Intergenerational class mobility among men and women in Europe: Gender differences or gender similarities?

Erzsébet Bukodi

Department of Social Policy and Intervention,

Nuffield College

University of Oxford

erzsebet.bukodi@spi.ox.ac.uk

Marii Paskov

Department of Social Policy and Intervention,

Nuffield College

University of Oxford

marii.paskov@spi.ox.ac.uk

Accepted for publication in *European Sociological Review*

Acceptance date: 2020-01-08

Intergenerational class mobility among men and women in Europe: Gender differences or gender similarities?

Abstract

We address two questions. Are there gender differences in the level and the pattern of intergenerational class mobility? If so, do these differences show up in a uniform fashion in Europe? We use a newly-constructed comparative data-set to examine how far differences between men and women in absolute and relative mobility can still be characterised in the same way as in the last decades of the 20th century. We also examine the effects of women's heterogeneity in terms of labour market attachment on their class mobility. Our results show that in most countries, women are more likely than men to be found in different class positions to those of their parents'. But we point out that the reasons for this might be different in the West and in the East. Regarding relative mobility chances, we are able to underwrite the dominant finding of past research that women display greater social fluidity than men only in a certain group of countries. In most countries, we do not find any systematic gender difference between men and women in the level of their relative mobility rates. But we do find significant and systematic gender differences in the pattern of relative rates: women's class mobility appears to be more impeded by hierarchical barriers than by the propensity for class inheritance. And, in this regard our findings point to a large degree of commonality across European countries.

Keywords: comparative class mobility, gender difference, absolute and relative rates

Introduction

Past research shows that in most European countries inequalities between men and women in educational attainment in relation to class of origins have declined over recent decades (Breen *et al.*, 2010). However, we do not know whether or not this increasing gender similarity in educational inequalities has been 'translated' into increasing gender similarity in intergenerational class mobility. This paper aims to address this issue. More specifically, we ask the following research questions. Are there differences between men and women in their levels and patterns of intergenerational class mobility? If so, do these gender differences show up in a *uniform* fashion in European countries? Or, put another way, how far do we see *commonalities* across European nations in the extent to which men and women differ in their rates of intergenerational class mobility? In addressing these questions, and following the established sociological tradition, we make a clear distinction between absolute and relative rates of class mobility.

We use the European Socio-Economic Classification (ESeC) (Rose and Harrison, 2010) for our purposes. It can be shown that class measured via ESeC is associated with individuals' current incomes but, and more importantly, also with other aspects of their economic lives: income security, unemployment risks, short-term income stability and

longer-term earnings prospects (Lucchini and Schizzerotto, 2010; Watson *et al.*, 2010; Bukodi and Goldthorpe, 2018).[1]

Past research into intergenerational class mobility has usually examined men and women separately, and only very few studies *directly* compare across gender, especially in a cross-country comparative setting. But those that do, reach fairly similar conclusions. In regard to absolute mobility, women, overall, appear to be more mobile than men; and, more significantly, they are more often downwardly mobile (e.g. Erikson and Goldthorpe, 1992; Li and Singelmann, 1998). In regard to relative mobility, the dominant finding appears to point to a somewhat weaker association between class origins and class destinations among women than among men – i.e. women tend to display greater social fluidity than men (Erikson and Goldthorpe, 1992; Jonsson and Mills, 1993; Wong, 1995; Li and Singelmann, 1998; Goldthorpe and Mills, 2004; Torche, 2015; Bukodi, Goldthorpe, Joshi and waller, 2017); although some research does not find much gender difference in this respect (Hout, 1988; Beller, 2009; Hout, 2018). However, most of past research – at least in the European context – used data from the 1970s to the 1990s, and thus provided a picture of gender difference in intergenerational class mobility that is now becoming more of historical than of

[1] Moreover, the increase in income inequality that is evident in many European countries in the recent past would appear to have occurred to a greater extent between rather than within social classes (see, for example, for Italy, Albertini, 2013 and for the UK, Williams, 2012). We would also like to note here that findings on class and income mobility may differ for the same place and time – i.e. they may show different levels and trends (see, e.g., Breen, Mood and Jonsson, 2016).

contemporary interest. In this paper, we aim to give a new account that extends the time horizon from the 20th into the 21st century, via covering men and women who were born between the late 1930s and the mid-1980s.

Why expect gender difference in class mobility?

As indicated above, we make an explicit distinction between absolute and relative mobility and investigate the differences between men and women in both. Absolute mobility refers to the proportions of individuals moving between different class positions. Relative mobility refers to the degree of fluidity that exists within the class structure, as expressed in the strength of the association between individuals' class origins and class destinations, considered net of structural effects.

As regards *absolute* mobility rates, a general agreement exists that these are primarily conditioned by the structure, and differences in the structure, of the class positions between which mobility occurs (see, e.g., Erikson and Goldthorpe, 1992; Breen and Luijkx, 2004). Hence, insofar as there are differences between men and women in their class distributions, we would also expect differences between them in absolute mobility rates.

One could argue that gender differences in the distribution of class positions should be much less pronounced today than they were decades ago. In most advanced societies there is now a gender parity in educational attainment (McDaniel and Buchmann,

2015), which has led, to some extent at least, to the closing of the gap between men and women in employment rates (Charles, 2011). Sex segregation in occupations – especially in managerial and professional occupations – also declined substantially in the 1970s and 1980s, before stabilising (Chang, 2000); moreover, women experienced a more marked upgrading of the class structure than men (Breen, 2019).

