets is applied, a straight line method (with or without accelerated rate schemes) seems to be more appropriate.

30. The declining balance method may be also used as an optional method or as a method reserved only for some types of assets. However practices applied in MS differ rather widely. Some MS do not recognize the declining balance method whatsoever and the straight line basis is the only method for the depreciation of assets (e. g. Austria).

31. Other methods such as the depletion method are applicable in certain sectors (eg natural resources) but are not considered in any detail in this paper.

32. If two or more methods are allowed to be used in respect of the same kind of asset, rules determining when a taxpayer is allowed to change depreciation method are necessary. Some MS make any change conditional upon meeting certain conditions; others prohibit any change in method at all once a choice has been made.

33. The differences in the rates currently applicable to different kinds of assets in MS are rarely very large. As discussed above MS in principle set rates for different types of assets primarily according to the length of an asset's useful life. However the number of different rates and the number of different categories of assets for depreciation purposes vary considerably among MS.

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131 If a useful life of an asset is e. g. fixed as 4 years, the first year depreciation charge is *acquisition value/4*, and the following years' charges are calculated as a *double residual value/(5 minus number of years in which the asset has already been depreciated)*.

34. All MS distinguish between movable (e. g. plant, machinery, equipment) and immovable (e. g. buildings) assets for the purpose of tax depreciation. Depreciation rates for immovables range between 1% and 20%, while the most frequent range is 2 – 5%. Different rates for different types of buildings (office, residential) are often applicable.

35. The remaining tangible assets are further categorised into several groups (up to five, or occasionally practically on an individual asset basis) by MS, or the same treatment is applicable to all of them (pooled). It would be difficult and a little bit misleading to generalize in respect of the applicable rates in this area, since many specific rates are given for a number of assets in some MS.

36. To be deductible for tax purposes, the amounts depreciated must be recorded transparently by the company. Whether the tax depreciation charges are registered as adjustments to a company's accounting depreciation plan (when they are different), taken to be equal to the accounting depreciation or deducted separately after the accounting depreciation charges have been added back to the company's accounting profit depends on the degree of 'dependency' between the financial accounts and the tax accounts, which varies across the EU.

37. A common approach to tax depreciation implies a common approach to dependency of the tax treatment on accounting: either dependency is weakened to permit the common depreciation rules, or the accounting rules are amended to permit depreciation in line with the common tax depreciation rules. Where there is little dependency, i. e. the linkages between the financial accounts and the tax accounts are not very strong, changing from existing national rules on tax depreciation to a common approach to tax depreciation has little impact on financial accounting. However, where links are strong, this change has implications for the financial accounts. If national tax depreciation rules are changed to a newly defined common approach, national accounting rules would have to be amended accordingly. Although the treatment of assets and tax depreciation is an obvious example of how the issue of tax and accounting dependency needs to be resolved, the same question arises with other structural elements such as provisions.

VIII. General solutions

38. The CCCTB aims to provide MS with a complete solution for the tax depreciation of assets and should not in principle be subject to any modifications made by national laws. Ideally the system would replace up to 25 different tax depreciation schemes with one.

39. Tax depreciation rules currently applicable in MS are often similar in essential principles, but different in details, especially in respect of the categorisation of assets for tax purposes and the various schemes applicable to them. The reasoning behind some aspects of the 25 systems have been developing over many years. These national systems are an important starting point for an EU-wide scheme, but all these different elements cannot simply be combined together without some changes. In order to reach consensus participating members will have to be open to new innovative solutions seeking an accurate, simple, transparent and neutral scheme which reflects economic reality and measures the profit of companies on a relatively

objective base, even if such solutions lead to a change in the traditional methods in some MS.

40. In order to create a complete and functional set of rules it will be necessary to agree and elaborate on the following issues. In order to progress it is suggested that solutions for the general rules should be examined in the first instance.

