

4 Female labour force participation and patterns of occupational sex segregation in Europe

As already pointed, one of the profound labour market developments has been the continuous progress made by women during the last decades. These developments have been driven by a variety of forces. In particular, the outsourcing of traditional female household activities has eased women's transition from the home to the labour market and led to diversified employment and working-time arrangements.

In this context, the question arises which impact these continuous processes of social change have on the development of occupational sex segregation. What are the key factors influencing patterns of sex segregation in a country? To which extent do they differ across EU Member States?

Based on various comparable data sets, this chapter first provides an overview of trends in female labour force participation. It shortly discusses determinants of the observed employment patterns which cause differences between EU Member States. In a second step, the analysis will be extended to patterns of occupational sex segregation across countries. In this regard, the aim is three-fold: first, empirical results concerning occupational differences between men and women will be presented by identifying trends for 23 EU Member States between 1995 and 2004.⁵⁸ As occupational sex segregation is a multidimensional phenomenon, the horizontal and vertical dimensions will be taken into account. Second, the usefulness of the theoretical differentiation between sex typing and occupational chances which has been proposed in chapter 3 will be assessed particularly with regard to changes over time. Finally the question will be addressed in how far the described patterns are related to the national context and the development of institutional characteristics as well as cultural and social attitudes concerning women's and men's role in society.

⁵⁸ Unfortunately, sometimes the data were not available for all 23 EU Member States or not for all points in time.

4.1. Female employment in the EU - developments and characteristics

4.1.1. Development of female employment

During the last 20 years a growing proportion of women in the European Union has been engaged in paid work. As the following table 4.1 shows, particularly the Nordic countries have taken a leading position in 2004, with female employment rates⁵⁹ between 71.6% in Denmark and 70.5% in Sweden. By contrast, Southern European countries, like Greece (45.2%) and Italy (45.2%), are still characterised by very low female employment rates. Women have made progress in the total employment rate between 1985 and 2004 in almost all countries. However, the timing of growth varies across countries. The Nordic countries (Sweden⁶⁰ and Denmark) started very early and had the highest female participation rate throughout the whole time period, followed by the United Kingdom. During the last decade (1990-2004), the largest increase could be observed in Spain (+17.4%), Ireland (+19%) and in some continental European countries, like the Netherlands (+17.2%). It is remarkable that, above all, the female participation rate in the Netherlands has increased by 25% (from 40.9% to 65.8%) during 1985 and 2004.⁶¹ In the case of Germany, the rise of female employment between 1985 and 1990 can be explained by the German reunification (1989) and the higher labour market commitment of East German women.

In Eastern European countries, the development was different. As the communist ideology forced maximum utilisation of the labour force potential, female full-time employment was nearly as high as male's during the communist regime. The high integration of women into paid employment was institutionally supported through well-developed childcare facilities and generous social programs offered by public enterprises (e.g. Łobodzińska 1995, Pascall and Kwak 2005).⁶²

⁵⁹ The employment rate is based on the definition of Eurostat where it is defined as the share of employed persons aged 15 to 64 in the total population of the same age group). Unemployed persons are not taken into account. By contrast, the activity rate or labour force participation rate refers to the number of employed *and* unemployed persons (as a percentage of working age population). In general these values are higher.

⁶⁰ A closer inspection of Sweden brings to light that, together with Finland, it is a country that had a fundamental collapse in female participation rates between 1990 and 1995.

⁶¹ This development is particularly related to the gradual improvement of childcare facilities and changing values regarding women's roles (Visser and Hemerijck 1997). Moreover, the steep increase in female labour participation and thus in employment consists mostly of part-time jobs. Freeman (1998) depicts the Netherlands as having 'the first part-time economy in the world'.

⁶² Nevertheless, female labour potential was primarily regarded as a means to fulfil the needs of the production system in a period of rapid industrialisation. Hence, the apparent gender equality observed in the labour market did not translate into equality in household-related tasks. Women, in

Table 4.1: Development of female employment rates^b (% , age 15-64), 23 EU Member States, 1985-2004

	1985	1990	1995	2000	2004	Gender gap ^c	EU-60% target ^d
<i>Nordic countries</i>							
Denmark	68.3	70.2	66.7	71.6	71.6	-8.1	11.6
Finland	73.1	71.3	59.0 ^e	64.2	65.6	-4.1	5.6
Sweden	75.6	78.7	68.8	70.9	70.5	-3.1	10.5
<i>Anglo-Saxon countries</i>							
United Kingdom	54.8	62.0	61.7	64.7	65.6	-12.2	5.6
Ireland	33.3	35.6	41.6	53.9	56.5	-19.4	-3.5
<i>Mediterranean countries</i>							
Greece	35.8	37.1	38.1	41.7	45.2	-28.5	-14.8
Italy	32.5	35.6	35.4	39.6	45.2	-24.9	-14.8
Spain	25.2	30.7	31.7	41.3	48.3	-25.5	-11.7
Portugal	48.8	54.3	54.4	60.5	61.7	-12.5	1.7
<i>Continental countries</i>							
Austria	52.1	55.9	59.0	59.6	60.7	-14.2	0.7
Belgium	39.1	40.9	45.0	51.5	52.6	-15.3	-7.4
France	49.3	51.1	52.1	55.2	57.4	-11.5	-2.6
Germany	48.9	54.2	55.3	58.1	59.2	-11.6	-0.8
Netherlands	40.9	47.1	53.8	63.5	65.8	-14.4	5.8
Luxembourg	39.7	41.8	42.6	50.1	50.6	-21.8	-9.4
<i>Eastern countries</i>							
Hungary	50.2*	46.3*	40.3*	49.7	50.7	-12.4	-9.3
Poland	-	-	51.1*	48.9	46.2	-11.0	-13.8
Estonia	-	60.6*	53.6*	56.9	60.0	-6.4	0.0
Czech Republic	-	60.8*	52.3*	56.9	56.0	-16.3	-4.0
Lithuania	-	60.2*	55.1*	57.7	57.8	-6.9	-2.2
Latvia	-	64.1*	-	53.8	58.5	-7.9	-1.5
Slovenia	-	54.1*	52.1*	58.4	60.5	-9.5	0.5
Slovakia	-	59.7*	51.2*	51.5	50.9	-12.3	-9.1

Notes: a) The organisation of the table follows Boeri et al. (2005: 13); b) Definition of the employment rate = employed persons aged 15-64 as a share of the total population aged 15-64; the definition of the employment rate for the Eastern EU Member States refers to people aged +15; c) The gender gap refers to the difference between the male and the female employment rate (a minus means the differences of women's employment rate to men's); d) The EU 60% target refers to decisions at the Lisbon summit 2000 to increase women's employment from 51% to 60% by 2010 (see for more detail, chapter 1); e) The huge difference for Finland between the years 1990 and 1995 might be explained by one of the deepest recessions Finland experienced during 1990 and 1995. At the same time the unemployment rate of women increased from 2.7 to 15.1%.

Sources: European Commission: Employment in Europe 2002, 2004, 2005 and 2006,

* For Eastern European countries, 1990-1995: http://w3.unecce.org/pxweb/Dialog/statfile1_new.asp

spite of their professional duties, were expected to perform housework and provide care (e.g. Pascall and Manning 2000, Geisler and Kreyenfeld 2005).

These patterns have changed considerably after the breakdown of the communist system. Economic transition and a rapid development of the service sector caused a significant change in the structure of labour demand. The situation of men worsened substantially. For women, however, it was even more difficult to compete successfully in the labour market (Pollert 2003: 337). The table clearly shows that female employment rates dropped between 1990 and 2004 in nearly all Eastern European countries. It is particularly low in Poland (46.2%), while the highest figure is reached in Estonia (60%) and Slovenia (60.5%). Furthermore, the declining role of the state in the economy in many CEE countries, accompanied by rapidly diminishing financial resources, resulted in reduced public support for families, both in terms of income and provision of services (Stropnik 2003). As a consequence, the reconciliation of work and family has become more difficult - a development which has finally led to the observed drop in female employment. In spite of the described difficulties in the labour market, the gender employment gap in post-socialist countries is still much lower than in the majority of the 15 'old' EU Member States, particularly when measured in full-time equivalent (European Commission 2004a).

The described developments in female employment have a certain corollary, particularly for men. Between 1985 and 2004, the male participation rate diminished in almost all countries (except of the Netherlands and Portugal), but not to the same extent as the female participation rate increased. The reasons for the decline of male employment in the 'old' EU Member States can be seen in a longer qualification period of young men and the possibility of an early retirement offered to older men (Rubery et al. 1998). In Eastern Europe, however, the drop was probably caused by cuts in the industrial sector and further structural changes which affect men to a greater extent than women (Ruminska-Zimny 2002: 3). Nevertheless, there are still significant gender differences in Europe: even though the employment gap between women and men⁶³ has decreased, on average, from 18.1% to 15.2% over the last few years, it remains significant. Moreover, it varies considerably across countries: in 2004 the gender employment gap ranged from -28.5% in Greece to -3.1% in Sweden. The European employment target of a 60% female employment rate, which is to be realised by 2010, could only be reached by nine out of 23 countries in 2004.⁶⁴ Although the gap has decreased over the last decade, it is still substantial in the Mediterranean countries as well as Poland, Luxembourg, Hungary, Slovakia and Belgium.

⁶³ The gender gap is defined as the difference in the employment rate between men and women.

⁶⁴ These countries are Denmark, Sweden, the Netherlands, the United Kingdom, Finland, Portugal, Austria, Slovenia and Estonia.

4.1.2. *Characteristics of female employment in the EU*

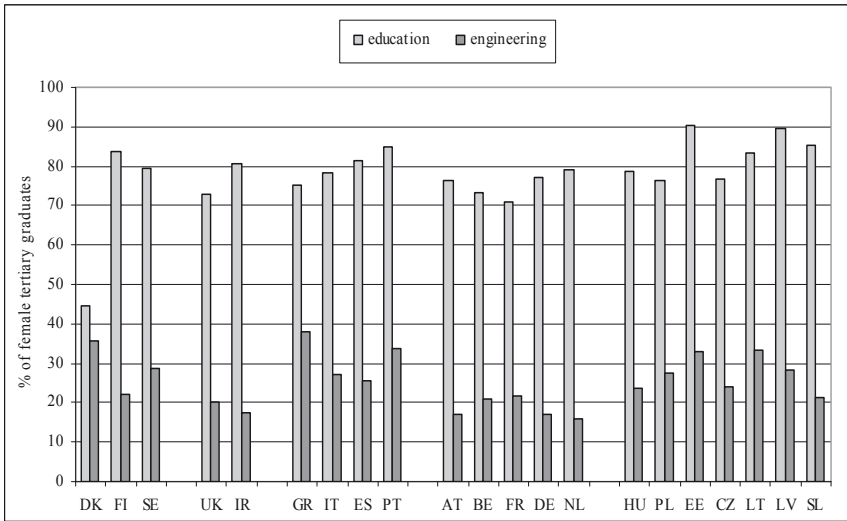
Different processes are responsible for the increasing involvement of women in paid employment. Individual working preferences are influenced by an accumulation of various individual as well as demand side factors. For instance, the increasing educational attainment of women and their growing preference for non-domestic roles as well as structural changes of economy, like the extension of the service sector and the increase of part-time work, can be seen as important factors causing a higher attachment of women towards the labour market (Jonung and Persson 1993, Blossfeld and Hakim 1997).

With respect to educational expansion, there has been a steady increase of women's educational attainment in most European countries (Müller and Wolbers 1999, Strack 2003, OECD 2004b). Nowadays, they reach parity with men in nearly all countries: According to Eurostat (2007), almost 80% women aged 20-24 had completed at least upper secondary education on average of the EU-25 in 2004, while around 74% of men had done so. However, there are still country differences: while 93.7% of female graduates in this age group have completed at least upper secondary education in Slovenia, only 58.8% have done so in Portugal. In tertiary education, it appears that more women (59%) than men complete first-level degrees⁶⁵. However, their shares decrease to 43% in higher tertiary degrees, like PhDs.

The increasing gender equality in educational attainment suggests that women are now better equipped for the labour market. However, a core problem is the persistent unequal distribution of men and women across fields of study. As figure 4.1 demonstrates, women still tend to choose gender-typical fields of study. The comparison of the share of female tertiary graduates in 'education' (a typical female field of study) and 'engineering' (a typical male field of study) shows that women are obviously underrepresented in 'engineering' in all selected EU Member States. The share varies between 15.9% in the Netherlands and 38% in Greece. In education, by contrast, the share of female graduates differs from 90.5% in Estonia and 44.7% in Denmark (see table A4.1 in the appendix).

⁶⁵ The first-degree level refers to ISCED5a graduates and higher tertiary degrees refer to ISCED6 graduates.