However, as Online Appendix 1.1 demonstrates, despite all these developments, there are still significant differences between men and women in their class distributions in most European countries. One could argue that the main reason for this is the persistent, and perhaps even growing, heterogeneity among women in their labour market attachment. The shift towards post-industrial employment in recent decades has led to labour markets that are increasingly segmented – i.e. divided into standard jobs ('insiders') and non-standard jobs ('outsiders') (Emmenegger *et al.*, 2012). Women tend to be in a majority in the latter in advanced societies (Hausermann and Schwander, 2012). Evidence also suggests that despite declining occupational sex segregation, women are still over-represented in lower-quality clerical, service and manual occupations (Charles and Grusky, 2004; Levanon and Grusky, 2016), even in the 'most progressive' Nordic countries (Gronlund *et al.*, 2017). Women also tend to have more work interruptions and periods of inactivity than men (Estevez-Abe, 2005). But by far the quantitatively most significant form of female 'outsiderness', in many countries, is part-time employment (Hipp *et al.*, 2015). It has been argued that among women, part-time employment is often undertaken to combine paid employment with unpaid care work, and functions as an alternative to inactivity (OECD, 2010). In some countries, part-

timers are also more likely than full-timers to have fewer educational qualifications (Connolly *et al.*, 2016); they are more likely to have intermittent careers and experience occupational downgrading over their working lives (Dex and Bukodi, 2012); and they are more likely to be concentrated in low-paid jobs and occupations (Nightingale, 2018). It is therefore possible that the class distribution of women working part-time is also different from that of women working full-time. If this is indeed the case, in countries, or in cohorts, where the proportion of part-timers in the female labour force is larger, the differences between men and women in the distribution of their class positions, and in turn in their absolute mobility rates, would also be expected to be larger.

Relative mobility, as indicated, is intended to capture the pattern of individuals' chances of moving intergenerationally between different class positions when these chances are considered net of all differences in the class structure between parents and children. Gender differences in relative rates would then show up insofar as men and women coming from similar origins differ in their chances of getting into different class positions.

As referenced above, a large part of past research finds a greater equality of relative rates for women than for men. How can this come about? One possibility is that for women, but not for men, the association between class of origins and class of destinations is being reduced through educational attainment becoming less strongly associated with origins and more strongly associated with destinations – i.e. through

women's intergenerational mobility chances becoming determined in a more 'meritocratic' way. However, another possibility should also be recognised. Greater equality of relative rates may in fact derive from constraints in the form of limits on opportunity. This is indeed what Goldthorpe and Mills (2004) argued for in the British case. As they discuss, women, after leaving the labour market for child-rearing, may not, on their return, be able to find employment in a similar form and at a similar level to that in which they were formerly engaged (see also Connolly and Gregory, 2008). They may often have to take up part-time jobs that imply downward mobility relative to their previous employment and thus, in some cases, downward mobility relative also to their parental backgrounds. In other words, changing patterns of *intra*generational mobility among women could lead to more equal relative rates in an intergenerational perspective, insofar as these patterns also weaken the net association between women's class origins and destinations. Given that in advanced societies, a large majority of women now return to work after periods of child-rearing and other forms of inactivity, women, overall, may show greater – if 'perverse' – fluidity than men. But yet another possibility has been suggested by Bukodi *et al.* (2017) – again, in the British context. They argue that it is in fact not the changing patterns of worklife mobility *per se* that leads to greater fluidity for women, but rather the tendency of some women from more advantaged families to choose not to fully exploit the advantages of their parental backgrounds in their working lives. They may rather prefer employment arrangements that allow them to reconcile work and family more easily, even if this means a higher risk of intergenerational downward mobility. And, given that the

number of women coming from more advantaged class origins is steadily increasing (e.g. Breen 2019), the lack of concern of some of these women to maintain their parents' class positions – through employment – can also be a source for greater social fluidity for women as a whole.

However, as mentioned in the Introduction, some research does not find much difference between men and women in their relative mobility rates. How can this come about? There is evidence suggesting that in more resent cohorts parents tend to invest similarly in their sons' and daughters' education (Breen *et al.*, 2010) – i.e. there is not much gender difference in the relationship between parental backgrounds and children's educational attainment. It has also been shown that women's class career trajectories are becoming more similar to men's (Bukodi, Goldthorpe, Halpin and Waller, 2016), and women now have equal, or even higher, returns to educational qualifications – in terms of class or earnings – than men (e.g. DiPrete and Buchmann, 2006). All this implies that the association between class origins and destinations might have become similar for men and women.

We pursue these issues in what follows. We investigate the gender differences in absolute and relative rates in 29 European countries. In doing so, unlike in past research, we explicitly take into account women's heterogeneity in terms of labour market attachment, and investigate to what extent this may contribute to gender differences in class mobility.

Data and variables

Our analyses are based on pooled data from the European Social Survey (ESS). The ESS is a repeated cross-national survey that employs probability sampling of private households and collects data in face-to-face interviews. The ESS is among the highest quality comparative surveys undertaken, with fully-harmonized and reliable measures on key aspects of individuals' economic and social lives. We thus have some assurance that any variation in mobility rates by gender and country that we observe is to a large extent genuine rather than being an artefact of non-comparability in our data.

We pool data from the first five waves of the ESS that were carried out biannually between 2002 and 2010. We supplement this core data-set with another that records detailed information on respondents' social origins – the ESS-DEVO data-set that has been produced as a part of a project aimed at improving the measurement of social background in the ESS (Ganzeboom, 2014).

We include in the analyses all respondents aged 25 to 64 at the time of data collection. In total, the analytical sample includes 64,176 men and 68,494 women, interviewed in 29 countries. Our oldest respondents were born in 1938 and the youngest in 1985. The fact that our sample covers such a wide range of birth cohorts could mask differences in their mobility experiences and could then affect the results from our gender comparisons. To address this issue, we introduce 'quasi-cohorts' that distinguish between men and women born in 1938-49, 1950-64 and 1965-75. In order to mitigate the problem of measuring respondents' class positions at different ages in the three

cohorts, in all the analyses that involve these quasi-cohorts, we limit our sample to those aged 35-64 – i.e. to respondents who have already reached the stage of 'occupational maturity' when the probability of job changes implying changes of class position becomes small (cf. Bukodi and Goldthorpe, 2009).