General rule	*Specific rule*
A DETERMINATION OF ASSETS QUALIFYING FOR TAX DEPRECIATION	● Expenses ● Non depreciable assets ● Assets of minor value
B DETERMINATION OF DEPRECIABLE BASE	● Acquisition for non monetary payment ● Second-hand property ●Subsequent expenditure treatment
C WHO IS ELIGIBLE TO CLAIM TAX DEPRECIATION CHARGES	●'Economic' (beneficial) ownership e. g. financial lease ● Purchase with the clause reserving ownership ● Subsequent expenditure on rented asset ● Legal successor
D TIMING OF TAX DEPRECIATION	● First year, last year (if an asset sold) rule ● Tax year longer or shorter than 12 months
E MECHANICS OF TAX DEPRECIATION	● Methods ● Rates
F SALE OF THE ASSET, TAX VALUE	
G RELATION BETWEEN ACCOUNTING AND TAX DEPRECIATION (DEPENDENCY)	
H RECORDING OF DEPRECIATION	

A. DETERMINATION OF ASSETS QUALIFYING FOR TAX DEPRECIATION

41. The accounting solution creates a good starting point as it is accepted in most MS. Assets with a limited useful life recognised in the balance sheet of a company should in principle be depreciated for tax purposes. As the aim of CCCTB is to measure business profits of companies it is advisable to ensure that only the costs of assets used for business purposes will affect the tax base. A business purpose test should therefore be added.

► Do members agree that only assets acquired and used for business purposes shall be depreciable for tax purposes?

B. DETERMINATION OF DEPRECIABLE BASIS

42. Historical, acquisition or production costs seem to be the most appropriate basis for tax depreciation. For the determination of the actual costs the simplest solution seems to be to follow the accounting one.

► Do members of the group think that more specific guidance should be given on what costs should be/should not be included in the acquisition price or could the accounting rules be accepted as a general basis?

C. WHO IS ELIGIBLE TO CLAIM TAX DEPRECIATION CHARGES

43. A 'legal owner' rule is the simpler, but the more formalistic solution. The "economic owner" approach better reflects the real relation between the asset and business in which it is used. On the other hand it requires the creation of a set of rules to define and identify the economic owner. Special rules for the depreciation of the asset by the beneficial owner would be in line with the principle substance over form[132]; on the other hand depreciation by the legal owner is more in line with the simplicity[133] principle.

44. A legal successor should be allowed to continue depreciation commenced by his predecessor. Companies are mainly affected in the case of reorganisations (e. g. mergers, acquisitions). The determination of situations when depreciation is not to be recaptured even if the owner of the asset has changed could be done in line with the 'Merger' Directive on the common system of taxation applicable to mergers, divisions, transfers of assets and exchanges of shares concerning companies of different Member States.

► Would members agree that only the legal owner shall be in principle entitled to depreciate an asset? Will it be necessary to adopt exceptions to this rule?

D. TIMING OF TAX DEPRECIATION

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132 Commission Working Document on General Tax Principles, Para 26, CCCTB/WP/001.

133 Commission Working Document on General Tax Principles, Para 17, CCCTB/WP/001.

45. The recognition of the acquisition costs of an asset for tax purposes should primarily relate to the actual useful life of the asset. This principle as applied in accounting is further developed by the company itself for each particular asset. Tax systems traditionally tend to decrease the element of permissible judgement and provide taxpayers with fixed rules for different categories of assets. This approach closely corresponds with the principle of certainty and effectiveness. The difficulty is to find the best balance between simplicity and accuracy.

46. Different schemes for movable and immovable assets will probably be necessary. Any further differentiation within each of the two groups should however be thoroughly considered and justified in order to avoid unnecessary complications and conflicts with the simplicity and transparency principles.

47. Tax depreciation charges should be claimed on an annual basis. Tax depreciation should probably be compulsory in both profit and loss years, although it is recognised that flexibility here is linked in some cases to loss carry-forward rules and the treatment of foreign tax credits.

48. Rules for the first year, the year in which an asset is sold or alienated and for tax years longer or shorter than 12 months are needed. Any of the currently applicable solutions (full depreciation charge or 50% or combination of the two) could be used. This is an example of where there does not seem to be a particular point of principle involved or a best practice identified, in which case the solution that members can agree on most easily is probably the most appropriate one.

► Would members of the group like to comment on this issue and proposed solutions?