Figure 4.1: Percentage of female tertiary graduates out of all graduates in education and engineering, 2004

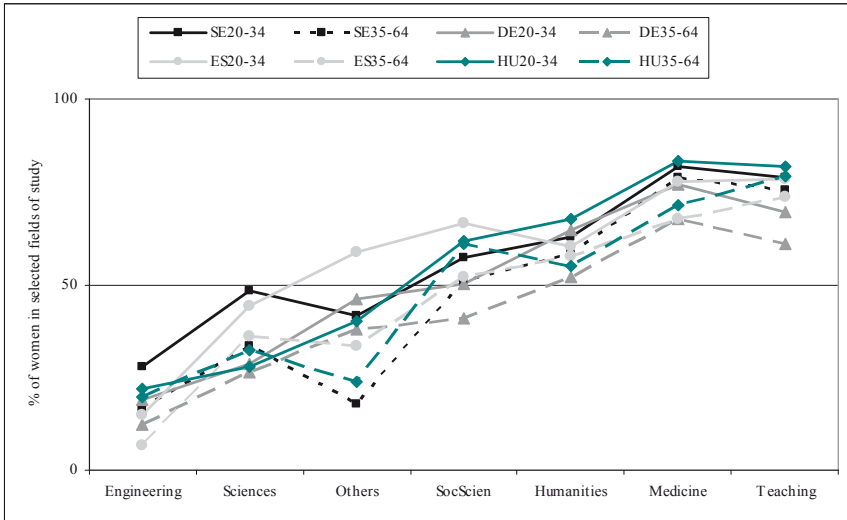


Source: UNESCO 2006; <http://stats.uis.unesco.org/ReportFolders/reportfolders.aspx>

Even though the observed patterns may be related to a strong association of masculinity with ‘technical’ skills and of femininity with ‘nurturing’ skills, it is worth noting that some ‘scientific’ or ‘technical’ fields of study, such as medicine, have experienced a strong tendency towards feminisation over time. To demonstrate such developments, figure 4.2 shows remarkable changes in educational sex typing over time for selected countries. A distinction between younger (20-34) and older age cohorts (35-64) reveals different processes: For the youngest age cohort, in almost all selected countries a tendency towards a slight integration is observable in typical ‘male’ fields of study, like engineering and sciences. In these fields of study the share of women has increased from cohort to cohort. On the other hand, feminisation tendencies come to the fore particularly in integrated and typically female fields, like medicine and teaching. As already underlined, this also demonstrates the limitations of aggregate measures of segregation indices. Even though most indices indicate persistent educational and occupational segregation, fundamental changes can occur within specific fields or occupations. The described developments in the unequal distribution of men and women across fields of study would not be so dramatic, if particular fields of study, like education and humanities, did not provide women with potentially lower labour market chances in terms of income and career

prospects (Götzfried 2004, European Communities 2006, Reimer and Steinmetz 2007). Therefore, it can be expected that the gender-specific distribution across fields of study also reinforces occupational sex segregation.

Figure 4.2: Patterns of sex typing of fields of study for selected EU Member States and different age cohorts, 2004 (tertiary degree holders)



Source: EULFS 2004, own calculations

Turning to economic structures and their relation with occupational sex segregation, it is argued that structural changes in economy and demographic shifts influence the demand for and supply of female workers. Oppenheimer (1970), for example, attributes the growth in women's employment in the US labour market after World War II to shifts from the agricultural to the service sector and a resulting increased demand for labour within female-typed occupations. Other researchers (England and Farkas 1986, Goldin 1990) underline that, besides the increasing demand in female-typed jobs, factors like reduced working hours and increased real wages encouraged women's labour force participation. However, each EU Member State has faced more or less similar processes of change over the last decades: declining employment in the agricultural and industrial sector and a growth of employment in the service sector (European Commission 2005c). Particularly the rapid growth of the service sector offers more and diverse possibilities for women to find work and combine it

with family life. Table 4.2 confirms that, during 1995 and 2004, most of the expansion of female employment took place in services.

Table 4.2: Development of female employment rates (%) in different economic sectors, 1995-2004

	Agriculture			Industry			Service		
	1995	2000	2004	1995	2000	2004	1995	2000	2004
<i>Nordic countries</i>									
Denmark	2.6	1.9	1.7	13.4	12.4	11.0	84.0	85.7	87.3
Finland	5.6	3.8	3.0	14.0	13.8	12.2	80.4	82.4	84.8
Sweden	1.2	1.2	1.0	11.4	10.9	9.8	87.4	87.9	89.2
<i>Anglo-Saxon countries</i>									
UK	0.7	0.6	0.4	11.6	10.0	7.9	87.7	89.4	91.6
Ireland	3.1	2.1	1.4	17.2	15.5	12.7	79.6	82.4	86.0
<i>Mediterranean countries</i>									
Greece	21.8	18.6	15.3	15.6	13.5	11.0	62.6	67.9	73.6
Italy	5.9	4.1	3.4	20.8	19.4	17.0	73.3	76.5	79.6
Spain	5.7	4.4	3.8	12.3	13.6	12.3	82.0	82.0	83.9
Portugal	12.3	12.0	12.7*	23.6	20.3	19.7*	64.1	67.8	67.6*
<i>Continental countries</i>									
Austria*	8.2	6.2	5.8	17.6	14.1	13.0	74.3	79.8	81.2
Belgium	2.1	1.5	1.6	11.6	10.0	9.0	86.2	88.5	89.4
France	3.4	2.7	2.5	12.8	11.2	10.3	83.8	86.1	87.2
Germany	2.7	1.9	1.6	17.9	15.4	14.1	79.5	82.7	84.3
Netherlands	2.3	2.4	1.9*	9.1	8.7	8.0*	88.6	88.9	85.3*
Luxembourg	1.7	1.1	1.1	8.5	6.2	7.6	89.7	92.7	91.4
<i>Eastern countries</i>									
Hungary	4.7*	3.3*	2.6	24.8*	25.0*	22.6	70.6*	71.7*	74.9
Poland	22.5*	18.3*	17.2	21.0*	19.0*	17.1	56.6*	62.7*	65.6
Estonia	7.8*	4.6*	3.6	26.6	23.9*	25.4	65.7	71.6*	71.1
Czech Rep.	5.5*	3.7*	2.8	30.8*	27.5*	25.7	63.7*	68.7*	71.6
Lithuania	17.9*	15.8*	13.3	21.5*	20.0*	20.2	60.6*	64.2*	66.5
Latvia	13.5	12.1*	9.6	20.2	18.4*	17.5	66.3*	69.5*	72.9
Slovenia	10.8*	9.7*	10.5	33.7*	28.1*	24.6	55.5*	61.5*	64.9
Slovakia	6.4*	4.0*	2.1	28.6*	25.5*	23.2	65.0*	70.5*	74.6

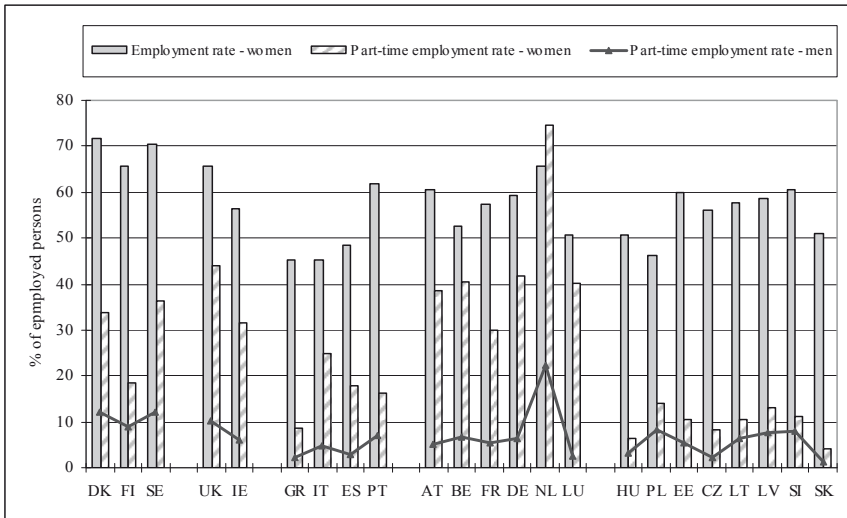
Note: * For those countries and years the source is <http://w3.unece.org>

Sources: European Commission: *Employment in Europe 2002, 2004, 2005 and 2006*.

The biggest increase can be observed in Greece, Slovakia, Slovenia, Poland, Austria, Ireland and Italy, whereas nearly no changes can be identified in the Netherlands, Sweden and Spain. A further reason for women's growing

labour market attachment is related to increasing non-standard employment, like part-time work (ILO 1992, European Commission 2005c). In this regard, huge country differences can be observed with respect to female participation rates (see the following figure 4.3).⁶⁶ In 2004 three types of countries can be distinguished: first, countries with a high share of female part-timers, like the Netherlands (74.7%), the United Kingdom (43.9%) and Germany (41.6%) where part-time employment is a significant component of the national employment system.

Figure 4.3: Cross-national comparison of part-time work (%), 2004



Note: The part-time employment rate is based on all employed women / men.

Source: European Commission: *Employment in Europe 2005*.

Second, countries like Sweden (36.3%) and France (30.1%) with rates around 30%. Greece (8.5%) and Portugal (16.3%) form the third group with the lowest incidence of female part-time employment among the ‘old’ EU Member States. In Eastern Europe, part-time employment of women has not become common. Rates are very low in these countries (between 4.1% in Slovakia and

⁶⁶ In Britain, for example, part-time work emerged soon after the Second World War when the marriage barn was abolished. Italy, by contrast, has very small part-time workforce and very slow growth of part-time employment even at the end of the century (Addabbo 1997: 113).

14% in Poland)⁶⁷. Furthermore, it is obvious that part-time work plays a secondary role in the male employment biography. However, existing part-time employment disparities between men and women are much lower in CEE countries than in Western countries with rates between 22.3% in the Netherlands and 1.4% in Slovakia. Even though more than half of the female employment growth followed from the expansion of part-time work in countries like the Netherlands and Germany, it cannot be stated that rapid employment growth generally depends on the creation of part-time jobs. For example, Spain achieved one of the fastest female employment growths with only an insignificant increase in part-time employment (European Commission 2006, Fagan and Rubery 1996). Figure 4.3 also demonstrates that, in general, high female participation rates are not necessarily connected with high rates of part-time employment. Denmark has only a moderate level of female part-time employment (33.8%) but the highest female employment rate.

In literature, reasons for the increase in part-time work, and the question of the extent to which women have benefited from this process, are discussed extensively (Hakim 1991, Meulders et al. 1993, OECD 1994a, Rosenfeld and Birkelund 1996, Blossfeld and Hakim 1997, Drobnic 1997, Klein 1997). On the political side, a line is frequently drawn between the expansion of part-time employment, the growing integration of women in the labour force, and improvements in gender equality. It is assumed that part-time work, due to a reduced conflict between the labour market and family responsibilities, is not just a helpful but also an essential element in the mobilisation and integration of the female labour force. These optimistic statements focus on the positive side of part-time work. The drawback is that it is usually associated with low-skilled, low-paid and precarious or insecure employment (Hakim 1987, Birkelund and Rosenfeld 1995). Female part-timers often remain in a dependent position in respect of their husband, and the 'flexibilisation' does not necessarily facilitate the combination of family and employment, as revealed by the emergence of non-standard working time schemes (Evans et al. 2001: 11, Bollè 2001).

The greater involvement of women in paid employment may also be accompanied by other flexible employment forms, like temporary work.⁶⁸ In general, fixed-term employment does not display gender differences comparable to part-time employment, with the average share for the EU being 14.9% for

⁶⁷ This can also be explained by very small part-time labour markets in these countries. Women's preferences for choosing part-time may be more constrained, forcing them either in full-time work or non-work.

⁶⁸ In 2004, the share of total employees within the EU on contracts of fixed duration was 13.7%, ranging from 32.5% in Spain to below 5% in Estonia, Ireland, and Luxembourg.

women and 13.9% for men (see for more detail table A4.2 in the appendix).⁶⁹ Nevertheless, the difference is substantial in some Member States, such as Belgium, Italy and Spain⁷⁰, where the share of fixed-term employment for women is around 5% higher than that for men, and Finland where the gap amounts to 8%. By contrast, in many of the new Member States, as well as Austria and Germany, larger shares of men were employed on a fixed-term basis than women in 2004/5. The political arguments advanced in favour of temporary work resemble those presented for part-time work: temporary work is seen as a good solution for a better balance between public and private responsibilities or a bridge to permanent employment and jobs of better quality (European Commission 2002, Korpi and Levin 2001, Franco and Winqvist 2002). However, studies show that temporary workers suffer from less control over their working hours, have less autonomy, perform less skilful tasks, receive less training and often work on an involuntary basis (Paoli and Merllié 2001).⁷¹

In the context of the debate on increasing part-time opportunities and a higher labour market flexibilisation, the lack of a work-life balance is very often cited as a factor explaining the persistence of gender gaps in the labour market. Even though there has been a changing attitude towards working mothers, and women start to question their domestic role (Duane et al. 1992, Crompton et al. 1996, Albrecht et al. 2000, Knudsen and Waerness 2001), they appear more often affected by the tension arising from the combination of labour market participation and family responsibilities. Relevant studies show that labour market participation and the amount of working hours are strongly linked to parenthood. The effect, however, is negative for women while it is positive for men. In almost all EU Member States, women (aged 20-49) with children have lower employment rates than those without. For the EU-25, the employment rate falls from 75.4% in the case of women without children to 61.1% for women with children. Moreover, 23.3% of women having children worked part-time, while this is only the case for 15.9% of women without children (European Communities 2006: 11).