As highlighted in the Introduction, we are also interested in the extent to which gender differences show up in a uniform fashion in European countries. To address this issue, in addition to presenting results for individual countries, we also bring together the data for six country groups – or, more precisely, for 6 x 3 = 18 country group-(quasi)cohorts. Our earlier research (Bukodi, Paskov and Nolan, 2019; Bukodi and Paskov, 2018; Bukodi and Goldthorpe, 2018) shows that the best understanding of cross-national variation in relative mobility can be gained if countries are seen as falling into groups within which differences in rates tend to be less than between-group differences. We identified a set of three comparatively 'high fluidity' groups of countries and a set of three comparatively 'low fluidity' groups of countries. The groups in the high fluidity set are the following: *West-Nordic* – Denmark, Finland, Norway, Sweden, France, Ireland and the UK; *Post-Soviet* – Estonia, Lithuania, Latvia, Russia and Ukraine; and *Post-Socialist-1* – Czech Republic, Romania, Slovenia and Slovakia. The groups in the low fluidity set are the following: *West-Central* – Austria, Belgium, Switzerland, Germany, Luxembourg and the Netherlands; *Southern* – Cyprus, Spain, Greece and Portugal; and *Post-Socialist-2* – Bulgaria, Hungary and Poland.

The two main variables in our analyses are those of respondents' social class origins and their social class destinations, which we determine, as earlier noted, according to the seven-class version of the European Socio-Economic Classification (ESeC), as shown in Table 1.

****Table 1****

We construct our ESeC variables in the following way. Occupational data for respondents and their parents, in each country, are coded to a common occupational classification, that is, ISCO-88. We take the 3-digit ISCO-88 codes together with a binary employment status code, distinguishing employers and the self-employed from employees, and thus create a 'reduced' version of the seven-category ESeC. We then move to the 'full' version, by adjusting the reduced version by taking into account two further items of information: the number of employees recorded in the case of the self-employed and managers, and whether or not the respondent (or their parent) had responsibility for supervising other employees.

To construct social class origins, we use the dominance approach (Erikson, 1984): that is, where both parents were in gainful employment, we determine class origins by the class of whichever parent held the highest class position, following the divisions indicated by the dashed lines in Table 1. We establish parents' class positions at respondents' age 14. As noted, we measure respondents' class destinations between ages 25 and 64, except in cohort-specific analyses, where the lower age limit is 35. As a

general rule, if respondents were not in employment at the time of interview, we allocate them to a class position on the basis of their last employment.

In Online Appendix 1.1 we show the class origin and destination distributions for men and women separately, in all 29 countries.[2] We inevitably lose a certain proportion of cases, some 13% in total, due to missing values on either respondents' or parents' class – Online Appendix 1.2 reports the proportions for each country. It has been suggested (e.g. Goldthorpe, 2007) that insofar as missingness is due to biased non-response, relating, in particular, to respondents from disadvantaged origins, an artificially high level of social fluidity may be observed in countries with relatively low response rates. In order to get a sense of the extent of bias of this kind in our data, in Online Appendix 1.3 we plot the average ESS response rates for each country against the proportion of missing values on class of origins. It is clear that in some countries, Estonia, Romania and Slovenia, the degree of missingness is notable; but it is also clear that there is virtually no relationship between the proportion of missing values on class origins and overall response rates. This suggests that the problem of differential missingness in our sample is not particularly severe.

A final comment is in order regarding our treatment of class of origins. One might argue that in treating social origins it would be more appropriate either to compare women

[2] In Bukodi, Paskov and Nolan (2019) we presented evidence regarding overall consistency in coding to ESeC across various surveys (ESS, Generation and Gender Survey Programme (GGS), the Survey of Health, Aging and Retirement in Europe (SHARE) and the European Value Survey (EVS)), and for the class distributions of parents as well as of respondents.

to their mothers and men to their fathers, or to use some kind of combination of fathers' and mothers' class positions (cf. Beller, 2009). Our decision to use the dominance approach instead is based on a thorough investigation that we present in Online Appendix 2, and now briefly summarise. We conducted three kinds of analysis.

First, we simply plotted the proportion of respondents for whom class origins is constructed via mother's, rather than via father's, class under the dominance approach, by year of birth, separately for our six country groups introduced above (Online Appendix 2.1). As one would expect, there has been, a more or less, gradual increase in this proportion in our sample – from 13% to 30%. But there are also apparent differences across country groups: while in the Post-Soviet countries, mother's class is used for 30-50% of the respondents, in the Southern countries this proportion never exceeds 15%.

The question then arises of how far all this could affect our results. We investigated this issue in a second step, when we determined the strength of association between class origins and class destinations, using four approaches to the former: dominance, father's class only, mother's class only and combined – see Online Appendix 2.2. More specifically, we calculated the set of global log-odds ratios that is obtained by successive partitioning of the mobility tables into 2x2 sub-tables, and we averaged these log-odds ratios for each table. We then compared the average global log-odds ratios calculated under the dominance approach to those calculated under the three other approaches to class origins, to see which approach yielded stronger origin-destination association.

Given that the same individuals were involved in the mobility tables that we compared, assessing the statistical significance for the difference of their average global log-odds ratios was not straightforward. We opted for the method proposed by Cox *et al.* (2009). The following points emerged. First, for men, there is no difference in the strength of the origin-destination association when comparing the dominance approach to the father's class only approach. For women, however, the global log-odds ratios deriving from mobility tables constructed under the dominance approach are significantly higher, especially in younger cohorts, than those deriving from tables constructed under the father's class only approach. Second, when comparing the dominance and the mother's class only approaches, the former yields significantly stronger origin-destination associations for *men and women alike* and, again, in later cohorts in particular. Third, when the dominance is compared to a combined approach – the construction of which is explained in a note to Online Appendix 2.2 – no significant differences in global log-odds ratios emerge for men; but for women, the dominance approach clearly performs better in the sense that it yields stronger origin-destination associations. In sum, it appears that the strongest intergenerational association is achieved, in all cohorts, when using the dominance approach to construct our mobility tables.