E. MECHANICS OF TAX DEPRECIATION

49. Various methods and rates are currently applicable in MS and it is not possible to combine them all together. It will be necessary to establish a common approach agreed by all participating MS. As a starting point for a common solution depreciation of immovable property (buildings) on an individual basis under the straight line method and for movable property (plant, machinery, equipment) on a pool basis under the declining balance method could be envisaged. Movable assets could be divided into three categories according to their useful life (e. g. 4, 8 and 12.5 years). The choice of different methods for the same type of asset should not be possible as it seems to create unnecessary complications and requires additional considerations concerning whether or not companies can 'change their mind' etc. Depreciation rates could be fixed to correspond with the length of the estimated useful life of each category of assets (i. e. in the above example 25%, 12,5% and 8%).

► The above example solution illustrates the sort of framework that could be applied. Do members have any comments on such an approach or do they have other suggestions?

► Could members of the group comment on what elements of the framework are particularly important for them and what sort of framework they might find acceptable?

F. SALE OF ASSET, TAX VALUE

50. This issue should be analysed in line with the solutions for any capital gains taxation; therefore it will be discussed in more detail later.

G. RELATION BETWEEN ACCOUNTING AND TAX DEPRECIATION

51. To the extent that the rules for accounting depreciation charges differ across the EU accounting depreciation charges should be tax non deductible. It would permit to introduce a common EU-wide set of rules for calculating tax depreciation charges (see also H below).

► Could members of the group agree with this approach?

H. RECORDING OF TAX DEPRECIATION

52. The amounts depreciated for tax purposes shall be recorded transparently by the company. Tax depreciation charges may be registered as adjustments of the accounting depreciation plan or accounting depreciation charges may be added back to company's accounting profit and tax depreciation charges deducted afterwards and registered separately.

► Do members of the group have a preference for any of above mentioned solutions?

GENERAL QUESTIONS:

► Do members believe that all of the issues important for tax depreciation are identified in this document? Do members wish to add anything?

► Do members think that some of specific issues should be delegated to a subgroup in order to elaborate on them in more detail?

Annex 1 - Draft summary tables of main tax depreciation rules for fixed assets in Member States – after revision

IAS/ Member state	Non depreciable assets	Immediate write off	Right to depreciate	Base	Method, rate			Irregularities
					Movable (machinery)	Immovable (buildings)	Intangibles	
IAS	Land[134]	Subject to materiality. An asset not expected to be used for more than one period (useful life of < 1 year = write off)	Essentially ownership test. The lessee under certain conditions.[135]	Historic cost, unless the alternative treatment of revaluation applied	Depreciation to be allocated on a systematic basis over asset's useful life[136] The useful life is a matter of judgement.[137] Range of methods e. g. straight line, declining balance etc. The choice of method to be based on expected pattern of economic benefits arising from the asset.[138]	As for machinery	See IAS 38	Rules on impairment of assets[139]

134 IAS 16 Para 45

135 The lessee should recognise finance leases as assets and liabilities in his balance sheet at amounts equal at the inception of the lease to the fair value of the leased property or, if lower, at the present value of the minimum lease payments – IAS 17

136 IAS 16 Para 41

137 IAS 16 Para 44

138 IAS 16 Para 45

AT	Land (Participations of +20%)	Assets below EUR 400 per item	Essentially the legal owner, the lessee only if qualifies as a beneficial owner. Special rules for economic (beneficial) ownership.	Historical, acquisition or production costs.	Straight line method 10% - 20% Special write off for obsolesce	Straight line method 3% buildings serving the business of a company; 2.5% buildings serving the business of a bank or insurance company 2% other buildings.	Same rules as for movable property, if intangible asset depreciable Goodwill 15 years	Personal cars minimum 8 years. Historic renovation of buildings up to 10%. Natural resources subject to exhaustion (in case of mines quarries) according to actual proportional depletion of the asset Land only if the fair market value has gone permanently below the acquisition cost.
BE	Land Other fixed assets that have an unlimited	Possible only for indirectly attributable costs of production and for costs	Essentially the legal owner, in case of "lease and similar rights", the lessee	Historical, acquisition, production or contribution costs.	Machinery: straigth line Method or declining balance method (excluding cars and assets used by lessee) - 10 – 33¨% - Declining balance	Straight line method or declining balance method (excluding assets used by lessee)	Straight-line only According to expected use minimum 5 years (3 years for R&D)	Exceptional depreciation for extraordinary technical wear and tear and for economic loss of value due to natural calamities