Finally, female employment is also associated with a change in inactivity patterns. In most European countries, women experience a higher risk of

⁶⁹ Furthermore, the share of both women and men employed in fixed-terms jobs (voluntarily and involuntarily) increased between 2000 and 2005. In 2005, 7.5% of all women employees and 6.7% of men were employed in fixed-term jobs.

⁷⁰ Particularly in Spain labour market flexibilisation and the reduction of high youth unemployment was combated with temporary contracts. As a consequence, the net-increase in full-time employment was more associated with temporary contracts instead of part-time work (Rubery et al. 1999a).

⁷¹ In countries like Belgium, Spain and Greece over 70% were working involuntarily on fixed term contracts, while many temporary workers in Ireland were doing so by choice (European Commission 2001).

unemployment than men although there are large country differences⁷²: in 2004, high unemployment rates existed in Greece (16.2%), Spain (14.3%) and France (10.6%), whereas the lowest rates could be found in Ireland (4.1%), the United Kingdom (4.2%) and the Netherlands (4.8%). With respect to Eastern European countries, Poland (19.9%) and Slovakia (19.2%) had the highest, and Hungary (6.1%) and Slovenia (6.8%) the lowest female unemployment rate (see appendix table A4.3). However, no straightforward relationship can be found between trends in unemployment and an increasing female employment rate. This is mainly caused by the problem that women, who leave the labour market, do not necessarily consider themselves unemployed. Vice versa it is often not clear whether a woman who enters employment was inactive (often called the 'silent labour market reserve') or registered as unemployed.⁷³

The on average higher unemployment risk of women in comparison to men has various reasons. First, women generally have lower employment rates, increasing the potential for a female labour reserve which may or may not be mobilised to seek work actively and be counted as unemployed. Moreover, unemployed women have to compete with non-employed women. Hence, the risk of remaining unemployed may be high despite new job opportunities for women simply because of the overall size of the available female reserve. A second argument is connected with higher transition rates for women between economic activity statuses. This fluidity and the greater insecurity attached to women's employment positions can result in a relatively high female stock of unemployment (Rubery et al. 1998: 148). However, the extent of these female unemployment risks is influenced by national labour market regulations as well as national patterns of female labour market participation.⁷⁴

⁷² It has to be underlined that there is a heated debate on whether applied unemployment measures are not itself 'gender blind' and therefore inadequate to really measure the extent of female unemployment (see Rubery et al. 2002a, Plantenga and Remery 2006a).

⁷³ Against this background it seems problematic to capture women's exclusion from the labour market because the distinction between inactive and unemployed seems less effective in the case of women.

⁷⁴ For example, there has been a focus on the importance of youth unemployment in the EU during the last decades. As young people constitute a higher share of the female labour force than the male labour force in most countries, high youth unemployment tends to boost the female unemployment rate disproportionately. This effect could be confirmed when looking at countries with high female unemployment rates, like Greece, Spain and France where also very high female youth unemployment can be found (Greece 36.6%, Spain 26.5% and France 23.3%). This tendency holds much more in the case of Eastern European Countries, for example in Poland (41.9%) and Slovakia (33.7%), see Eurostat 2007.

4.2. The development of occupational sex segregation throughout the 90s

The presentation of trends in female employment during the last decades raises the question in how far these changes are also influencing the extent of occupational sex segregation. For instance, it may be expected that the increasing number of women entering the labour market, as well as changes in the economic and occupational structure, also affect the distribution of men and women across occupations.

To answer this question, the common index-approach will first be taken in order to give a brief overview of main trends in occupational sex segregation taking into account horizontal as well as vertical aspects. The analysis is based on the second quarter of the European Labour Force Survey (EULFS) for the time period of 1995-2004 covering 23 EU Member States. As already discussed in chapter 3, the results are calculated for the ISCO88 1- and 2-digit level. Furthermore, agricultural occupations are excluded from the analysis and only persons in employment are considered.⁷⁵

4.2.1. Which countries are most segregated? - Some descriptive results

To start with the conventional practice of an index-based analysis of occupational sex segregation, table 4.3 presents the results of selected sex segregation indices (D , D_{st} , and L) for the year 2004.⁷⁶ D and D_{st} are selected because they are most commonly used in literature which also ensures the comparability of the results with prior findings.

As discussed in chapter 3, it seems plausible to look at results for different indices as they refer to different aspects of occupational sex segregation.⁷⁷ In line with previous studies, counterintuitive patterns of cross-national variability can be observed. Focusing first on the 'old' EU Member States, values for the occupational chances (measured through D) are the lowest for countries like Italy (38.5%) and Greece (43.7%) and highest for countries like Finland (54.3%) and Denmark (49%). Similar results can be observed for sex typing

⁷⁵ Some authors' underline that agriculture should be excluded from the analysis because of its 'gender blindness' (many women are only counting as helping family members and therefore not registered adequately in the occupational classifications, see for more detail chapter 3).

⁷⁶ Values for Luxembourg are included in the table but not interpreted due to data irregularities.

⁷⁷ As examined in chapter 3, D is implicitly weighted, so that 'big' occupations contribute more, whereas D_{st} treats occupations as if they had the same size. The methodological interpretation of both is, however, the same. By contrast, log-linear indices like L are invariant to changes in the proportion of women and men in the overall occupational population *and* to changes in the relative size of occupations.

(measured through D_{st}): Southern European countries (Italy and Greece) have very low values, whereas Denmark, Finland and Belgium show the highest results for sex typing. These findings indicate that, particularly in the latter countries, women and men are distributed unequally across occupations. More than 50% of women and men would have to change occupations to be equally distributed.

Table 4.3: Different segregation indices (ISCO88 2-digit, without agriculture), 2004

	D	D_{st}	L
Denmark	48.96	52.02	80.09
Finland	54.34	53.89	81.22
Sweden	45.20	49.16	75.41
United Kingdom	46.97	44.79	70.07
Ireland	47.60	46.23	77.84
Greece	43.69	42.65	80.03
Italy	38.45	40.37	57.16
Spain	48.54	45.14	74.35
Portugal	46.77	44.48	80.08
Austria	48.35	47.58	82.10
Belgium	48.50	51.77	82.58
France	48.89	44.99	66.72
Germany	48.67	47.13	64.54
Netherlands	44.75	48.02	76.83
(Luxembourg)	40.28	56.92	103.51
Hungary	48.69	44.71	73.93
Poland	48.43	46.43	78.10
Estonia	52.48	55.98	88.22
Czech Republic	52.03	46.19	73.29
Lithuania	54.54	55.48	85.30
Latvia	48.97	47.52	78.17
Slovenia	40.05	46.55	81.53
Slovakia	52.79	48.80	79.91

Notes: D=Index of Dissimilarity, D_{st} =Standardised Index of Dissimilarity, L=Lambda, see chapter 3 for index definitions.

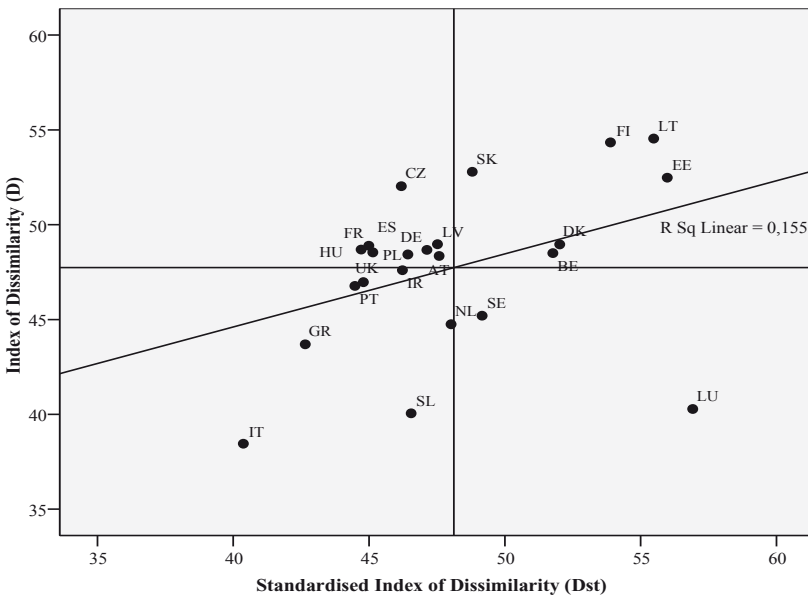
Source: EULFS 2004/5, own calculations

In Southern European countries, only around 40% of women and men would have to do so. In case of Eastern European countries, Estonia and Lithuania show values for both perspectives (sex typing and occupational chances)

which are among the highest in Europe. In Slovenia, by contrast, the lowest values can be observed for both perspectives.

On the basis of these results, it is possible to visualise the positioning of EU Member States with respect to the different aspects of occupational sex segregation (occupational chances and sex typing) in a scatter plot. The vertical line in the following figure 4.4 represents the average degree of sex typing, and the horizontal line the average degree of the dissimilarity of occupational chances for all countries.

Figure 4.4: Positioning of 23 EU Member States for both sex segregation aspects (ISCO88 2-digit, without agriculture), 2004



Source: EULFS 2004/5, own calculations

First of all, a moderate positive correlation can be observed between the two aspects of segregation ($r^2=0.16$), justifying the theoretically-driven differentiation between 'sex-typing' and 'occupational chances' as distinct but correlated dimensions of segregation. Furthermore, the graph yields two clusters which compose the extreme poles: Italy, Greece and Slovenia which are characterised by very low levels of sex-specific occupational chances and sex typing (particularly Italy), and Estonia, Finland and Lithuania which are located fairly

high in both dimensions of segregation. Finally, a third cluster is formed by a big group of countries centred on the averages of both dimensions. In this case, it is possible to distinguish between countries with above-average levels of occupational chances and fairly low levels of sex typing (Czech Republic, Hungary, France, Spain, Poland, Germany, Austria, and Latvia) and countries with below-average levels of occupational chances as well as low levels of sex typing (the United Kingdom, Portugal and Ireland). However, there are also countries like Denmark and Belgium with an above-average level of occupational chances and also fairly high values of sex typing, or with a below-average level of sex typing (the Netherlands and Sweden). With respect to the positioning of Eastern European countries, the common history of communism and a high integration of women into the labour market may suggest that labour markets, even after fifteen years of 'capitalisation', are less segregated than in the 'old' Member States, and that the countries group together. However, the opposite result comes to the fore: while Estonia and Lithuania were characterised by high values of occupational sex segregation in 2004, countries like Poland and Hungary were more comparable with continental European countries. This may be due to the fact that countries like Estonia, which have been more Western-oriented during communist times, have adapted somewhat faster to the capitalist economy. A growing service sector in these countries and a high share of women in services accompanied by 'typical' female occupations reflects this process.

As traditional indices have been criticised for marginal dependency (see chapter 3), results of log-linear approaches (L) are also discussed in this chapter. However, when comparing the results with D_{st} ⁷⁸, the positioning of countries is only slightly different. It varies between +/-3 positions in 11 countries, while the ranking of Italy, Spain, Luxembourg, Estonia and Lithuania remains constant. More fundamental differences can be observed in six countries: while Sweden, Germany, and the Netherlands are shifting towards a lower level of occupational sex segregation, the increasing values for Greece, Portugal, Austria, and Slovenia indicate a greater amount of occupational sex segregation. In sum, the comparison of L and D_{st} reveals that, even though L is a marginal free measure, the results do not vary much across indices.

Although indices are often used to give an overview of the positioning of countries with respect to occupational sex segregation, they provide little insight into potentially important country-specific patterns. Therefore, the next section will describe in more detail the structure of the different aspects and dimensions for selected European countries.

⁷⁸ As argued in chapter 3, L and D_{st} are comparable with respect to the measured perspective of occupational sex segregation.

4.2.2. *Where do women and men work? Dimensions of occupational sex segregation in 2004*

The sex typing of the labour market

As to the question of ‘typical’ male or female occupations, the simplest way to assess the level of occupational sex typing is to assess the distribution of women and men in different occupations. The following figure 4.5 is an example of the ‘sex typing profiles’ of ten selected EU-countries (see the profiles of the rest of countries in the appendix, figure A4.1) at the level of nine major occupational groups (ISCO88 1-digit).⁷⁹ The interpretation is straightforward: the more even the country curve, the more equal the distribution of men and women in the different occupations (50% constitutes the equal share of women and men in society). By contrast, the steeper the curve, the more segregated are women and men in the different occupational categories.