In a third step, we fitted a series of log-linear models on the four-way table of source of information on class origin (father or mother) [I] by gender [G] by class origins [O] by class destination [D], to find out whether or not taking [I] into account alters our main results on gender difference in the strength of the origin-destination [OD] association.

As is apparent from Online Appendix 2.3, it is *not* the case in any of our cohorts – i.e. the gender difference (more precisely, lack of difference) in the strength of [OD] remains the same even if we allow for the fact that [OD] itself is weaker, for men and women alike, when we base origins on mother's class.

Results

Gender differences in absolute class mobility

We first calculate total mobility rates; i.e. the percentages of individuals found in cells of the 7x7 mobility table off the main diagonal and thus in a different class to that of their parents. We also distinguish between the upward and downward components of total rates. These are calculated on the basis of the hierarchical divisions that we make within ESeC, as indicated by the dashed lines in Table 1: any intergenerational movement from a lower to a higher division is counted as upward mobility, and any movement from a higher to a lower division as downward mobility.

In the upper panel of Figure 1, we show the total mobility rates, separately for men and women in each country. What we should, first of all, note is the limited range of cross-national variation: in almost all countries, the rates fall between 70 and 80%. It is also clear that gender differences, insofar as there are any, show up in a uniform fashion: the total mobility rate is generally higher for women than for men. This is the case in

most West-Nordic and West-Central countries, some Southern European countries (Spain and Greece) and two post-socialist countries (Hungary and Poland).

As the middle and bottom panels of the figure reveal, women tend to be more mobile than men chiefly because they differ in the relative importance of the upward and downward components of total mobility rates. The proportion of the downwardly mobile is significantly higher for women than for men in all West-Nordic countries, except Sweden and Ireland, and in all West-Central and Southern European countries. So far as upward mobility is concerned, an opposite pattern – i.e. upward mobility is higher for men – is apparent in these latter countries, especially in the West-Central ones. The post-socialist countries, however, clearly differ from the rest. In these countries, women are less, rather than more, likely than men to experience downward mobility and they are more likely to experience upward mobility. There are possible reasons for this pattern that have been suggested in past research (e.g. Mach, 2004; Robert and Bukodi, 2004; Jackson and Evans, 2017). Some evidence indicates that men's mobility experiences in post-socialist countries have been more adversely affected than women's by the reduced availability of higher level positions in declining heavy industries and also by the dismantling of extensive state and party bureaucracies (for Russia, see Gerber and Hout, 2004). Also, it has been suggested that as the market economy matured in the late 1990s and early 2000s, women were more likely than men to experience *intra*generational upward mobility, which might have also increased their chances for *inter*generational upward mobility (for Estonia, see Titma *et al.*, 2010).

*** Figure 1 ***

One could, however, envisage that gender differences in absolute rates may be much less apparent in more recent cohorts, due to the macro-developments discussed earlier – e.g. convergence in employment rates among men and women, or a more marked upgrading of the class structure in case of women. We investigate this possibility in Figure 2, which plots upward and downward mobility rates for men and women, by quasi-cohorts, separately in our six country groups. As shown in the upper panel of the figure, men's upward mobility rates have been declining across cohorts in every country group but the Southern (cf. Bukodi, Paskov and Nolan, 2019; Breen, 2019). In contrast, women's rates have not changed much – except, again, in the Southern nations, where they are on the rise. But more importantly for our purposes, the pattern of gender differences in upward mobility remained more or less the same across cohorts in all six country groups, even if the magnitude of these differences is being reduced. And it is this latter observation to which we should attach importance regarding downward mobility rates as well (bottom panel). For example, if we take the West-Nordic or the West-Central group, we do see convergence in men's and women's rates; although the proportion of the downwardly mobile is significantly higher among women than among men even in the latest cohort.

*** Figure 2 ***

The obvious question that now arises is how we could best account for these rather persistent gender differences in absolute mobility rates. In case of the post-socialist

nations we have already provided some explanation. But for nations belonging to the other three country groups we need to conduct some further analysis, to answer this question.

As argued earlier, one possible explanation for the difference between men and women in their class distributions, and in turn in their absolute mobility rates, could be that a large degree of heterogeneity exists among women in their labour market attachment. Indeed, as the upper panel of Online Appendix 3.1 shows, in the West-Central country group, around 45% of female respondents worked part-time when interviewed, or their most recent job was part-time[3]. The corresponding figure is around 35% in the West-Nordic group, but only 15% in the Southern nations. If it is then the case that women working part-time are more likely than women working full-time to be found in less advantaged class positions, the former may experience more downward and less upward mobility than the latter. This would then have implications for the rates of absolute mobility for women at large: these could show different levels in countries in relation to the extent to which the female labour force is employed part-time.

Further, as noted in the Data and variables section, if respondents were not in employment at the time of the surveys, they were allocated to a class position based on their most recent employment. As the lower panel of Online Appendix 3.1 shows, the proportion of women treated in this way varies a great deal across cohorts –

[3] In order to define part-time work, we use the 30 hours cut-off, as recommended by the OECD (van Bastelaer *et al.*, 1997).

between 25% (latest cohort) and 70% (earliest cohort) – although less so across country groups; for the latest cohort, between 25% (West-Nordic) and 35% (West-Central). One could then argue that if it was the case that women coded according to their last employment differ in their class distributions from women in employment, either full- or part-time, when interviewed, they would also differ from each other in their rates of upward and downward mobility. Absolute mobility for women at large would then show different levels, depending on the extent to which the female population allocated to class positions based on their last employment.

We investigate these possibilities in Figures 3.1 and 3.2. In the upper panel of Figure 3.1, we plot the difference between women working (or who last worked) full-time and those working (or who last worked) part-time in the proportion in the salariat (Classes 1 and 2) and in the proportion in the working class (Classes 6 and 7), by our three quasi-cohorts, separately in the West-Nordic, West-Central and Southern nations. In the lower panel, in a similar fashion, we plot the rates of upward and downward mobility for full-timers and part-timers. Figure 3.2 shows the same kinds of statistics for women who were in employment when interviewed (either full- or part-time) and those who were not in employment when interviewed but coded according to their last employment (either full- or part-time).