139 IAS 36

	useful life (e.g. some works of art)	related to the creation of a company			is a double rate of straight line with a maximum of 40% of the historical cost.			Accelerated depreciation schemes[140] and investment allowances as incentive measures Cars: only 75% of the cost price on straight line only
CZ	Land Works of art	Tangibles below CZK 40,000 (EUR 1,300) per item Intangibles below CZK 60,000 (EUR 1,880) per item	Legal owner (lessor) in all cases	Historical, acquisition or production costs.	Straight-line method or straight line method with an accelerated rate plan. Individual basis. 4 – 20 years according to the type of an asset[141]	Straight-line method 30 – 50 years[142]	Straight-line 16.66%	Cars depreciable only up to CZK 900,000 (EUR 30,000) Special schemes for reconstruction of historical buildings.

[140] Special schemes for ships, plant and machinery used for scientific research, real property purchased, demolished and rebuilt for bank premise, works of art, such as statues, frescos, etc., made by residents of Belgium and incorporated in a building, the costs related to the creation of a company. Accelerated depreciation means depreciation which does not represent, either in economic or fiscal sense, a reasonable spreading out of costs or provision for an extraordinary loss in value; can not exceed 100% of the depreciable base.

[141] Fixed assets are divided into five groups with maximum depreciation periods of 4, 6, 12, 20, 30, 50. The fifth and the sixth group includes buildings only, some items in the forth group refer to immovable as well.

CY	Land (Goodwill)	Computer application software costing up to £1.000. Expenditure on Scientific Research of non-capital nature	Legal owner. The lessee may qualify under certain circumstances (e.g. in the case of finance leases the lessee).[143]	Historical, acquisition or production costs.[144]	Straight - line method applying various rates ranging from10% το 25% according to the type of plant & machinery. In the case of ships straight - line method applying various rates ranging from 4.5% to12.5%.	Straight-line method 25/33 years[145]	Patents, Patent Rights and Rights on Intellectual property, are depreciated in a reasonable manner (to the satisfaction of the Director of the Inland Revenue) over the economic life of such Patents or Rights.	Expenditure on Scientific Research [146] Motor Vehicles that can be classified as **private** Motor Vehicles (in accordance with the legislation for Motor Vehicles) **are not** tax depreciable. A special scheme applies for the depletion of natural mineral resources. Fixed assets transferred under reorganization are depreciated in the same manner as if the reorganization did not take place.

142 30 years residential buildings, 50 years administrative buildings.

143 In the case of rented immovable property where the tenant incurs the cost of erection of the building, **both** the landlord and the tenant have the right claim tax depreciation.

144 In the case of **second hand buildings** tax depreciation can be claimed on the residual value of the asset (cost minus the tax depreciation given) over the remaining tax life of the building from date of erection. **Second hand ships** over the remaining useful economic life in accordance with the certificate from the shipping authority. **Additional capital expenditure on ships** is depreciated over the remaining useful economic life of the ship.

145 25 years for industrial or hotel buildings, 33 years for any other building

146 Expenditure on Scientific Research on Plant, Machinery and Buildings including employees' dwellings are depreciated using the rates stated under the method rate above for Movable Machinery and Immovable Buildings. Any other Expenditure on Scientific Research of a capital nature is depreciated over 6 (six) years on a straight - line method.

DE	Real Property Participating Interests Financial Assets	Movable, independently usable economic goods up to € 410 (without VAT)	Economic Owner	Historical Acquisition or Construction Costs	Straight-line, declining balance, or sum-of-the-units depreciation. Individual valuation. Depreciation over the useful life (tax depreciation tables)	Straight-line depreciation 2% - 3% Declining balance depreciation for certain buildings used for residential purposes.	Straight-line depreciation over the useful life. Good will over 15 years.	Unplanned depreciation to be taken for economic goods (without limitation) for which there is a probable lasting reduction in value. Deductions for extraordinary technical or economic wear and tear are allowed. Special depreciation allowed in principle only in addition to straight-line or sum-of-the-units tax depreciation. Exception: special depreciation for SMEs (§ 7g Income Tax Law) is also possible in addition to declining balance tax depreciation. Deduction for depletion in regard to minerals.

