Council of the European Union

Brussels, 23 November 2017
(OR. en)

14624/17
ADD 1

SOC 740
GENDER 38
ANTIDISCRIM 56
EMPL 561
EDUC 423

COVER NOTE

From:	General Secretariat of the Council
To:	Permanent Representatives Committee / Council
Subject:	Gender segregation in education, training and the labour market Executive summary of the report by EIGE

Delegations will find attached the executive summary of the report entitled "Gender segregation in education, training and the labour market" prepared by the European Institute for Gender Equality (EIGE) at the request of the Estonian Presidency[1].

[1] Report on the review of the implementation of the Beijing Platform for Action, with particular reference to critical areas of concern "B: Education and training of women", "L: the Girl Child", "K: Women and the Environment" and "F: Women and the Economy".

Executive summary

Gender segregation is a deeply entrenched feature of education systems and occupations across the EU. It refers to the concentration of one gender in certain fields of education or occupations (horizontal segregation) or the concentration of one gender in certain grades, levels of responsibility or positions (vertical segregation). Though today women work in all occupations that formerly were 'all-men', their share within some occupations is still minor, for example, as construction workers, engineers or ICT professionals. On the other hand, a number of jobs are commonly dominated by women, namely pre-primary education, nursing, personal care and domestic work. Gender segregation narrows life choices, education and employment options, leads to unequal pay, further reinforces gender stereotypes, and limits access to certain jobs while also perpetuating unequal gender power relations in the public and private spheres.

Gender segregation has detrimental effects on women's and men's chances in the labour market and in society in general. A continuous increase in women's labour market participation over the last decades has largely been due to women entering "traditional female jobs" rather than a more even distribution of women and men across sectors and occupations. In the presence of gendered barriers, numerous sectors such as engineering and ICT fail to attract or retain women workers, despite the immense growth prospects and a shortage of specialists. Numerous barriers also restrict men's occupational choices, including lower pay across the sectors where women's employment is concentrated and prejudices about men's supposedly lower need for work–life balance or their aptitude to work in sectors of education or care. Gender segregation is one of the reasons behind skills shortages and surpluses and thus has large, though often still unaccounted for, effects on numerous policy initiatives, including those to stimulate economic growth and to reduce long-term unemployment. In the fast-changing and digitalising world of work, where every talent counts, this undermines the realisation of the EU's full innovative and economic potential.

By committing to the Beijing Platform for Action (BPfA), policymakers long ago recognised the need to 'eliminate occupational segregation, especially by promoting the equal participation of women in highly skilled jobs and senior management positions, and through other measures, such as counselling and placement, that stimulate their on-the-job career development and upward mobility in the labour market, and by stimulating the diversification of occupational choices by both women and men; encourage women to take up non-traditional jobs, especially in science and technology, and encourage men to seek employment in the social sector' (United Nations, 1995). A wide range of EU and national initiatives are being pursued to tackle gender segregation. This includes the Strategic Framework for Education and Training 2020 (ET 2020), the Europe 2020 Strategy for jobs and smart, sustainable and inclusive growth, the EU's Strategic Engagement for Gender Equality 2016–2019 (which identifies equal economic independence for women and men as a priority area), and the recent European Pillar of Social Rights, which intends to secure social rights more effectively for fair and well-functioning labour markets.

This report focuses on the fields of education and training and the occupations that are highly gender segregated (dominated by one gender). In particular, the focus is on the fields of science, technology, engineering and mathematics (STEM) and education, health and welfare (EHW). The analysis refers to education/training in tertiary education at ISCED Levels 5–8 (from short-cycle tertiary education to doctoral or an equivalent level of education) and to vocational education and training at ISCED Levels 35 and 45 (upper secondary and post-secondary non-tertiary vocational education).

Within STEM, the most men-dominated fields of education are ICT and engineering on the one hand, and manufacturing and construction on the other, with women representing 17 % and 19 % of the respective educational cohorts. Among the EHW study fields, gender segregation is more clearly pronounced in education than within the health and welfare fields, with men representing 19 % and 21 % of the cohorts respectively. Over the last decade (2004–2015), women's share among STEM graduates in the EU has fallen from 23 % to 22 %. No progress in increasing men's share in the EHW study field has also been achieved, with the share staying around 21 % at EU level during the same period (2004–2015). Among the highly diverse STEM fields, the share of women graduates notably declined in ICT (in 20 Member States), whereas few significant changes were noted in the study fields of engineering, manufacturing and construction (the largest STEM discipline). The fields of natural sciences, mathematics and statistics have sustained its gender-balanced distribution of graduates.