As is apparent from Figure 3.1, in the West-Nordic and West-Central countries, where a higher proportion of full-timers than part-timers is found in advantaged classes in all three cohorts, women working full-time are more likely than women working part-time

to experience upward mobility and they are less likely to experience downward mobility. But in the Southern countries, where part-timers are less negatively selected in terms of their class positions (see Figure 3.1), we do not see much difference between these two groups of women in upward and downward mobility.[4] Figure 3.2 reveals a similar logic at work.[5] In sum, we find that in the three country groups in question women working part-time *or* coded according to their last employment tend to be more concentrated in less advantaged class positions than women working full-time. This then has implications for their absolute mobility patterns: the former are more prone to intergenerational downward mobility than the latter. Hence, the higher the proportion of part-timers, or of those coded according to their last employment, the larger the difference this makes to the rates of upward and downward mobility among women as a whole – and, in turn, the larger the difference between men and women in absolute mobility rates.

**** Figure 3 ****

Given the substantial variation among women in absolute mobility rates according to their labour market attachment, we now restrict our female sample to those who worked in full-time employment when interviewed. In Figure 4 we plot the rates of

[4] One could argue that women working part-time and women working full-time might also differ in the distribution of their class origins. But our data show relatively little evidence of this.

[5] As is apparent in Online Appendix 3.2, it is also the case in the three post-socialist country groups that women in employment when interviewed and those coded by their last employment display different rates of upward and downward mobility, much in the same way as shown in Figure 3.2. But no difference in this respect shows up between full-timers and part-timers in these countries.

upward and downward mobility for them, by quasi-cohorts and in all six country groups, along with the rates for men.[6] As is apparent, there is now no country-group or cohort where women experience more downward and less upward mobility than men. In the West-Nordic, West-Central and Southern countries, gender similarity is the main feature. In the post-socialist countries women remain more often upwardly mobile and less often downwardly mobile than men.[7]

**** Figure 4 ****

Gender differences in relative class mobility

We now turn to the question of how far men and women differ in relative mobility. To do this, we apply a series of log-linear models to the data comprised by the four-way table of country (C) by gender (G) by class of origin (O) by class of destination (D). More specifically, we fit four models to the table. All four models include the marginal effects of country, gender, origins and destinations and a set of two-way associations, and they also allow the gender-destinations associations to vary across countries. But the four models differ in the following ways.

[6] One could argue that it would be more appropriate to restrict the male sample too to only those who were in full-time employment when interviewed. But, as Online Appendix 3.3 shows, there is no statistically significant difference in upward and downward mobility rates between men at large and men in full-time employment.

[7] Online Appendix 4 shows upward and downward mobility rates separately for individual countries.

The first model states that the association between origins and destinations, net of all marginal effects, is the same across gender and countries. That is to say, all the log-odds ratios defining the origins-destinations associations – i.e. all 441 of them in a 7x7 mobility table – are identical for men and women and also from one country to another. Or, in other words, there is no gender and cross-country variation in relative rates – this model could be called the extended *Common Social Fluidity* (*CmSF*) model (cf. Erikson and Goldthorpe, 1992).

The second model – a UNIDIFF model (Erikson and Goldthorpe, 1992; Breen, 2004) – modifies the first by proposing a *uniform* difference in the strength of the association between class origins and destinations between men and women. This model then allows us to test for the possibility that, in comparison with men, for women, the log-odds ratios defining the origin-destination associations are all greater or less by some common, multiplicative factor (captured by the so-called UNIDIFF-parameter), thus implying greater or less equality in relative rates across genders.

The third – also a UNIDIFF – model is equivalent to the second, but, instead of gender-specific relative rates, it proposes a uniform difference in the strength of the association between origins and destinations across countries. In other words, this model tests for the possibility that there is a systematic difference in the degree of social fluidity within countries' class structures.

Finally, the fourth model allows the general pattern of the origin-destination association to uniformly vary across genders and countries *simultaneously.*

Table 2 shows the results for four sets of comparison. We compare men, first, to all women; second, to women working full-time when interviewed; third, to women working part-time or who worked part-time in their last employment; fourth, to women not in employment when interviewed but coded according to their last class position. We assess the goodness of fit of the models using the likelihood-ratio test (G^2). The table also shows the index of dissimilarity (DI) – i.e. the smallest percentage of observations in the modelled mobility table that would need to be moved to other cells to make the model fit perfectly with the observed table – for each model.

**** Table 2 ****

In fact, all four of our comparisons yield the same results. Model 2 does not make any significant improvement on Model 1 – i.e. there is no evidence of greater or less equality in relative rates between men and women, even when we compare men to women with weaker labour market attachment. Also, given Model 3, which allows for country-specific relative rates, adding a term for uniform gender difference does not lead to a better fitting model – i.e. Model 4 does not significantly improve on Model 3. In other words, regardless of whether or not we allow for country-variation in relative rates, no uniform gender difference shows up.

What we have found so far is that the strength of the origin-destination association does not differ systematically or uniformly between men and women. However, this does not necessarily apply for every country group or cohort in our sample. In order to further investigate this issue, we proceed by fitting Models 3 and 4 to mobility tables

for each country group and cohort, with results as shown in Figure 5. This figure plots the UNIDIFF – or β – parameter, respectively, for all women, for women working full-time, for women working (or who last worked) part-time and for women not in employment when interviewed, with that for men being set at 1. β parameters less than 1 can be taken to indicate that the odds ratios capturing the association between origin and destination for women are uniformly lower than those for men – i.e. there is greater social fluidity among women than among men; while, conversely, β parameters greater than 1 indicate that the odds ratios for women are uniformly higher than those for men – i.e. there is less social fluidity in their case.