DK	Land Housing property and hospitals	Assets below DKK 11,000 per item. Assets with useful life not longer than 3 years.	Legal owner (lessor) A lessee may qualify and opt to depreciate an asset under certain conditions	Historical, acquisition or production costs.	Declining balance method. Pool basis max 25 % (detailed rules for different types of assets)	Straight –line method 5	Straight-line 14,3%	Computer software may be written off immediately R&D plant, machinery and equipment may be written off immediately
EE[147]	= IAS							
EL		Assets below EUR 600 per item.	Legal owner, (lessor) in all cases	Acquisition or production costs or value after reappraisal.[148]	Straight line method or declining balance method according to the type of an asset. 2 – 40%	Straight line method 5 - 8% up to 12% for temporary constructions	Straight line, Patents 5% Trademarks 10% goodwill 5 years	Research and development costs may be written off in the year when they incurred. Computer hardware and software may be written off in the year when acquired under certain conditions

147 Business profits are not taxable under traditional concept in Estonia. The depreciation scheme does not have a direct impact on the taxable base for corporate income tax purposes.

148 Since 1992 companies are required to revalue fixed assets every four years. The capital gain arising from revaluation is subject to a special tax.

								Special schemes for taxpayers benefiting from tax incentives.
ES	Land	No minimum	Legal owner (lessor) A lessee may qualify under certain conditions (e. g. financial lease)	Acquisition or production costs	Straight line declining balance 5 -12%	Straight line 1 -3%	Straight line over useful life 10%	- increased charges for very intensively used assets
FI	Land (Securities Participations)	Assets with useful life not longer than 3 years. Assets below EUR 850 per item. The total value of assets so expensed may not exceed EUR 2,500	Legal owner (lessor)	Historical, acquisition or production costs.	Declining balance method Pool basis Taxpayer may choose any depreciation percentage between 0% and 25% annually	Declining balance method Residential and administrative buildings 4% Commercial and industrial buildings 7% Light construction and building used for research 20%	Straight line 10 years Goodwill may be expensed directly if the probable period of use does not exceed 3 years	Natural resources depletion methods Land only if decrease in value is substantial and justified by taxpayer Accelerated scheme available for SMEs in respect of investment in most of the northern and eastern Finland from 1998 – 2003 (increase by 50% for the first three years)

		per tax year.						Special scheme for cars and some boats.[149] Investment allowances for shipping companies.
FR	Land	Assets below EUR 500 per item (excluding VAT).	Legal owner (lessor) in all cases	Historical, acquisition or production costs.	Straight line method Declining method for specified assets. Depreciable basis spread over asset's useful life (Generally accepted rates range between 2 and 25% according to the type of the asset, under declining balance method 1, 5 – 2, 5 multiple of the	Straight line method Depreciable basis spread over asset's useful life (2 -5% generally accepted)	Straight line, spread over its useful life (if the asset depreciable)	Exceptional depreciation in the form of an initial deduction of 100% available for software, energy-saving equipment and equipment for preventing pollution, noise reduction and certain medical research equipment. Start up costs special scheme. Accelerated schemes for subscriptions to the capital of approved film and audio-visual finance companies or finance

[149] The acquisition value of automobiles which are used for business purposes, such as buses and taxis, may be depreciated by applying the following maximum depreciation rates to the acquisition value over 5 successive years: 25%, 20%, 20%, 15% and 15%. If this depreciation method is used instead of the main depreciation rule, the profit on the sale or other transfer of assets at prices in excess of the net book value is deemed to be taxable income in the year of the sale or transfer. The acquisition value of pleasure boats (i.e. boats not directly used in business) is depreciable over a 10-year period at the minimum by applying the straight-line depreciation method. Hence, the maximum annual rate of depreciation for pleasure boats is 10%. It should, however, be noted that if the boat has initially been purchased for entertainment purposes, only 50% of the original purchase price is deductible.