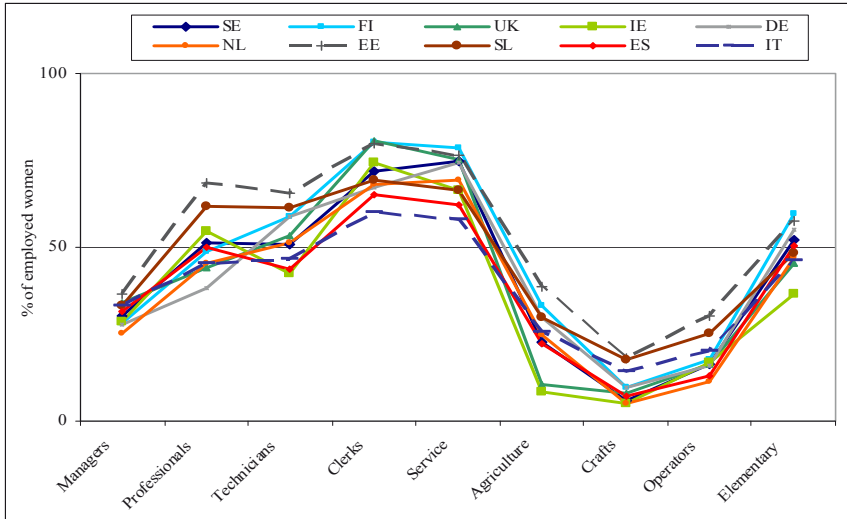
First of all, it is interesting that the patterns of ‘sex typing’ are very similar in all selected countries. For example, clerks (group 4) and service-orientated occupations (group 5) are highly feminised, with a share of women between 80.5% (Finland and the UK) and 60% (Italy) for clerks and 78.6% (Finland) and 58.1% (Italy) for services. The mostly male-dominated occupations are those of the producing industry (crafts (group 7), and machine operators (group 8)) and agriculture (group 6). This confirms results of earlier studies indicating that feminised occupations are often associated with attributes of ‘serving’ and ‘caring’, whereas men’s occupations are associated with attributes of ‘physical strength’ and ‘power’. As Anker et al. (2003) pointed out, it is especially striking how sex stereotypes in society about appropriate roles for women and men are replicated in the labour market. He examined that, in 1990, approximately 50% of all workers were in gender-dominated occupations. Also Charles (1992, 2005) underlines that this phenomenon of sexual composition of occupations is typical for developed industrial countries. As the presented results show, there are nevertheless some occupations (like professional, technical and elementary occupations) that can be classified as ‘integrated’ in almost all countries.

Besides the discussed similarities, there are also country differences: for example, the occupational groups ‘professionals’ and ‘technicians’ are typical female occupations with a female share of 68.6% and 61.6% in Estonia (similar to Slovenia). In the case of Southern European countries, service and clerical occupations are rather integrated than female-typed. In general, the results of prior studies are confirmed: the grade of sex typing of occupations is highest in

⁷⁹ For the purpose of a better presentation, this figure is based on the ISCO88 1-digit. At the level of the ISCO88 2- or 3-digit it would be too complex to be shown.

the selected Nordic countries (Finland and Sweden) which are supposed to be gender-egalitarian regimes, whereas it is lowest in the so-called traditional countries like Italy and Spain. In the case of Estonia and Slovenia, the patterns seem somewhat different.

Figure 4.5: Patterns of occupational sex typing for selected EU Member States (share of employed women, ISCO88 1-digit), 2004



Source: EULFS 2004/5, own calculations

While high values (a high feminisation) can be found in non-manual occupations (groups 1 to 5), sex typing is lower in the case of manual occupations (groups 6 to 9). This may be explained, on the one side, by the economic changes in former CCE countries and the rapid growth of the service sector that strongly supports the creation of typical female occupations. On the other side, the low sex typing of manual occupations might be a heritage of the communist system where women were represented strongly also in 'typical' male occupations.

The dissimilarity of occupational chances

The above-presented figure gives an impression of the sex composition of occupational groups. A second possibility to address occupational sex segregation is

to examine the occupational chances of women and men across occupations.⁸⁰ This perspective takes the size of each occupation into account, so that it can be explored how ‘evenly’ women or men are spread across all occupations and to which extent they are ‘ghettoised’ into specific occupational groups.

To illustrate this aspect, the well-known age-pyramid used in demography can be applied. Figure 4.6 exemplarily presents the structure of the sex-specific occupational chances for Germany, Italy, the United Kingdom, Finland and Estonia in 2004 on the basis of the ISCO88 1-digit. The hatched fields mark the differences in occupational chances between the two sexes, i.e. the degree of relative overrepresentation of one sex in the specific occupation. The sum of the hatched fields on the left (male) side is equal to the sum on the right (female) side and corresponds to the value of the index of dissimilarity D ⁸¹. For each country, the figure yields a detailed insight into the structure of sex-specific occupational chances, showing the chances of males (dark grey) and females (light grey) to access the nine major occupational groups. Even though this graphical presentation is intricate and more difficult to compare across countries, a comparison between Germany, Italy, the United Kingdom, Finland and Estonia shows similarities as well as country-specific patterns.

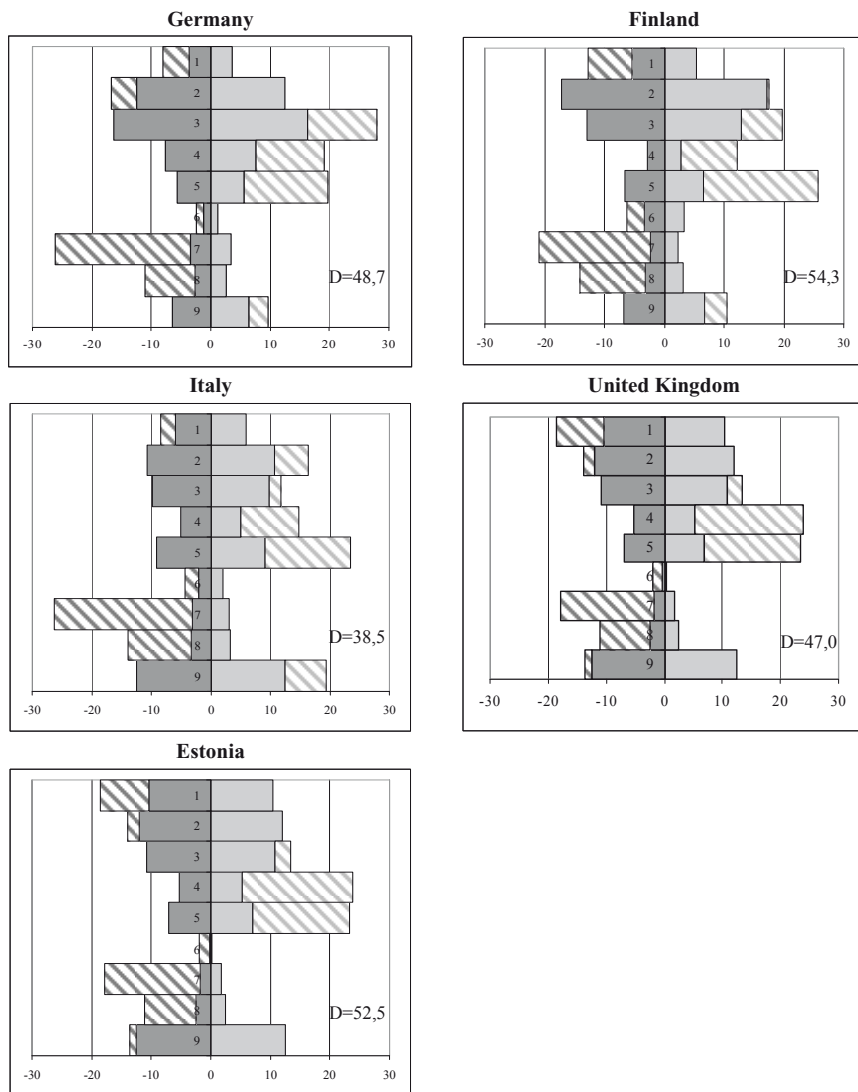
Starting with similarities, it can be observed that, in all countries, women have especially high chances to work in the group of professionals (3), clerks (4), and services (5). By contrast, men are likely to be found in occupations necessitating a ‘high qualification’⁸², such as legislators, senior officials and managers (1). Furthermore, occupations regarding a lower qualification (mostly in the manual sector), like those of major group 6 (agriculture), 7 (craft and related trades workers) and 8 (plant and machine operators and assemblers) show a predominance of men. Moreover the figures show that, in all selected countries, more than 50% of the female workforce (53.2% in Estonia and 66.9% in Germany) is concentrated in only a few occupational groups: ‘clerks’ (group 5), ‘technicians’ (group 3) and ‘professionals’ (group 2) or ‘services’ (group 4). Men, by contrast, are concentrated in ‘crafts’ occupations (group 7 around 20%) in all selected countries.

⁸⁰ For this analysis, percentages are calculated across occupational groups for each sex separately.

⁸¹ Hence, D may be interpreted as the proportion of male workers plus the proportion of female workers who would need to change occupations in order to have the same proportion of women in every occupation (Anker 1998: 90). D ranges from 0 (i.e. no segregation) to 1 (resp. 100%, i.e. total segregation).

⁸² It is noteworthy that the hierarchy of the ISCO88 is problematic. For example, the seventh group of the ISCO88 also contains highly-qualified occupations, like master craftsmen.

Figure 4.6: Percentage of employed men and women by occupations and selected countries (ISCO88 1-digit), 2004

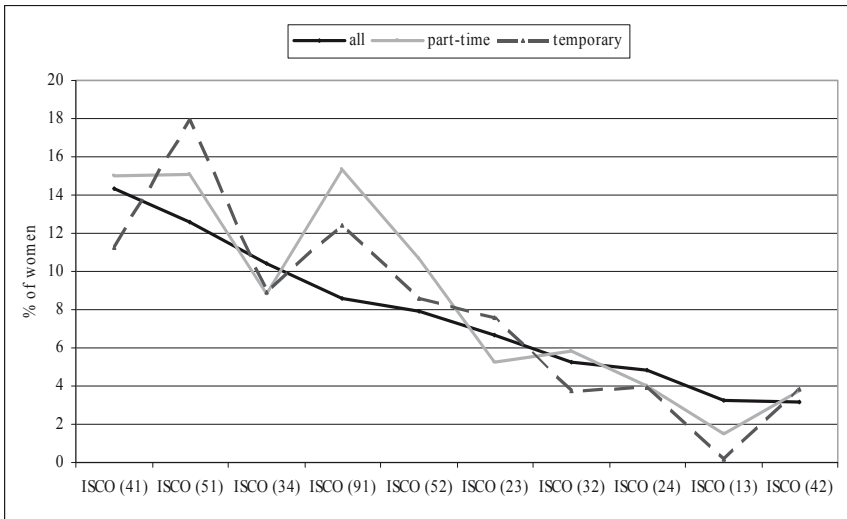


Source: EULFS 2004/5, own calculations

However, certain countries show a specific labour market structure. As to professional occupations (2), an overrepresentation of women can be found in Italy and Estonia, while in Germany and the United Kingdom men are more often employed in this occupational group. In Finland, this group is rather equally shared by men and women. With respect to the occupational group of elementary workers (9), women are overrepresented in four of the selected countries whereas, in the United Kingdom, this occupation is more male-dominated.

A further difference among countries concerns the extent of participation in individual occupational groups. For example, men are generally overrepresented in the first occupational category. The percentage of women employed in this group, however, is highest in the United Kingdom and lowest in Germany.

Figure 4.7: Female participation rate (out of all female employed persons) in the 10 most common occupations (ISCO88 2-digit), 2004



Notes: ISCO 41=office clerks, 51=personal and protective service workers, 34=other associate professionals, 91= sales and services elementary occupations, 52=models, salespersons and demonstrators, 23= teaching professionals, 32=life science and health associate professionals, 24=other professionals, 13=general managers, 42=customer service clerks
Source: EULFS 2004/5, own calculations

Turning to the most common female occupations, on average around 77% of all employed women in the 23 EU Member States are working in 10 out of 26 occupations (ISCO 2-digit). As figure 4.7 shows, the highest share of women

can be found in the occupational groups ‘office clerks’ (41) and ‘personal and protective services workers’ (51) which include occupations like travel attendants, housekeepers and restaurant service workers. These occupations are also characterised by highly flexible work arrangements, like part-time or temporary work.

4.2.3. The development of occupational sex segregation over the 90s⁸³

For a political evaluation of gender equality, changes in the unequal distribution of male and female employees and changes in the amount of sex typing of occupations are important. It would thus be necessary to analyse changes in both aspects of segregation in parallel. This could be achieved in different ways: first, by using D and performing a decomposition of changes in this measure (Blau and Hendricks 1979, Handl 1984). This procedure, however, cannot be applied in a simple way when taking more than two points in time into account. Another possibility is to include both aspects of segregation using different indices and to compare the directions of changes for the different measures over a time period. For the present analysis, the latter strategy will be pursued, looking at changes in the aspects of ‘segregation’ of EU Member States for the years 1995, 2000 and 2004.⁸⁴ As D and D_{st} are most commonly used in literature, and their correlation with more complicated indices is high (see chapter 3), subsequent results are only presented for these simple, well-known indices. This decision also ensures the comparability of results with prior findings.

Starting with measures for ‘sex-specific chances’, it is possible to differentiate between:

1. countries where the occupational chances for men and women have become more and more unequal (Ireland, Italy, Spain, Portugal, Austria and Belgium);
2. countries which show almost constant degrees in occupational chances (Greece, Hungary and Lithuania); and
3. countries where the distribution of male and female employees (i.e. the occupational chances) has become more and more similar (Denmark, Finland, Sweden, the United Kingdom, France, Germany, the Netherlands, Luxembourg, Poland, Estonia, the Czech Republic, Latvia, Slovenia and Slovakia).

⁸³ A similar analysis for 1995 and 2000 has been published 2007, see Handl and Steinmetz (2007: 265-268).

⁸⁴ To fulfil minimum standards of validity and reliability, and include all EU Member States, the analyses of the EULFS start with the year 1995.