The following points of interest emerge from Figure 5. When comparing men to all women (black circle symbols), in four of the six country groups – West-Nordic, West-Central, Post-Soviet and Post-Socialist-2 – no uniform gender difference in the strength of the origin-destination association shows up, except in the youngest cohort in Post-Soviet countries: i.e. Model 4 does not improve significantly on Model 3. In other words, in these country groups, relative mobility rates for men and women can be taken as similar – or at least not systematically more or less equal. But there are two country groups where we do find uniform gender difference: the Southern and the Post-Socialist-1. In the former, with an exception for the earliest cohort, women display a weaker origin-destination association; in the latter, the reverse applies. Past research shows that in some of the Southern countries – e.g. in Spain – women in recent cohorts experienced a more marked decline in the strength of the origin-destination association than men (Gil-Hernández *et al.*, 2017), which might have led to more equal relative

rates among them than among men. In regard to women in Post-Socialist-1 countries, they may have less equal relative rates than men, in part because – as Online Appendix 6 implies – they have distinctively strong origin-destination associations at the top (Class 1) and also at the bottom (Class 7) of the class hierarchy.

When comparing men to women working full-time (grey triangle symbols), we essentially find the same pattern as described above. But when we compare men to women working (or who last worked) part-time (grey square symbols), we do not find any uniform difference in any country group or cohort. Finally, in the comparison of men to women not in employment when interviewed (grey diamond symbols), we only see systematic gender differences in the three post-socialist country groups, where the origin-destination associations are stronger for women.[8] [9]

In sum, in a majority of countries and cohorts, men and women do not display systematically different rates, regardless of the degree of labour market attachment of the latter. And, in country groups where we do detect uniform differences, these show opposite patterns. In the Southern countries women – those working full-time in particular – have more equal relative rates, while in some of the post-socialist countries

[8] As a robustness check, we also calculated the average global log-odds ratios, separately for men and women in each country group and cohort, and conducted significance tests for the gender difference in them, using the method described in the Data and variable section – see Online Appendix 5.1. The results are essentially the same as those reported in the main body of the paper.

[9] Online Appendix 5.2 reports the results for the comparison between men and women separately for individual countries.

women – those coded according to their last employment in particular – have more *un*equal relative rates.

**** Figure 5 ****

However, even in countries where we see overall gender similarity in the level of relative mobility, this does not necessarily mean that there is no difference between men and women in the *pattern* of inequality in relative rates. In order to throw more light on this matter, we now calculate all the 441 log-odds ratios between origin and destination classes in a 7x7 mobility table, for men, for women and for women working full-time when interviewed, for each country in our sample.[10] To examine the pattern of inequalities in relative mobility chances, and the gender differences therein, we take *all* positive log-odds ratios as the dependent variable in a linear regression and include, as explanatory variables, a series of binary indicators to characterise the mobility transitions involved in them. The units of analysis are then in effect the 2x2 sub-tables for which the log-odds ratios are calculated, each of which is defined by two origin and two destination classes.

More specifically, we distinguish three variables that capture the *range* of mobility, determined by the five hierarchical levels within ESeC – see Table 1. The first variable separates out odds ratios that involve mobility transitions that imply the crossing of any

[10] Due to lack of statistical power – i.e. small sample size in some countries – we are not able to perform this analysis for women working (or who last worked) part-time and for women coded according to their last employment.

one of the five hierarchical levels – short-range mobility; the second variable does so for the crossing of two levels – middle-range mobility; and the third one for the crossing of three or four levels – long-range mobility. We also introduce another set of binary variables – seven, in total – that separates out log-odds ratios that involve transitions occurring between the class in question and any other classes. We do so, to capture individuals' propensities for intergenerational class *im*mobility or 'class inheritance'. We work with two models. In Model 1, we include our ten binary variables, alongside a dummy for gender, as well as country fixed-effects; in Model 2, we add interactions between the binary indicators and the gender dummy.

**** Table 3 ****

As is apparent from Model 1, in both comparisons – when comparing men to all women as well as when comparing men to women working full-time – with short-range mobility transitions, those that occur between adjacent origin and destination classes, inequalities in relative mobility chances are negligible. In effect, 'perfect mobility' is approximated. But with longer-range transitions, these inequalities clearly widen. The coefficients for middle- and long-range mobility transitions are positive in sign, implying that as the range of mobility extends, the size of the log-odds ratios increases. The coefficients for mobility transitions capturing class inheritance are also significant and positive, indicating a high propensity of immobility in all classes, except Class 3.

Model 2 examines whether or not the properties of log-odds ratios that we distinguish vary by gender. They clearly do. The barriers that limit longer-range mobility appear to

be stronger for women – for those working full-time, in particular – than for men. In other words, women have a lower propensity than men to experience medium- and long-range upward or downward mobility across the class hierarchy. A possible explanation for this could be that formal qualifications may matter more for women's class mobility, especially if transitions involve the managerial and professional class where women tend to be concentrated in occupations in the public sector that are characterised by a relatively strict 'credentialism'.