Gender segregation is much stronger in vocational than in tertiary education in almost all EU countries. Overall, only 13 % of EU graduates from STEM vocational education are women, whereas 32 % graduate from STEM tertiary education. Five countries (EE, IT, PL, PT, RO) have a gender-balanced proportion of STEM graduates in tertiary education, but no country has achieved gender balance in vocational education. Over the last decade, a declining interest in STEM studies was observed among all students, but in particular among women in vocational education. In EHW studies, no country has yet achieved a gender-balance among students either at the tertiary or vocational education level: men represent 16 % of EHW graduates in vocational education and 23 % of EHW graduates in tertiary education. The data show an increase in women's and men's interest in EHW studies at the vocational education level.

The chances of employment for women graduating from men-dominated fields of education are significantly lower compared to those of men. In 2014, the employment rate of EU women STEM graduates at tertiary level was 76 %. This is more than 10 percentage points lower than the employment rate of men with the same qualification and three percentage points lower than the average employment rate of women with tertiary education. Furthermore, in contrast to the overall increase in women's employment in the EU, the employment rate of women STEM graduates decreased between 2004 and 2014. Additionally, there has been a notable increase in inactivity rates among women STEM graduates who studied at vocational level. Across the EU, the employment rate of men graduates in EHW was above the general employment rate of men and also higher than that of all men with tertiary education.

In the transition from education to work, gender plays a prominent role in 'funnelling' young men and women into gendered rather than 'gender-atypical' jobs. The chances of finding a job matching their educational profile are higher for women EHW graduates than for women STEM graduates, and the opposite holds true for men graduates in these fields. Among tertiary STEM graduates, only one third of women work in STEM occupations, compared to one in two men. Among vocational education graduates, the gap is even greater, with only 10 % of women but 41 % of men working in STEM occupations. Among those moving away from STEM, 21 % of women at the tertiary education level work as teaching professionals, and 20 % of women with vocational STEM education work in sales. The chances of finding a job to match one's educational profile are more equitable in the EHW field, with about half of women and men from any educational level able to find work in EHW occupations.

Gender segregation in STEM and EHW occupations is persistently high and has not improved in the last decade. In fact, the share of men in EHW occupations decreased from 30 % in 2004 to 26 % in 2014 at the EU level. This is partially due to the retirement of men, who make up about 40 % of the EHW workforce aged 60–64, whereas there are far fewer men (23 %) among the youngest cohorts. The share of women in STEM occupations increased marginally from 13 % in 2004 to 14 % in 2014. No differences are observed in the share of women across the age cohorts of STEM workforce.

Gender segregation varies significantly across countries and across STEM and EHW related occupations. There is thus a vast scope for improvement. Building and related trades, electrical and electronic trades, metal, machinery and related trades and ICT are almost exclusively men-dominated occupations, whereas personal care work is a women-dominated occupation. The gender balance among science and engineering professionals is observed in one country only (LV). Stationary plant and machine operator work is a predominantly men-dominated occupation in some countries, and one with a very high proportion of women employees in other countries. A gender-balanced distribution of employees has been reached among (associate) health professionals in a few countries; however, men are underrepresented in the teaching profession across all Member States.

Gender segregation is viewed as one of the main factors underlying the gender pay gap across the sectors. Circularly, the gender pay gap also hampers the reduction of gender segregation. Differences in pay levels across sectors can not only motivate women to take up employment in men-dominated occupations, but can also discourage men from entering women-dominated occupations. Among those already working in the sectors under study, the unadjusted gender pay gap is found to be lower within STEM than in EHW sectors, though there are large country and sub-sector differences. For example, in manufacturing and ICT men earned more than women in all EU Member States, whereas in waste management and remediation activities or construction, women were observed to have higher average pay than men in some Member States.

Following the request of the Estonian Presidency of the Council of the EU (2017), the present report explores the progress made between 2004 and 2015 in breaking gender segregation in education, training and the labour market in the EU. The analysis is based on existing and proposed new Beijing indicators on gender segregation in education, transition from education to employment, and occupational segregation. The report draws on a number of varied data sources, including Unesco-OECD-Eurostat (UOE), the European Labour Force Survey (LFS), Eurofound's European Working Conditions Survey (EWCS) and Cedefop's European Skills and Jobs Survey (ESJS).