The main trends with respect to ‘sex typing’ are less clear. In most of the examined countries, more or less oscillating values can be found. Only in two countries (the United Kingdom and France), the sex typing of occupations has constantly decreased over the whole time period. In four countries (Belgium, Hungary, Estonia, and Lithuania), the sex typing of occupations has constantly increased. In the Czech Republic no significant changes occurred.

As to a correlation between changes in both aspects, sex-specific changes and sex typing, the following table 4.4 (see for more detail table A4.4 in the appendix) shows that, only in twelve countries, coherent trends can be observed⁸⁵: in the case of the United Kingdom, France, Germany, Latvia (and Finland), a decrease over the whole period of time took place with regard to both aspects, while the values increased in Ireland, Italy, Spain, Portugal, Austria and Belgium. In Greece, no substantial changes occurred.

Table 4.4: Direction of change for both aspects of sex segregation (ISCO88 2-digit, without agriculture), 1995/2004

	Direction of change in differences in occupational chances			
		decrease (-)	constant (=)	increase (+)
Direction of change in sex typing	-	FI*, UK, FR, DE, LV*		
	=	SE*, PL*, CZ*, SL*	GR	
	+	DK, NL, (LU), EE*, SK*	HU, LT	IE, IT, ES, PT, AT, BE

Notes: *Trends for FI and SE as well as for the Eastern European countries are only measured between 1997/98 and 2004/5 due to missing data for the year 1995.

Source: EULFS 95/05, own calculations, only categories with N>10 are included.

Based on these findings, it is hard to identify of a consistent trend of ‘segregation patterns’ in Europe during the 90ies. Even though it is difficult to compare actual results with results of other studies⁸⁶, it is interesting that this ‘inconsistency’ in the ten-year period, in many respects, is comparable with patterns found by Jacobs and Lim (1992) for the period 1960-1980. They compute D for 39 countries over seven occupational categories and show a slight decline in levels of segregation between the years 1960 and 1980. However, many countries fail to demonstrate consistent trends towards either increasing or decreasing levels of segregation across this time period. Anker (1998: 110) also conducted a study on trends in occupational sex segregation for seven selected countries, focusing on the influence of different levels of the ISCO88 classification. When using at least the 2-digit level, he found in nearly all countries a slight decline

⁸⁵ A change is defined as an approximately 1% increase or decrease in the values of the segregation indices.

⁸⁶ This is due to the fact that different indices and occupational classifications have been used.

between 1970 and 1990. Nevertheless, the stability of occupational segregation over time has always been underlined in studies focusing on long-term trends of sex segregation.

Even though the results reveal no clear trend of changes of occupational sex segregation between 1995 and 2004, sex segregation has decreased in some countries at least in one dimension during that period. This development might be related to fundamental changes of gender-related politics during the 90ies and the progressive demand of the EU to reduce high levels of occupational sex segregation by implementing specific measures in National Action Plans (see Sweden and Denmark).⁸⁷ However, the presented findings also indicate that the rising proportion of employed women have not altered automatically the pattern of occupational sex segregation. It has been argued that an increase of occupational sex segregation is related to the inflow of women into expanding areas, such as clerical, sales, nursing and teaching jobs, where they already had an established foothold. Consequently, sex segregation remained high within clerical work or manual work, and sex typing became even more rigid (Rubery and Fagan 1993, Rubery et al. 1999a, Leitner 2000, Charles and Grusky 2004).

In general, however, the persistence and extension of female dominance in specific occupational groups should not overshadow the already-mentioned fact that some change has taken place, although it is less visible when looking at broad occupational categories. Such integrating forces can be due to several factors: the aforementioned increase in the educational attainment of women (Crompton and Sanderson 1990), a rapid expansion of occupations in specific areas and sectors which are more easily accessible for women, and a decline or stagnation of men in specific professional areas.⁸⁸ One such example is the deteriorating conditions in some parts of the public sector and the high rewards offered by 'IT' and other 'knowledge economy' activities in the private sector.

Furthermore, a growing number of jobs require social or personal skills to ensure satisfactory 'customer service'. These skills are often perceived as a particular competence of women. Finally, equal treatment legislation, corresponding developments in case law and progress made in collective arrangements have also played an important role.

⁸⁷ In this respect, particularly the National Action Plans (NAPs) of the European Commission should be mentioned which give country-specific recommendations as to the reduction of gender gaps.

⁸⁸ This can be associated with men exiting or avoiding professions where wages and other conditions are declining relative to opportunities elsewhere in the economy.

4.3. The vertical dimension of occupational sex segregation - gender stratification throughout the labour market

In modern societies, living conditions are linked to a great extent with the revenues from regular employment so that categories like ‘occupation’ and ‘status position’ have become main determinants of social inequality. In this context, social inequality still persists in all EU Member States. The hierarchy of occupational status and prestige is seen as functionally necessary and tolerated as long as social mobility, in principle, is possible. As a consequence, the so-called vertical dimension of occupational sex segregation (the sex-specific occupational inequalities) is an important aspect when analysing gender inequalities in society. It should be recognised that the unequal distribution of men and women across occupations as such need not necessarily have negative consequences. Inequality becomes serious, however, when it is combined with the vertical aspect penalising women with respect to income, occupational status and career prospects. Against this background, the question arises whether the increasing labour market attainment of women is accompanied by a higher representation of women in high status positions or a lower gender wage gap.

4.3.1. Reaching management and high-status positions

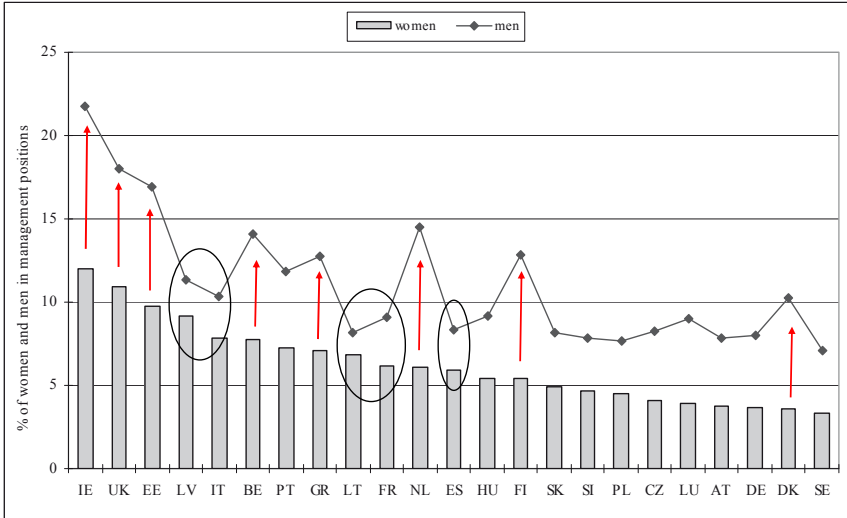
Even though the EU attaches much importance to achieving gender balance in decision-making across Europe, only one out of five government ministers is a woman, and the ratio is only slightly higher among members of national parliaments. Also in business, women still continue to represent only 3% of presidents of boards in top companies (Müller 1995, Davidson and Burke 2000, European Commission 2005a/b, 2008, EIRO 2005). As Vinnicombe (2000: 9) pointed out “Years after the EU adopted equal opportunity laws, European management itself is still a man’s enclave.”

These findings are partly confirmed by the following figure 4.8 presenting the percentage of women and men in managerial positions (out of all occupations) on the basis of the ISCO88 1-digit for the year 2004. In general, women are underrepresented in managerial positions in all countries. This holds, particularly, for countries like Denmark and Sweden⁸⁹ with female rates of 3.6% and 3.4%. The opposite can be found in liberal countries as well as in Eastern European countries, where women have the best chances to work in a managerial position. In Ireland and the United Kingdom, 12% and 10.5% of all em-

⁸⁹ In Sweden also men have the lowest share in managerial occupations (7.1%) in comparison to the other EU Member States.

ployed women are working in managerial positions, while in Estonia and Latvia, women reach shares of 9.8% and 9%.

Figure 4.8: Male and female participation rates (%) in management positions out of all occupations (ISCO88 1-digit, group 1), 2004



Source: EULFS 2004/5, own calculations

Nevertheless, when looking at the gender gap in these managerial positions, countries like Latvia and Lithuania or Italy, France and Spain show the lowest values, while the high female participation rates in Ireland and the United Kingdom are accompanied by the biggest gender gap. When differentiating the management positions on the basis of the ISCO88 2-digit into groups 11 (legislators and senior officials (ISEI score 70), 12 (corporate managers (ISEI score 68) and 13 (general managers (ISEI score 51)), it becomes obvious that the largest gender gaps exist in group 12 and group 13 (see appendix figure A4.2.).

There are two hypotheses why women are underrepresented in higher job hierarchies relative to men. The 'glass ceiling' argument (Baxter and Wright 2000, Cotter et al. 2001, Maume 1999, 2004) is that women have less chances of being promoted to higher positions than men even if both are in jobs that offer promotion opportunities. Social attitudes and cultural biases are regarded as major factors discriminating against women and holding them back from higher-level jobs. Actual discussions also refer to the fact that men much more than women are likely to be involved in informal networking practices (Brass

1985, Coe 1992, Kanter 1977a, Linehan et al. 2001, Rutherford 2001). Davidson and Cooper (1992) discuss how problematic it is for women to penetrate the 'old boy's network'. As a consequence they are denied contacts, opportunities and excluded from information and resources that networks provide. A further constraint, especially if high-level positions involve long working hours, frequent travel and relocation, is the disproportionate responsibility women still have for raising children and performing household tasks.⁹⁰ The second argument is called the 'dead-end' explanation (Polacheck 1981, Lazear and Rosen 1990). It states that women are promoted to higher hierarchical levels less frequently because they are in jobs that offer fewer opportunities for promotion.

Besides the fact that women, to a lesser extent, are represented in top-positions of the labour market, it is also interesting to examine the socio-economic status and prestige women and men attain in employment. In this context, the average occupational status of a country could be used as an indicator of the level of modernisation of national economies and the corresponding employment structure.⁹¹ For this purpose, the international comparable status scale ISEI can be used which helps to quantify sex-specific inequalities in terms of occupational status (Ganzeboom and Treiman 1992). When applied to the ISCO88 2-digit, the ISEI-scale ranges from a minimum of 16 points (assigned to low-skilled and low-income elementary occupations like domestic helpers and cleaners) up to a maximum of 80 (for example attained by professional occupations). For a country comparison of sex-specific inequalities, however, it seems useful to calculate gender gaps to control the different overall status levels of the countries instead of focusing on absolute differences. As men and women have the same status points in each occupational group, it is not possible to capture gender differences in occupations exactly. To explore gender differences, it is therefore advisable to look not only at the overall status attainment of women and men, but also at the status positioning of the sexes when distinguishing between, for example, the manual and the non-manual sector as one option to include the horizontal aspect of occupational sex segregation (see Charles and Grusky 2004).⁹²

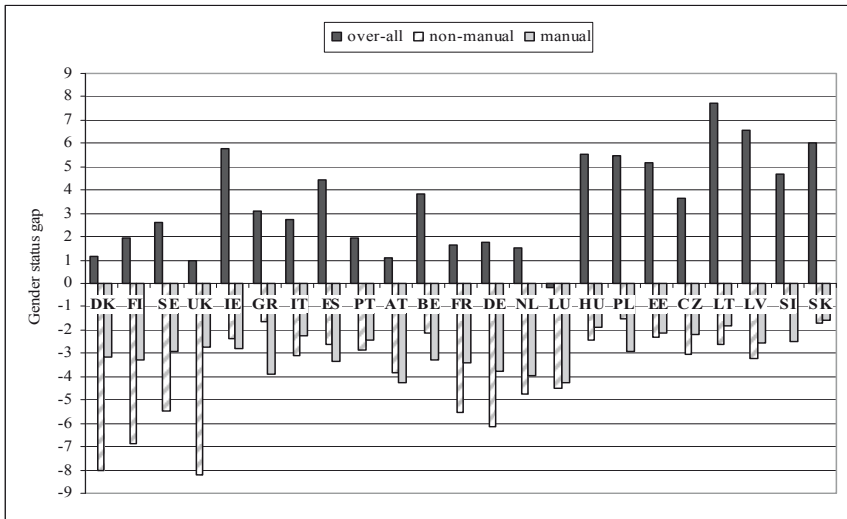
⁹⁰ A study of the OECD underlines that the difference is not so much between women with and without children, whereas the differences can be found when comparing men and women. A closer analysis suggests that the hypothesis of a punishment attached to motherhood in terms of career mobility cannot be ruled out. In fact, if fathers display more career mobility than childless men because promotions are more likely to occur during the child-rearing ages, the fact that mothers are no more likely than childless women to step up to jobs with greater supervisory role implies that they are actually penalised.

⁹¹ In this context, countries where the agricultural and industrial sector still plays a major role for regular employment are expected to show significantly lower levels of overall occupational status.

⁹² This refers more or less to a differentiation between 'typical' male and female occupations, like as proposed by Hakim (1993)

The following figure 4.9 illustrates the gender-specific status differences for the year 2004 over all occupations (dark grey) as well as for the non-manual (hatched grey) and manual sector (grey). A value higher than 0 means that women's status is higher than men's and vice versa. As to the overall status gap in all countries (except Luxembourg), women in general reach a higher occupational status in comparison to men.