Gender differences also exist in the tendency for class inheritance. As is apparent, the propensity for intergenerational immobility is significantly weaker in the case of women than of men in the three intermediate classes – Classes 3, 4 and 5. Put differently, in these classes women are more likely than men to move away from their class origins. This finding is, to a certain extent, in line with that of earlier research showing that men, overall, have a stronger propensity to follow their fathers *into particular occupations* than women have to follow either their fathers or their mothers (Jonsson *et al.* 2009; Erikson, Goldthorpe and Hällsten, 2012). Further, the finding of a weaker tendency of 'class succession' among the self-employed for women than for men is also in line with what Erikson and Goldthorpe (1992) have found, using data from earlier time periods, for a limited set of countries. The self-employed 'invest' differently in their sons and daughters – formal education may be less important for sons, as they tend to take over the business, but greater emphasis is placed on daughters' education, chiefly because of 'risk dispersion' (cf. Breen *et al.*, 2010). However, it is also apparent that the propensity for class inheritance, or intergenerational immobility, at the two extremes

of the class hierarchy (in Class 1 and in Class 7) is significantly stronger in the case of women than of men – i.e. the 'class floors' and the 'class ceilings' appear to be 'stickier' among women.[11]

Revisiting gender differences in absolute class mobility

Finally, we revisit absolute rates and investigate how far the gender differences that have shown up in them derive from gender differences in relative rates as distinct from class structural differences. To do so, for every country group and cohort in our sample, we replace actually observed cell values of the mobility tables with those that would be expected under the model that proposes the *same* relative rates for men and women – i.e. Model 3 in Table 2. In other words, we eliminate gender differences in relative rates, and then re-calculate upward and downward mobility rates for men and women, separately for each country group and cohort. We report the results in Figure 6.

It is apparent that the expected values for upward and downward mobility under a model that assumes no difference between men and women in relative rates are scarcely distinguishable from those based on the actually observed values – especially

[11] Online Appendix 6 shows the results by country group. More specifically, we have run Model 1 in Table 3 separately for men, for all women and for women working full-time, in our six country groups. The overall pattern of results is very much the same as what we reported in Table 3. The only deviation from this general pattern that is worth mentioning concerns the tendency for class inheritance: in the Post-Soviet and the Post-Socialist-2 nations, men and women do not seem to differ significantly in this respect.

for men. But even for women, only slight, 2-3 percentage-points, differences show up. In other words, in most countries, women would experience only slightly more upward and slightly less downward mobility in the case of gender equality in relative rates. This means that differences between men and women in relative rates make a *very limited* contribution to differences between men and women in absolute rates. Hence, any gender variation in absolute rates is overwhelmingly accounted for by differences between men and women in their class distributions.

**** Figure 6 ****

Conclusions

The aim of this paper has been to address two inter-related questions. Are there gender differences in the level and the pattern of intergenerational class mobility? If so, do we see commonalities across European nations in the extent to which men and women differ in their rates of intergenerational class mobility; or, rather, do gender differences show up in a more or less idiosyncratic fashion? In order to answer these questions, we made an explicit distinction between absolute and relative rates of social mobility, and built on our earlier research into comparative social mobility, based on the European Social Survey.

In regard to absolute mobility, we have found that in a majority of European countries, women are more likely than men to be found in different class positions to those of

their parents'. But the reasons for this gender difference in total mobility rates are not the same in the 'West' – i.e. in the West-Nordic, West-Central and Southern European country groups that we distinguish – as in the 'East' – i.e. in the three post-socialist country groups that we distinguish. In the West, women are more socially mobile than men, chiefly because they are more likely to move down, rather than to move up, the class hierarchy. In the East, however, the reverse applies. Moreover, we have found that these basic patterns of gender differences in upward and downward mobility rates remained largely the same across birth cohorts that span more than four decades.

In an attempt at explaining the gender differences in upward and downward mobility, we argued that in the East, these might show up in the way they do because men's mobility experiences have been more adversely affected than women's by the economic consequences of the transition from state-socialism to some form of capitalist democracy. In the West, however, we might understand gender differences in absolute mobility better if we consider the large degree of heterogeneity that exists among women in their labour market attachment. Indeed, we have found that in our three Western country groups, women working part-time, or not in employment when interviewed but coded according to their last employment, are more prone to intergenerational downward mobility than women in full-time employment, chiefly because they are more concentrated in less advantaged class positions. This means that the higher the proportion of the part-timers, or those coded according to their last employment, among women, the larger the difference this makes to the rates of upward and downward mobility for women at large.

In regard to relative mobility, we have found more evidence of gender similarity – or, more precisely, of a lack of systematic gender differences. In four of our six country groups, men and women do not differ uniformly in their relative mobility rates, regardless of the degree of labour market attachment of the latter. In other words, our results do not corroborate our expectations regarding the role of heterogeneity among women in their labour market attachment: neither the 'perverse fluidity' argument nor the argument that women from more advantaged families may choose not to fully exploit the advantages of their parental backgrounds in their working lives has gained much support from our cross-national analyses. Further, in the two country groups where uniform gender differences do show up, these point into opposite directions. In the Southern European nations – Cyprus, Greece, Spain and Portugal – women tend to have more equal relative rates; while in nations belonging to our Post-Socialist-1 group – Czech Republic, Slovakia, Slovenia and Romania – women tend to have less equal relative rates. In the former cases, there is some indication in earlier research that women's intergenerational mobility chances are in fact becoming determined in a more meritocratic way than men's (e.g. Gil-Hernández *et al.*, 2017). In the latter cases, our analyses indicate that one possible reason for less equal relative rates for women could be that they show significantly stronger origin-destination association than men both at the top and the bottom of the class hierarchy – i.e. 'class floor' and 'class ceiling' effects are particularly strong in their case.

There are two further aspects of relative mobility in which regard our findings also point to a quite large degree of communality across European nations. First, gender

differences in absolute rates appear to be only little affected by gender differences in relative mobility chances: absolute rates are overwhelmingly determined by the differences between men and women in their class distributions. Second, women's class mobility appears to be more impeded by hierarchical barriers than by the propensity for inheritance – i.e. for the same class positions to be passed on from generation to generation, especially via self-employment.

How do then our results relate to those of earlier research? We confirm previous findings that women are more socially mobile than men in most European countries. But we point out that the reasons for this might be quite different in the West and in the East. As regards relative mobility chances, we are able to underwrite the dominant finding of past research that women display greater social fluidity than men only in the Southern European countries. In the remaining countries, we either do not find any uniform gender difference, or in some of the post-socialist countries we find that women show less, rather than greater, fluidity than men. But what earlier studies have not investigated in any systematic way is gender difference in the pattern of relative mobility rates. Our research highlights that there are clear differences between men and women in this respect. Hierarchical barriers limit the mobility of women more than that of men, but the tendency for class inheritance is weaker for women than for men. It is for future research to explore the underlying factors and mechanisms that could explain these gender differences in the pattern of inequality of mobility chances.