					straight line rates).			innovation companies and for industrial and commercial buildings constructed in certain economically depressed regions Cars only up to EUR 18,300 Special rules for real estate leasing
HU	Land Forests Investments not put in use	Assets below HUF 50,000 (EUR 200) per item.	Legal owner A lessee may qualify under certain conditions (e. g. financial lease).	Acquisition or production costs.	Straight-line method 14, 5%, 33% and 50% according to type of the asset[150]	Straight-line method 2% - 6% according to durability of building and construction material (brick, stone, steel, light metal, rig timber, etc.) [151]	No specific tax rules, according to useful life of the asset Goodwill minimum of 5 years	Value of land can be written down only if the fair market value has gone permanently below the acquisition cost Tangible assets with an acquisition or production cost not exceeding HUF 200,000 (EUR 810) per

[150] The rate of 14.5% is general, the following assets may be depreciated according to accounting rules or, optionally, at a rate of 33%:
- control engineering (automation) and general purpose computer technology products and equipment; industrial robots; solar panels; protective devices against noise; office equipment; machinery used for environmental protection; and programme-controlled machines in general, gauging and testing equipment.
Alternatively, a 50% depreciation rate may be applied to:
- general computer technology equipment; tangible assets newly acquired or produced in 2003 or 2004 and normally subject to depreciation at 14.5% or 33%; intellectual property or the capitalized value of experimental development acquired or created in 2003 or 2004; and machines and equipment used exclusively for film or video production.
A rate of 20% applies to motor vehicles. For leased plants recorded between the lessor's assets, the accelerated tax depreciation rate is 5% and for such machinery and equipment, 30%.

	Works of art, etc.							item may be depreciated according to the accounting rules
IE		Under scrutiny	Person who bears the burden of wear and tear of the asset, Essentially the owner, exceptionally the lessee.	Historical, acquisition or production costs.	Straight line method Pool basis 7 years (first six years 15% the seventh year 10%) motor vehicles 20%	Straight line method - industrial buildings 4% - certain buildings over 7 years	Patents over their residual life max 17 years. Software over 7 years.	Special scheme for tax incentive scheme areas
IT	Land	Assets below EUR 520[152].	Legal owner (lessor) Person carrying the business in case of usufruct or rent ed enterprise	Historical, acquisition or production costs.	Straight line method 10% - 40% according to the type of an asset.	Straight line method 3% - 5% according to the sector of activity.	Trademarks 10% Patents 33,3% Goodwill (except that created by company itself) 10%	More intensive use may justify higher depreciation charges.

151 Special rates apply to agricultural constructions (3%, 5% and 10%), railway constructions (4% and 7%), bridges (4%), power lines, oil and water pipelines (4%, 6% and 8%) and waste storage (20%). For leased buildings accounted for as the lessor's assets, the accelerated tax depreciation rate is 5%.

152 EUR 516,46

			(lessee, holder of usufruct)					
LT			Legal owner (lessor) in all cases.	Historical acquisition or production cost.	Straight line method or declining balance method 3 – 15 years according to the type of an asset.	Straight line method Declining-balance method may be used when certain conditions are met. 8 – 20 years according to the type.	Straight line 15%	
LU	Land Works of art Financial assets.	Assets - with useful life not exceeding 1 year or - not exceeding EUR 870 (excluding	Economic owner[153].	Historical acquisition or production cost.	Straight line method or declining balance[154] method if statutory conditions met. Useful life (3 % - 40 %) according to the	Straight line method 1,5 % - 3 % office buildings. 4 % - 5 % industrial buildings.	Straight line method. Useful life.	With the approval of the tax authorities, depreciation on the basis of asset utilization may be applied in the case of assets the annual use of which fluctuates widely. Extraordinary depreciation is permitted if justified by excessive

153 For tax purposes, assets are attributed to the economic owner, even if he is not the legal owner. The economic owner of an asset is in general the person who bears the economic risk and has the economic benefit of the asset (i.e. financial lease). In all cases, the economic owner is entitled to the depreciation.

154 The declining-balance method may be used only for certain tangible assets (not buildings) provided the owner is also the effective user of the assets. Under the declining-balance method, a fixed percentage of the book value is depreciated each year. The declining-balance method rate may not exceed three times the rate applicable under the straight-line method, nor 30 %. Consequently, if the straight-line depreciation rate is 15 %, the maximum rate under the declining-balance method will be 30 %. However, for assets used in research, the rate may not exceed four times the rate applicable under the straight line method, nor 40 %.