Figure 4.9: Sex-specific occupational status gaps, 23 EU Member States (ISEI2 without agriculture), 2004



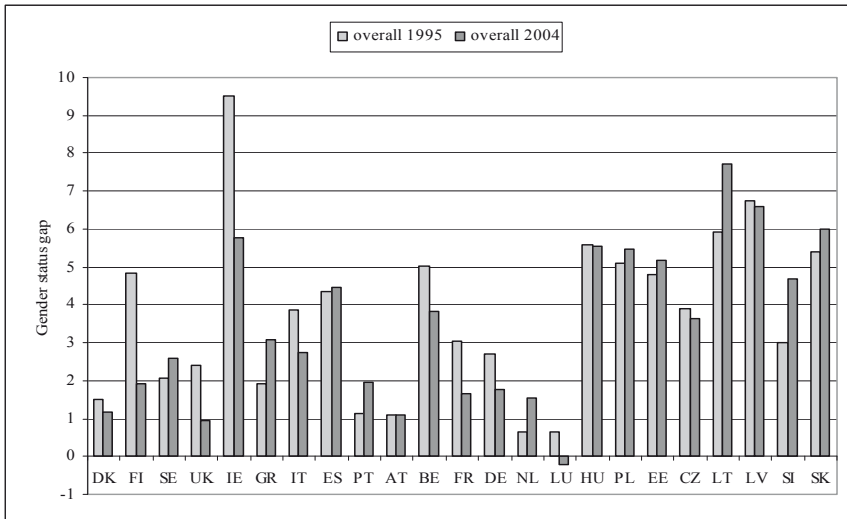
Note: The gap is calculated by subtracting the mean status value of women from that of men for each country and differentiated for the non-manual and manual sector (see table A4.5 appendix).
Source: EULFS 2004/5

This result seems plausible because section 4.2.2. has demonstrated that women are overrepresented in occupational groups, like professionals, with a relatively high status, whereas men are more polarised between occupations with a very high and a very low status. In a country comparison these gender gaps vary considerably: the lowest status gap (more gender equality) can be found in countries like Denmark, the United Kingdom, Austria and the Netherlands. Countries like Spain and Ireland, as well as Eastern European countries, by contrast show remarkable gender inequalities in favour of women (see also results for section 4.2.2.: women in these countries are also overrepresented in the occupational group 2 (professionals)).

As to the distribution of men and women in manual and non-manual occupations, the results are surprisingly different and reflect the fundamental vertical gender differentiation.⁹³ Particularly in non-manual occupations where women are generally overrepresented, the gender status gap is high in nearly all countries, while the difference seems less pronounced in manual occupations. However, as mentioned above, these results indicate that women, generally, reach positions with a relatively good occupational status, whereas men are distributed between very high and low status positions. In Eastern European countries, once again, the segregation along these lines is less pronounced than in the ‘old’ Member States - an indication that the distribution of men and women over all occupational groups is more even than, for example, in the Nordic countries.

Turning to the development of the gender status gap, the following figure 4.10 presents changes between 1995 and 2004.

Figure 4.10: Development of the overall sex status gap, 23 EU Member States (ISEI without agriculture), 1995/2004



Note: For the Eastern European countries the information was only available from 1998.

Source: EULFS 1995, 1998 and 2004/5

⁹³ The above described results are also observable when restricting the sample only to women and men with a tertiary degree (see appendix, figure A4.6).

In sum, it is to be noted critically that the described results for management as well as high status positions need to be interpreted with caution, as cross-national comparability of occupations in major group 1 of the ISCO88 is particularly susceptible to national differences in definitions. Particularly in Ireland and the United Kingdom, the definition is looser than in other countries (Elias and McKnight 2001). Furthermore, occupations with a supervisory role may not only be found in management occupations (group 1) but also be within other groups of occupations, like professional occupations (group 2). The available level of occupational disaggregation, however, does not reveal such underlying vertical gender segregation.

4.3.2. The gender wage gap

A further way of assessing the vertical dimension of occupational sex segregation is the analysis of the gender wage gap⁹⁴ - not least because the reward attached to any job may change with the sex composition of the workforce. Another advantage of the analysis of the gender wage gap is that it overcomes the above-discussed problem that status values are equal for men and women in the same occupational group and cannot be differentiated.

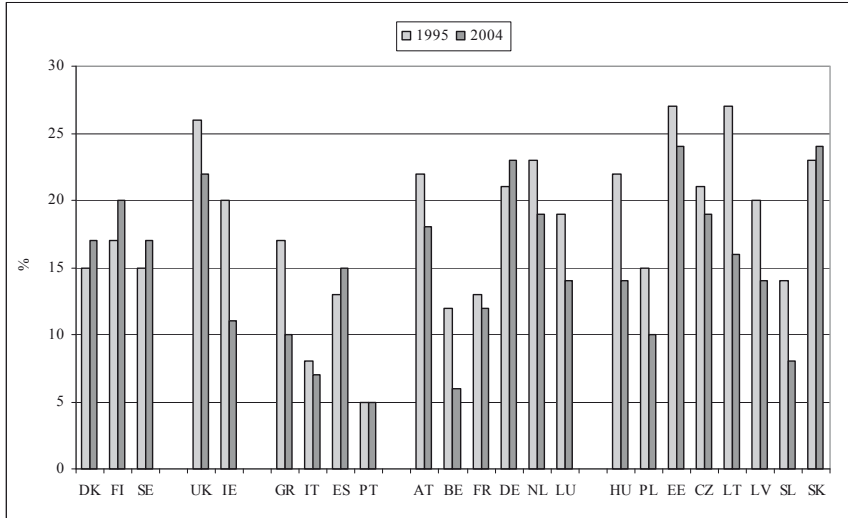
The following figure 4.11 shows the gap between the gross hourly earnings of women relative to men for 1995 and 2004. Starting with results for 2004, the gender-specific wage gap is lowest in Southern European countries, whereas the highest values can be found in the United Kingdom, Estonia, Slovakia and Germany. With respect to the development between 1995 and 2004, it proves to be difficult to analyse trends in the gender pay gap. There is a wide variation in results over time, between countries and even within a particular country.

The presented figure, based on data of Eurostat, indicates that the wage gap decreased in nearly all countries, except Denmark, Sweden, Spain, Germany and Slovakia where the gender differences in payment increased over the time period. However, the cross-country comparability is limited by the fact that hourly earnings are calculated on the basis of slightly different definitions of wages and hours worked across countries. Overtime pay, for instance, is

⁹⁴ The gender pay gap refers to the difference between the wages earned by women and men. In order to take into account differences in working hours and the impact of the income tax system, most estimates are based on differences in gross hourly wages. The most common method is to calculate the gender pay gap as the ratio of women's average gross hourly wage to men's average gross hourly wage, or as the difference between men's and women's gross hourly wage as a percentage of men's average gross hourly wage. In the present analysis, the gender pay gap indicates how many percentage points the earnings of men would have to decrease in order to equal those of women.

included only in some cases. These differences affect the gender pay gap only to the extent that they are gender-biased.

Figure 4.11: Development of the gender wage gap (gross hourly earnings), 23 EU Member States, 1995 and 2004



Notes: According to the definition of Eurostat the gender pay gap is the difference between average gross hourly earnings of male paid employees and female paid employees as a percentage of average gross hourly earnings of male paid employees; the population consists of all paid employees aged 16-64 that are at work 15+ hours per week.

Source: Eurostat 2007

Furthermore, estimates about the differences between male and female wages depend on the data available, the specific sample, and the method used. As a consequence, there is a higher risk of measurement errors because most of the information comes from national household surveys where the risk of miss- or under-reporting by interviewers is quite high (Barry et al. 2001, Grimshaw and Rubery 1997, Rubery et al. 2002b). Possible explanations of the gender wage gap, traditionally, refer to differences in individual characteristics, like age, education, and experience (Blau and Kahn 1994, Groshen 1991, Mincer and Polachek 1974, Petersen and Morgan 1995, Polachek 1987, Treiman and Hartman 1981). However, new empirical studies (OECD 2002, Rice 1999, Rubery et al. 2002b) suggest that these differences only play a minor role in the persistence of the gender pay gap. The improved educational situation and the increased female participation rate have strongly diminished gender specific

differences in individual characteristics. Nevertheless, gender differences in experience still play a role in some countries.

In general, however, the gender pay gap seems more related to the level of occupational segregation (Collinson et al. 1990, Millward and Woodland 1995, Rubery 1992, Reskin and Roos 1990) and the impact of the wage structure, the wage dispersion and the specific system of wage determination (Bernhardt et al. 1995, Blau and Kahn 1992, Boeri et al. 2005, Figart et al. 2002, Grimshawsaw and Rubery 1997, OECD 2002). Women tend to work in different occupations and industries than men, and may be penalised because of this decision. The extent of the penalty, though, may differ in accordance with the wage structure. A more compressed wage structure is likely to diminish the gender pay gap.

Furthermore, union density as well as the bargaining coverage seems to go hand in hand with a lower overall wage inequality (OECD 2004c, Rowthorn 1992, Rubery et al. 2005). It seems clear that general trends in wage structures may influence trends in the degree of gender wage differences to the same extent as specific efforts to implement equal pay at an organisational or sectoral level. Recent developments seem to enhance labour market inequality in the EU. Relevant factors include, for instance, the declining real and relative pay levels at the bottom of the labour market accompanied by rising wage dispersion in many countries, the limits on public sector pay imposed by tighter monetary policies, and finally shift towards de-centralised and more individualised systems of wage setting (Blau and Kahn 2003, Grimshaw and Rubery 2001).

4.4. The national institutional context

The extent to which men and women participate in the labour market, and the type of job they do, is not only influenced by the above-discussed supply and demand side characteristics. Studies in this area (Charles 1998, Fagan and O'Reilly 1998, Charles et al. 2001, Meulders and Gustaffson 2002) show that institutional arrangements, like specific labour market, social, tax and education policies⁹⁵, as well as socio-cultural norms can contribute to the explanation of gender-specific differences on the labour market. In this respect, the national institutional variations reflect historical and contemporary differences in political debate as well as compromise settlements between social actors (Alwin et al. 1992, Pfau-Effinger 1998a).

⁹⁵ These include policies promoting the flexibility of working time arrangements, the system of family taxation, and the support of families through childcare subsidies, child benefits and paid parental leave.

4.4.1. The role of education and training systems

As already emphasised, several researchers (Borghans and Groot 1999, Smyth 2005, Smyth and Steinmetz 2008) have demonstrated the interrelation between educational and occupational sex segregation, even though educational segregation need not necessarily 'cause' occupational segregation. Nevertheless, it can be assumed that institutional arrangements in education systems, particularly the extent of 'openness' of the systems, affect the integration process of young people into the labour market, and also determine the extent to which educational sex segregation is translated into the labour market.

So far, a large number of sociological studies have established that countries follow different strategies to match the output of the educational system (secondary and tertiary) to the demands of the labour market (Allmendinger 1989, Breen 2005, Maurice et al. 1986, Müller and Gangl 2003, Shavit and Müller 1998). Explanations of this situation refer to country variations concerning the 'qualificational' and 'organisational space' (Maurice et al. 1986)⁹⁶, their level of 'stratification' and 'standardisation' (Allmendinger 1989), the system of vocational training (Shavit and Müller 1998), or the 'exclusiveness' of a degree (Kim and Kim 2003). Breen (2005) synthesizes this research under the term 'educational signalling'. Educational systems with clear signals for their graduates generally show a tighter linkage between the education system and the labour market because employers can assess an applicant's productivity more easily.

However, the aforementioned literature has not devoted attention to the question how educational institutions or structures influence sex-specific labour market outcomes and particularly occupational sex segregation. This issue is central to certain explanatory frameworks which will be discussed in more detail in chapter 5 and 6. It seems that educational system characteristics, like the vocational orientation (Charles et al. 2001, Estévez-Abe 2005), the share of female tertiary graduates (Charles and Bradley 2002), the share of female graduates in atypical fields of study (see also Bourque and Conway 1993, Bradley and Ramirez 1996; Davis and Guppy 1997) and the share of women graduating in short-term programmes (for example, Oechsel and Zoll 1992, Rubery et al. 1996), play a crucial role for the translation of educational into occupational sex segregation.

As table 4.5 shows, educational systems differ fundamentally with respect to the aforementioned characteristics. Considering the degree of vocational specification of educational systems, for instance, the share of persons enrolled

⁹⁶ Germany, for example, is a typical 'qualification space' where skills are learned in a vocationally-oriented schooling system and employers select employees based on these assets.

in more vocational and technical education varies from 8.9% in Lithuania to 51.9% in the Netherlands. In this regard, particularly continental and Northern European systems seem to be more stratified than educational systems in Southern and Eastern Europe which might be a first indicator for stronger segregation processes within these countries.