		VAT). In the latter case, the owner must be the effective user of the asset.			type of an asset.	6 % rented flats (during a fixed period of 6 years following completion).		wear and tear (technical as well as economic). Non depreciable assets can be written down only if the fair market value has gone permanently below the acquisition cost. Natural resources, mines, etc. : depletion method. Special depreciation for investments tending to the protection of the environment, the realization of energy savings and the creation of employment for handicapped workers.
LU	Land Works of art Financial	Assets - with useful life not	Economic owner[155].	Historical acquisition or production cost.	Straight line method or declining balance[156] method if statutory conditions met.	Straight line method 1,5 % - 3 % office	Straight line method.	With the approval of the tax authorities, depreciation on the basis of asset utilization may be applied in the case of assets the

155 For tax purposes, assets are attributed to the economic owner, even if he is not the legal owner. The economic owner of an asset is in general the person who bears the economic risk and has the economic benefit of the asset (i.e. financial lease). In all cases, the economic owner is entitled to the depreciation.

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	assets.	exceeding 1 year or - not exceeding EUR 870 (excluding VAT). In the latter case, the owner must be the effective user of the asset.			Useful life (3 % - 40 %) according to the type of an asset.	buildings. 4 % - 5 % industrial buildings. 6 % rented flats (during a fixed period of 6 years following completion).	Useful life.	annual use of which fluctuates widely. Extraordinary depreciation is permitted if justified by excessive wear and tear (technical as well as economic). Non depreciable assets can be written down only if the fair market value has gone permanently below the acquisition cost. Natural resources, mines, etc. : depletion method. Special depreciation for investments tending to the protection of the environment, the realization of energy savings and the creation of employment for handicapped workers.
LV	Land, works of art and antiques, jewellery		Legal owner. A lessee in cases of	Historical acquisition or	Declining balance Method	Declining balance method	Straight line	Research and development costs 100% in the year when

			financial leasing	production cost.	15% - 70% depending on the type of asset (assets are divided into five depreciation categories, for most of them depreciation calculated on a pool basis)	Individual basis 10%	Patents, licences, trademarks 20% Concessions 10%	incurred
MT		Under scrutiny		Acquisition or production costs.	Straight-line method 6,6 – 25%	Straight-line method 2%	straight-line 8%	Industrial buildings and structures, initial deduction of 10% allowable in the first year in addition to the annual deduction Depreciable amount in case of motor vehicles limited to MTL 3,000 (EUR 7,000) if not commercial vehicles

								Accelerated scheme for R&D
NL	Land (Participations Securities)	Assets below EUR 450.	Economic owner, i.e. e. person bearing the risk ob wear and tear of the asset.	Historical acquisition or production cost.	Declining balance method - Machinery and equipment 10% - 20% - Computer equipment 25% - 33% - Trucks 30%	Straight line method 2 – 4%	Straight line, declining balance provided the method is in accordance with sound business practice Rate depends on useful life of the asset, patents and concessions 20%)	Accelerated depreciation allowed for certain assets (environmentally friendly investments) Depreciation on the basis of asset's usage for assets with great variety in annual use Random depreciation as a tax incentive [157]
PL	1) land and the right to perpetual usufruct of land; 2) buildings, accommodations, constructions and devices treated as	Assets below 3.500 PLN (ca. 850 EUR)	Legal owner A lessee may qualify under certain conditions (e. g. financial	Acquisition or production costs.	Straight-line method 7-30%	Straight-line method 1,5/2,5/4,5/10/14/20% Development costs 3 years	straight-line 20 – 50%	Statutory option to apply: 1) declining balance method, 2) increase or decrease the rates contained in statutory list of depreciation rates,

[157] "Random" depreciation means that the taxpayer can choose between depreciation from 0% to 100% in order to equalize the tax burden over various years. It is even possible to entirely stop depreciation if this is favorable for the taxpayer's tax position. Unlike normal depreciation, random depreciation is even possible before the moment of utilizing the asset although not from a higher amount than was actually paid on the asset.