Table 4.5: Overview of relevant educational system characteristics for 21 EU Member States

Country	Enrol. of students (%) in voc./tec.edu (ISCED 2/3)	Fem. share (%) of tertiary degree holders (overall)	Ratio between women and men in ISCED 5B ^a	Fem. share (%) of grad. in male-dom. fields of study ^b
Denmark	27.4	58.8	0.7	26.9
Finland	28.2	62.0	1.3	23.7
Sweden	27.1	61.0	1.3	27.6
UK	22.8	57.7	1.1	22.1
Ireland	15.5	57.0	1.2	34.8
Greece	17.9	60.9	1.0	21.8
Italy	37.6	59.1	1.1	33.3
Spain	13.9	57.7	0.8	20.1
Portugal	14.1	65.9	1.2	37.3
Austria	37.9	50.6	1.0	13.3
Belgium	40.5	57.1	1.4	20.8
France	26.2	56.6	1.1	27.4
Germany	21.4	52.7	1.0	15.7
Netherlands	51.9	56.1	0.9	14.6
Hungary	13.5	63.5	2.0	29.5
Estonia	14.0	71.6	1.8	51.3
Poland	25.2	65.5	1.8	38.5
Lithuania	8.9	66.5	1.1	16.7
Latvia	14.6	69.2	0.9	40.9
Slovenia	33.8	60.4	1.1	27.0
Slovakia	33.7	56.7	2.6	30.5

Notes: a) The ratio is calculated by the share of women in ISCED 5B out of all women through the share of men in ISCED 5B out of all men; b) Engineering, mathematics and informatics are defined as typically male fields of study.

Sources: The data refer to 2004, UNESCO (2007): Key Data on Higher Education 2007: 206 and from the EULFS 2004/05.

Focusing on the tertiary system, particularly in countries like Austria, Germany and the Netherlands female involvement is quite low in comparison to Southern or Northern European countries. This might be explained by the fact, that in these systems, the educational expansion mainly has taken place in the secondary system, which in turn, might lead to higher segregation outcomes. In contrast, the former Eastern European countries (especially Estonia, Latvia and Lithuania) hold top positions with female participation rates above 66%. From a

human capital perspective, it can be argued that a higher female participation and graduation rate should also improve female labour market outcomes. However, research in this field demonstrates that this assumption heavily depends on segregation processes within the tertiary system. For instance, it has been assumed that women, even though they are increasingly gaining tertiary degrees, are more often enrolled in short term courses (ISCED 5B) which are less rewarded on the labour market and, therefore, support vertical segregation processes. Also here cross-national differences can be observed with respect to the selected indicator. Some of the aforementioned Eastern European countries (except Latvia) which are characterised by high female tertiary graduation rates seem to have the highest share of women graduation in short-term courses in comparison to men (ratio between 1.8 and 2.6). Countries like Spain and Denmark with a rather moderate share of female tertiary graduates, by contrast, have very low ratios between 0.7 and 0.8. In consequence, the principally 'positive' effect of a high female tertiary participation rate might be neutralised or even reversed and, thus, lead to higher vertical occupational sex segregation.

Besides the fact that tertiary systems can be segregated vertically (by level of degree), research demonstrates that there is also a horizontal dimension (by field of study). In this respect it is argued, that even though women are increasingly awarding tertiary degrees this is determined by an over-proportion of them graduating in 'typically' female fields. As a consequence horizontal segregation processes could be supported by selecting women into typically female occupations.⁹⁷ Therefore, the selected indicator showing the share of women in atypical fields of study implies how much this horizontal component is pronounced within the educational system. Furthermore, it might also indicate in how far the chances of women to gain access into typically male occupations are increased. There are cross-national differences observable: in Austria, the Netherlands and Germany, only around 15% of women graduate in a typically male field of study, while in Eastern European countries, like Latvia and Estonia, the share varies between 41% and 51%.

In sum, it can be stated that even within the educational system segregation processes are complex and depend on different dynamics. The positive effect of a high graduation rate of women can be 'negatively' influenced by the type of tertiary degree women are gaining (ISCED 5B). However, besides the level of the degree also the specialisation is important. For instance, a degree in a short-term course might be better for women when it is in a typically male field of study (as it might be better in terms of earning and career prospects). In this respect two segregation effects could also 'neutralise' each other to some extent.

⁹⁷ Due to this there is also a vertical component, as typically female occupations are often associated with lower pay and less career options.

4.4.2. *The role of welfare states: gender legislation and social policies*

Without doubt, national policy makers have various options to support and enhance gender equality on the labour market and reduce occupational sex segregation. One of the most direct ways is legislation and affirmative action which guarantees women mainly ‘equal access’ to occupations and high status positions (anti-discrimination legislation). As already pointed out in chapter 1, the EU gender equality legislation concerning the labour market has a long tradition (see table 4.6). However, it mainly aims to reduce vertical discrepancies, e.g. the gender wage gap or women’s underrepresentation in positions with decision power.

Horizontal discrepancies seem to be difficult to tackle because they are embedded in different areas of society (see chapter 2). The gender mainstreaming approach - even though aiming to include the gender dimension also horizontally into all fields of policy making - only led to less successful soft law measures with respect to horizontal occupational sex segregation (see chapter 1).

Against this background, EU equality law seems to have reached its limits. However, gender equality arises not only from EU-driven anti-discrimination policy, but also from national state intervention focusing on three policy areas: childcare, parental leave and family taxation systems. Jaumotte (2003: 54), for example, shows that policies stimulating female employment include a more neutral tax treatment of the second earner, tax incentives to share market work between spouses, childcare subsidies and paid parental leave.

Table 4.6: Selected EU policy measures concerning gender equality in employment since 1957

Treaty of Rome (1957)	
Article 119	Men and women should receive equal pay for equal work
Treaty of Amsterdam (1997)	
Article 3	The EC shall aim to eliminate inequalities, and to promote equality between men and women.
Article 141	Each Member State shall ensure that the principle of equal pay for male and female workers for equal work of equal value is applied. The principle of equal treatment shall not prevent any Member State from maintaining or adopting measures providing for specific advantages in order to make it easier for the underrepresented sex to pursue a vocational activity or to prevent or compensate for disadvantages in professional careers (positive action).

Source: The table follows Le Feuvre and Andrioc (2003: 48-49).

Table 4.6 (continued): Selected EU policy measures concerning gender equality in employment since 1957

Council Directives	
Directive 75/117/EEC of 10 February 1975	Approximation of laws in the Member States relating to the application of the principle of equal pay for men and women which has been enshrined in the Treaty of Rome [JO L45, 19.2.1975].
Directive 76/207/EEC of 9 February 1976	Implementation of the principle of equal treatment for men and women as regards access to employment, vocational training and promotion and working conditions [JO L39/40, 14.2.1976]
Directive 92/85/EEC of 19 October 1992	Introduction of measures to improve the safety and health at work of pregnant workers who have recently given birth or are breast-feeding.
Directive 96/34/EC of 3 June 1996	Framework agreement on parental leave concluded with UNICE (The Union of Industries in the European Community), the ETUC (European Trade Union Confederation) and the CEEP (European Centre of Public Enterprises)
Directive 2000/78/EC of 27 November 2000	Establishes a general framework to combat all kinds of discrimination on grounds of religion or belief, disability, age or sexual orientation in employment and occupation.
Directive 2002/73/EC of 23 September 2002	This Directive amends Directive 76/207/EEC of 9 February 1976. It provides a Community definition of direct and indirect discrimination, harassment and sexual harassment. It also encourages employers to take preventive measures to combat sexual harassment, reinforces the sanctions for discrimination and provides for the setting up within the Member States of bodies responsible for promoting equal treatment between women and men.
Directive 2004/113/EC of 13 December 2004	Implementing the principle of equal treatment between women and men in the access to and supply of goods and services.
Council Recommendations and Resolutions	
Resolution/12.07.1982	Promotion of equal opportunities for women - approval of Action Programme 1
Recommendation 84/635EEC/13.12.1984	Promotion of positive action for women.
Resolution/ 03.06.1985	Equal opportunities for girls and boys in education.
Resolution/24.07.1986	Promotion of equal opportunities for women - approval of Action Programme 2
Resolution/22.06.1994	Promotion of equal opportunities for men and women through action by the European Structural Funds
Resolution/27.03.1995	Participation of women in decision making
Recommendation 96/694/02.12.1996	Recommendation on the balanced participation of women and men in decision-making processes

Source: The table follows Le Feuvre and Andriocci (2003: 48-49).

Gornick et al. (1997), however, argue that generous tax benefits and tax credits for families can also encourage women to stay at home.⁹⁸ At the European level, particularly the issue of childcare has extensively been discussed.⁹⁹ Although there are still major shortfalls in availability and affordability of childcare facilities in Europe, universal improvements in care provisions have been achieved particularly in the old EU Member States (Rubery et al. 2002a). As table 4.7 shows, six countries (Denmark, Sweden, Ireland, France and the Netherlands) already reached the EU target of 33% for children under the age of three in 2004, while particularly in Southern European countries and Germany (West Germany) the availability of childcare facilities for the youngest age group is below 10%. For children between three and six, the situation is more favourable, because more countries almost reach the coverage target of 90% (except the United Kingdom, Ireland and Greece with coverage rates between 58% and 66%).¹⁰⁰

Besides childcare, leave facilities are also an important element of reconciliation policy. Mainly when children are young, time-related provisions like leave arrangements, career breaks and the reduction of working time are crucial to combining work and family life. Table 4.7 shows that maternity leave provisions are relatively uniform among EU Member States: most of them provide for a break of 14-20 weeks. The United Kingdom is an exception with a recently-introduced extension to 26 weeks maternity leave.

An important factor influencing the amount of leave taken is the replacement rate of earnings. Only in nine countries (Denmark, Greece, Spain, Portugal, Austria, France, Germany, the Netherlands and Luxembourg), statutory maternity leave is compensated at 100%. It is calculated at 80% of earnings in Sweden and Italy, while in the other countries there are various sliding scales. In the new Member States, maternity leave provisions vary, between 28 weeks in Slovakia and the Czech Republic to 16 weeks in Latvia and Poland. Payment levels are replaced mostly at 100%, except in the Czech Republic and Hungary (70%) and in Slovakia (55%).

⁹⁸ It has to be recognised that in labour markets where women are 'protected' by regulations and legislations, employers might be reluctant to hire them for lucrative jobs or to promote them to managerial positions. Consequently, social policies intending to facilitate women's economic activity could also have the unintended detrimental consequence of limiting women's economic opportunities (Mandel and Semyonov 2003).

⁹⁹ As one result of the Barcelona summit 2002, Member States are asked to remove disincentives to female labour force participation by providing more childcare services. Concrete targets have been set: until 2010 at least 90% of children between 3 and 6, and at least 33% of children under the age of 3 should be in childcare.

¹⁰⁰ The New Member States, formerly accustomed to a generous provision from both the state and employers, have faced a fundamental decline in available childcare services with the breakdown of the communist system.

Table 4.7: Maternity leave, parental leave, provision of childcare and taxation systems in EU Member States, 2003/4

	Pub. funded childcare, children <3	Pub. funded childcare, children > 3	Maternity leave (weeks)	Maternity leave (payment %)	Effective* parental leave (weeks)	Taxation
Denmark	56%	93%	18	100	47	I
Finland	21%	70%	17,5	66 (average)	99	I
Sweden	41%	90%	12	80	119	I
UK	28%	58%	26	90	25	I
Ireland	40%	66%	18	70 (only 14 weeks)	11	OI (splitting)
Greece	7%	60%	17	100	12	J
Italy	6%	93%	22	80	24	I
Spain	10%	98%	16	100	48	OI (joint)
Portugal	19%	75%	17	100	20	J (splitting)
Austria**	9%	82%	16	100	71	I
Belgium	28%	100%	15	82 (first 30 days rest 75)	18	OI (splitting)
France	43%	100%	16	100	48	J (family quotient)
Germany	7%	89%	14	100	64	J (splitting)
Netherlands	35%	100%	16	100	11	I
Hungary	6%	86%	24	100	114	I
Poland	2%	60%	16	100	53	OI (joint)
Estonia	22%	79%	18	100	38	I
Lithuania	18%	60%	18	100	148	J
Latvia	16%	75%	16	100	22	I
Slovenia***	27%	59%	21	100	38	I
Slovakia	18%*	70%	28	55	52	I

Notes: *Effective parental leave = total parental leave in weeks ** % payment benefit, I=Individual, OI= Optional individual, J= Joint

Sources: Eurostat 2004, Plantenga and Siegel 2004, ***value for Slovenia Gauthier 2005: 51, Gandullia 2004.

Parental leave has complex effects on women's labour supply: while it can strengthen women's labour force attachment where the alternative would be to quit the jobs, it may also delay women's return to employment if introduced as a substitute for childcare services. Where leave policies are not backed up by childcare facilities, the system may serve merely to postpone labour market quits rather than providing a genuine bridge back to employment.

Among EU Member States, entitlements differ in relation to length and level of financial compensation. For example, the duration of parental leave ranges from 156 weeks (three years) in Spain, Germany, France, Poland,

Lithuania and Latvia to 13 weeks in the United Kingdom, the Netherlands and Ireland. It is unpaid in Greece, Spain, Ireland, the Netherlands, Portugal and the United Kingdom, while in other countries leave takers are compensated to some extent for their loss of earnings (note given in the table, for more information see Plantenga and Siegel 2004). However, given the differences in payment level it is not possible to rank the countries simply on the length of the consecutive weeks of parental leave. As Plantenga and Siegel (2004) argue, country differences may be overestimated, as formal regulations say little about the actual impact. As a consequence, they recommend to us information on the take-up rate (the actual use of leave facilities). Taking this consideration into account, the 'effective leave' (see table 4.7.) varies from 119 weeks in Sweden to less than 20 weeks for Belgium, Greece, Ireland and the Netherlands. In this context, also the choice of the tax unit (separate, joint, optional) is important. In addition, the question arises whether single-earner or dual-earner couples are favoured. While individual taxation provides greater incentives for employed partners to continue working, joint taxation encourages women to give up their jobs and rely financially on the income of their husbands. Most Western European countries have adopted separate systems of taxation. However, Scandinavian countries, the Netherlands, and the UK particularly support equal employment opportunities by a family taxation system, while several continental countries (Belgium, France, Germany, Italy and Luxembourg) maintain a joint taxation of families, at least as an option.

Against this background, it becomes evident that women's and men's occupational allocation is embedded in a complex interplay of personal as well as national-specific institutional factors. Besides the above-discussed determinants, further economic and organisational features of employment may affect sex-specific job allocation processes. For example, the average gender pay gap is smallest in countries where the wage system has an effective national minimum, and shows narrow differentials between low and high paid income (Blau and Kahn 1992, Rubery and Fagan 1995). Moreover, internal customs and practice concerning the organisation of work in firms affect occupational sex segregation. While male-dominated sectors (like transport) acquire flexibility through full-time shift patterns, part-time arrangements are more often used in female-dominated sectors (hotels and catering) with similar operational demands (see Fagan and O'Reilly 1998: 4).

4.4.3. 'Gender culture' - the role of social-cultural norms and attitudes

Apart from the institutional framework, occupational decisions are also affected by socio-cultural norms and attitudes. As underlined in chapter 2, these norms and attitudes are developed early in life and influenced by individual characteristics like age and education, as well as characteristics of the family of origin. Importantly, such norms and attitudes define responsibilities of women and men towards family and work, and determine socially-accepted work-care arrangements (Alwin et al. 1992, Pfau-Effinger 1998a). A study by Lück and Hofäcker (2003), for example, shows that countries with more liberal attitudes towards gender roles, a higher work orientation of women and a higher acceptance of female labour in the presence of young children have generally higher female employment rates. Countries with more traditional gender attitudes, a higher family orientation of women and a low acceptance of working women, by contrast, show lower female employment. Post-socialist countries seem to be an interesting case because a high family orientation and a relatively low acceptance of working mothers with young children coexist with a relatively high labour market attachment of women.¹⁰¹

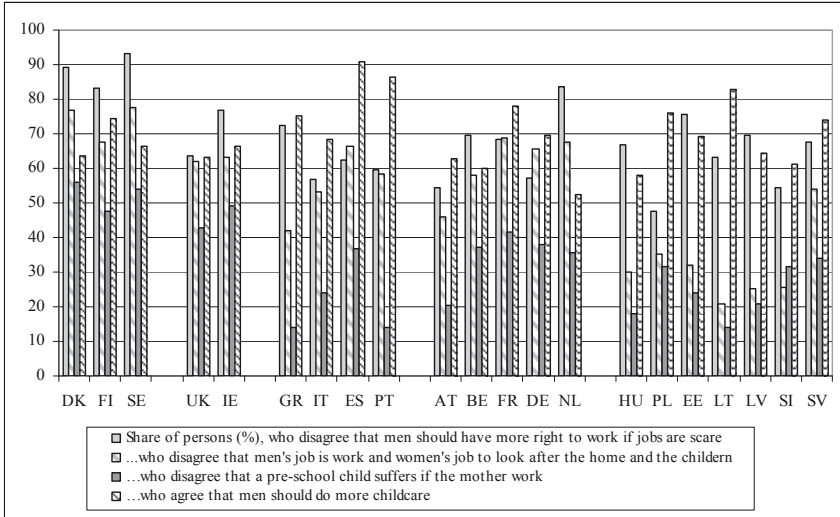
Norms and attitudes about the 'adequate' role of women and men in society have also an influence on occupational sex segregation. Due to the increasing awareness of egalitarian principles, it can be expected that, ultimately, more egalitarian norms and attitudes will also lead to more universal hiring practices and promotion procedures, and gender neutral pay scales (like in the public sector). When trying to capture the 'gender culture' of societies, it seems important to consider different aspects of the role of men and women, such as 'equality of access to the labour market' and 'care and motherhood'. The following figure 4.12 shows that attitudes towards the aforementioned aspects vary across countries.

As to the statement that *'men should have more right to a job than women when jobs are scarce'* (access aspect), a relatively high share of individuals, particularly in Northern European countries, disagree (except Italy, Austria, and Poland). A similar result can be seen with respect to the statement that *'a men's job is to earn money, a women's job is to look after the home and family'* (traditional division of work-aspect). While agreement is quite high in the 'old' Members States (between 42% in Greece and 78% in Sweden), they are rela-

¹⁰¹ Lück and Hofäcker (2003) explained this phenomenon by the high economic necessity of households.

tively low in Eastern European countries (between 21% in Lithuania and 35% in Poland, except Slovenia with a share of 54%).¹⁰²

Figure 4.12: Share of persons disagreeing with selected statements concerning gender equality, 2002/3



Notes: The graph presents the share of persons who disagree with the following statements:

- When jobs are scarce, men should have more right to a job than women (ESS, second round)
- A men's job is to earn money, a women's job is to look after the home and family (ISSP 2002)
- A pre-school child is likely to suffer if his or her mother works (ISSP 2002, R1)
- Men should do more childcare (ISSP 2002, R1)

Sources: European Social Survey (ESS) 2003, International Social Survey (ISSP) 2002

Turning to questions of 'care and motherhood' a different picture emerges: generally, the share of persons who disagree with the statement that 'a pre-school child suffers if the mother works' is fairly low in all EU-Member States. Particularly in Southern Europe and Austria, Hungary, Lithuania and Latvia, people seem to have a more 'traditional' attitude towards women's childcare responsibility.¹⁰³ Interestingly, the 'egalitarian mood' with regard to this is reduced in the Northern countries. Even though the share of disagreeing people is

¹⁰² The result supports the argument that women in former communist countries faced a 'double burden'. In spite of their professional duties, they were also expected to perform housework and provide care (Geisler and Kreyenfeld 2005, Pascall and Manning 2000).

¹⁰³ A possible explanation might be the lack of available and affordable childcare facilities for youngest children in these countries.

still lower in comparison to other EU Member States, this finding demonstrates that, regardless of the support of equal access to the labour market, a 'traditional' family model still exists.¹⁰⁴

With respect to the involvement of men into childcare, the share of persons who agree that '*men should do more childcare*' increases in comparison to the former statement. The high share of persons agreeing with this statement in almost all countries indicates that independently of well-organised public or private childcare facilities, the involvement of men is still perceived as lacking behind.

As demonstrated above, the 'gender culture' and the 'egalitarianism' of countries can vary substantially. Even in countries like Sweden and Denmark with relatively strong egalitarian attitudes towards gender and work, the opinions can be divergent with respect to the question of motherhood. When trying to include such aspects into the analysis of occupational sex segregation, one should be aware that one single indicator is incapable of capturing all different aspects.¹⁰⁵ Moreover, it is questionable that principles of egalitarianism will weaken all forms of segregation to the same extent. The definition of female and male roles in modern society is still linked with standard essentialist visions of masculinity and femininity. Hence, cultural stereotypes about gender differences will maintain their influence on family as well as educational and occupational preferences and choices. This is also manifest in the preferences of employers and employees, the persistent horizontal segregation of men and women across occupations and their concentration in the manual and non-manual sector.

4.5. Conclusion

This chapter yields two important findings: first, it has been shown that the extent and patterns of occupational sex segregation vary across countries. The developments are divergent particularly when taking the multidimensionality of the phenomenon into account. In this respect, the use of single number indices seems to be misleading because they measure the *degree* rather than the actual pattern of occupational sex segregation (Charles and Grusky 1995, Goode 1963, Jackson 1998, Ramirez 1987). This is problematic because cross-national differences, in consequence, are mainly viewed from the perspective of the extent to which egalitarian practice has been institutionalised. Moreover, it is assumed

¹⁰⁴ This might also indicate that in Northern European countries, women are more bound to employment due to the tax system and generous childcare services (Ellingstæter and Rønsen 1996, Ellingstæter 1998, Siim 1993)

¹⁰⁵ Nevertheless, only one indicator has been applied in the work of Charles and Grusky (2004).

that universal and integrative forces are capable of changing occupational sex segregation as a whole. Therefore, only a multi-dimensional approach can be appropriate to demonstrate that mechanisms, underlying cross-national variety and change, function differently with respect to the horizontal and the vertical dimension of occupational sex segregation.

The second finding is that, besides individual determinants, institutional factors, like the organisation of educational systems, post-industrial developments, social policies and the national 'gender culture', play a decisive role in explaining cross-national variations in occupational sex segregation. Only when they are included in the analysis, a complete picture of segregation processes can be drawn for a single country or across countries (Pfau-Effinger 2000). However, a multi-dimensional approach seems to be appropriate also in this context because macro-level factors affect the aforementioned two dimensions of occupational sex segregation differently.

In sum, the argument advanced by segregation scholars can be confirmed that occupational sex segregation is a universal phenomenon that varies in complex and multi-dimensional ways.¹⁰⁶ Cross-national differences in the patterns of occupational sex segregation, identified in this chapter, can be summarised according to three inequality components refined in the work of Charles and Grusky (2004): a *horizontal* differentiation that segregates women and men across the non-manual and the manual sector¹⁰⁷, and a *vertical* division allocating men to the most desirable occupations a) within the non-manual and b) within the manual sector (see figure 4.13).¹⁰⁸

Furthermore, it is important to be aware of the described factors which determine female and male employment patterns. They can have different effects on the distinguished dimensions. For example, the expansion of professional employment gives women better access to higher-level (and previously male-dominated) jobs. Therefore, it supports the desegregation of the labour market. Other parts of the labour market, however, may become more segregated at the same time. As Charles and Grusky (2004) emphasise, the manual part of the labour market facing most of the job losses during the last decades, shows signs of increased sex segregation. Women entering this sector concentrated on fe-

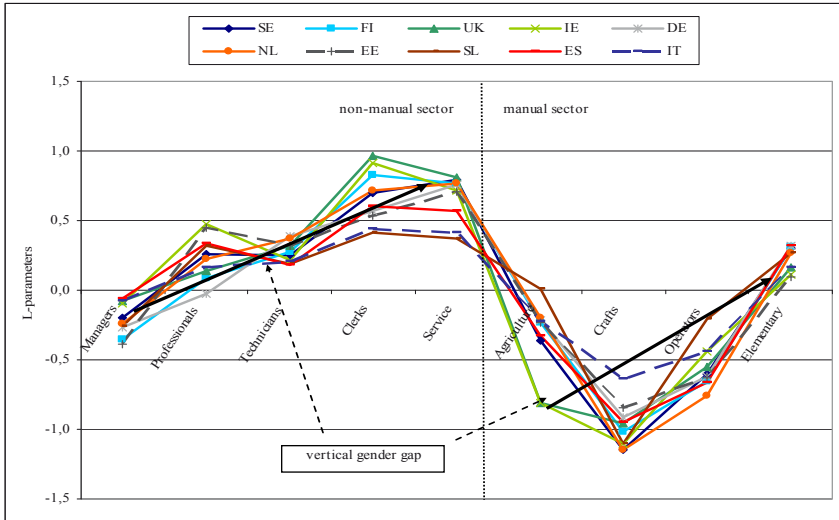
¹⁰⁶ As already mentioned in chapter 1, researchers have distinguished between horizontal and vertical dimension of occupational sex segregation theoretically. However in Charles' and Grusky's opinion the core problem is that in most empirical and methodological debates this has been forgotten or not implemented adequately and convincingly.

¹⁰⁷ Other researchers make the division between typical male and female occupations, see for instance Hakim 1996.

¹⁰⁸ This characterisation accords with early comparative work of Roos (1985) as well as with contemporary analyses drawing on more recent surveys (Anker 1998, Neramo 2000, UN 2001).

male-dominated areas (like elementary workers) where they have not been exposed to unemployment which occurred mostly in male-dominated manual jobs.

Figure 4.13: Dimensions of occupational sex segregation (L-parameters, ISCO88 1-digit), 2004



Note: The figure follows Charles and Grusky's distinction between gender gaps in the non-manual and manual sector.

Source: EULFS 2004/5, own calculations

For the understanding of occupational sex segregation, it should be considered how the above-described contextual factors structure labour markets, and in how far these systems interact with individual preferences, choices and particularly the fact that women are not a 'coherent' category (Hakim 2000). Moreover, it must be recognised that new divisions are emerging which need to be addressed in the context of occupational sex segregation. There is an evolving polarisation in labour market opportunities and experiences between highly educated and low educated women. As already mentioned, while young women are now matching or even exceeding the qualification levels attained by men, marked horizontal segregation persists in specialism: for instance, at graduate level women are underrepresented in engineering and sciences, although their involvement in these subject areas has increased in recent years in some countries. As a consequence, gender differences in specialism rather than accreditation of higher education may become more important in the future.