	cooperative housing resources or resources used for social and educational activity conducted by housing cooperatives; 3) works of art and museum exhibits; 4) value of the firm if it is the result of a different process than purchase or acceptance for use for consideration (leasing); 5) component assets which are not used due to cessation of the economic activity in which such assets were used.		lease)					3) individual determination of depreciation rates

PT	Land[158] Tourism boats and airplanes[159] Some intangible assets	Assets below EUR 200.	Legal owner (lessor), A lessee under certain conditions (e. g. financial lease)	Acquisition or production cost or a regularised net value when revaluation legally authorized.	Straight line method or declining balance method[160] Individual basis[161] 12,5%[162]	Straight-line method Individual basis 2% office buildings 5% industrial buildings	Straight line method 3 3,3% software rest over useful life (or time of exclusive use) if depreciable The light passenger vehicles are depreciable only up to the acquisition value of € 29.927,87	
SE	Land	Machinery or equipment with useful	Legal owner (lessor).	Historical, acquisition or production	Straight line method or declining balance method.	Straight line	The same rules as the ones for machinery	Enterprise can show that the market value of the assets is lower than the residual value of the

158 In case of buildings 25% of their value is deemed to be land.

159 Except when used for public transportation or operational leasing.

160 Declining balance method is only allowed to newly acquired movable assets and is not applicable neither to light vehicle passengers (except when used in public transport or rented) nor to furniture.

161 Assets of the precisely same type (except light passenger vehicles), to which the same method applies and which were acquired in the same date should be depreciated together.

162 The depreciation rate of 12,5% applies to non-specified machinery, but specific depreciation rates are established which depend on the type of asset and the activity branch in which it is used.

		life less than 3 years or below SEK 5,000 (VAT exclusive)[163].		costs.	Pool basis 30% declining balance or 20% straight line. 25% declining balance if the taxable depreciations differ from the ones in the accounts.	Individual basis 2-5%		asset (after depreciation) and claim excess depreciation[164].
SI	Land and other natural wealth, assets of cultural, historical or artistic importance, lower construction of railways, roads, airports etc., assets that are permanently out of use and other	Tangible fixed asset whose useful life is longer than one year and whose individual historical cost does not exceed the tolar equivalent of 500 EUR is recognised as expense at the time of	Legal owner; lessee in the case of financial leasing.	Acquisition or production costs.	Straight-line method 25% Exceptions: – cars: 12,5% – computers and computer equiptment: 50%	Straight-line method 5%	Straight-line method 10%	

163 Higher limit up to SEK 20,000 per item may be permitted for large companies. The amount may not be material in relation to the company's result or financial position.

164 Value for tax purposes does not exceed the highest acceptable value under Swedish accounting standards.

	assets that can be used for unlimited period of time.	the transfer into use.						
SI		Under scrutiny	Legal owner (lessor)	Acquisition or production costs.	Straight-line method 25%	Straight-line method 5%	straight-line 20%	
SK	Land Works of art	Assets below SKK 20,000 (EUR 500).	Legal owner (lessor) in all cases.	Acquisition or production costs.	Straight line method or declining balance method Individual basis 6 -16,6%	Straight line method Individual basis 3,3 – 5%	Straight-line method 20%	
UK	Land and most non-industrial buildings	Very short life assets	Legal owner (lessor) under scrutiny. In case of industrial buildings person with the relevant interest.	Acquisition or production costs. Relief on buildings is limited, viewing successive owners of the building together, to	Declining balance method Pool basis 25% 6% (on assets with expected life of 25	Straight line method Individual basis 4% Relief for buildings is limited to industrial buildings, certain	Accountancy treatment subject to option for 4% straight-line.	Various first-year allowances. Special scheme for assets used for mineral extraction. Capping of write-down allowances on most business cars at £3000

				the original cost of its construction.	years plus)	hotels, commercial buildings in enterprise zones and agricultural buildings.		a year.

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List of abbreviations and technical terms

CCCTB	Common Consolidated Corporate Tax Base
CCTB	Common Corporate Tax Base
CGE	Computable General Equilibrium
FA	Formulary Apportionment
LSE	Large-sized enterprise
MNC	Multinational Corporation
MNE	Multinational Enterprise
PE	Permanent Establishment
PTA	Principal Tax Authority
SA	Separate Accounting
SME	Small and medium-sized enterprise