References

Albertini,M. (2013). The Relation between Social Class and Economic Inequality: A Strengthening or Weakening Nexus? Evidence from the Last Three Decades of Inequality in Italy. *Research in Social Stratification and Mobility*, 33:27-39.

Beller,E. (2009). Bringing Intergenerational Mobility Research into the Twenty-First Century: Why Mothers Matter. *American Sociological Review,* 74:507–28.

Breen,R. (2019). Education and intergenerational social mobility in the US and four European countries. *Oxford Review of Economic Policy*, 35:445-466.

Breen,R. (ed.) (2004). *Social Mobility in Europe*. Oxford: Oxford University Press.

Breen,R. and Luijkx,R. (2014). Conclusions. In Breen,R. (ed.), *Social Mobility in Europe*. Oxford: Oxford University Press.

Breen,R., Mood,C. and Jonsson,J.O. (2016). How much scope for a mobility paradox? The relationship between social and income mobility in Sweden. *Sociological Science*, 3:39-60.

Breen,R., Luijkx,R., Muller,W. and Pollak,R. (2010). Long-term Trends in Educational Inequality in Europe: Class Inequalities and Gender Differences. *European Sociological Review*, 26:31-48.

Bukodi, E. and Goldthorpe, J.H. (2018). *Social Mobility and Education in Britain: Research, Politics and Policy*. Cambridge University Press.

Bukodi, E., and Goldthorpe, J.H. (2018). *Social Inequality and Social Mobility: Is there an Inverse Relation?* SocArXiv, https://doi.org/10.31235/osf.io/jkqne.

Bukodi, E. and Paskov, M. (2018). Income inequality, living standards and intergenerational social mobility. In Nolan, B. (ed.) *Generating Prosperity for Working Families in Affluent Countries*, Oxford University Press.

Bukodi, E., Paskov, M. and Nolan, B. (2019). 'Intergenerational class mobility in Europe: A new account'. *Social Forces*, 10.1093/sf/soz026.

Bukodi, E., Goldthorpe, J.H., Halpin, B. and Waller, L. (2016) 'Is education now class destiny? Class histories across three British birth cohorts'. *European Sociological Review,* 32: 835-849.

Bukodi, E., Goldthorpe, J.H., Joshi, H. and Waller, L. (2017). 'Why have relative rates of class mobility become more equal among women in Britain?' *The British Journal of Sociology*, 68: 512-532.

Chang,M.L. (2000). The Evaluation of Sex Segregation Regimes. *American Journal of Sociology*, 105:1658-1701.

Charles,M. (2011). A World of Difference: International Trends in Women's Economic Status. *Annual Review of Sociology*, 37:355-371.

Charles,M. and Grusky,D.B. (2004). *Occupational Ghettos: The Worldwide Segregation of Women and Men*. Stanford: Stanford University Press.

Connolly,S. and Gregory,M. (2008). Moving Down: Women's Part-Time Work and Occupational Change in Britain. *Economic Journal*, 118:F52-76.

Connolly,S., et al. (2016). Britain's Slow Movement to a Gender Egalitarian Equilibrium: Parents and Employment in the UK 2001–13. *Work, Employment and Society,* 30:838–857.

Dex,S. and Bukodi,E. (2012). The Effects of Part-Time Work on Women's Occupational Mobility in Britain: Evidence from the 1958 Birth Cohort Study. *National Institute Economic Review*, 222:820-37.

DiPrete,T. and Buchmann,C. (2006). Gender-specific trends in the value of education and the emerging gender gap in college completion. *Demography*, 43:1-24.

Emmenegger,P., Häusermann,S., Palier,B. and Seeleib-Kaiser,M. (2012). How we Grow Unequal. In P. Emmenegger,S. et al. (Eds): *The Age of Dualization: The Changing Face of Inequality in Deindustrializing Societies,* Oxford: Oxford University Press.

Erikson,R. (1984). Social Class of Men, Women and Families. *Sociology*, 18:500-514.

Erikson,R., and Goldthorpe,J.H. (1992). T*he Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon Press.

Erikson,R., Goldthorpe,J.H. and Hällsten,M. (2012). No Way Back Up from Ratcheting Down? A Critique of the 'Microclass' Approach to the Analysis of Social Mobility. *Acta Sociologica*, 55:211-229.

Estévez-Abe,M. (2005). Gender Bias in Skills and Social Policies: The Varieties of Capitalism Perspective on Sex Segregation. *Social Politics,* 12:180-215.

Ganzeboom,H.B.G. (2014). ESS-DEVO (ESS Developmental Project: Improving the Measurement of Social Background in the European Social Survey), http://www.Harryganzeboom.Nl/ ESS-DEVO/Index.Htm

Gerber,T.P., and Hout,M. (2004). Tightening Up: Declining Class Mobility during Russia's Market Transition. *American Sociological Review*, 69:677-703.

Gill-Hernandèz,C.J., Marqués-Perales,I. and Fachelli,S. (2017). Intergenerational social mobility in Spain between 1956 and 2011: the role of educational expansion and economic modernisation in a late industrialised society. *Research in Social Stratification and* Mobility, 51: 14-27.

Goldthorpe,J.H. (2007). *On Sociology,* Volume Two. Stanford, CA: Stanford University Press.

Goldthorpe,J.H. and Mills,C. (2004). Trends in Intergenerational Class Mobility in Britain in the Late Twentieth Century. In Breen,R. (ed.) *Social Mobility in Europe*, Oxford: Oxford University Press.

Gronlund,A., Hallden,K. and Magnusson,C. (2017). A Scandinavian Success Story? Women's Labour Market Outcomes in Denmark, Finland, Norway and Sweden. *Acta Sociologica*, 60:97-119.

Häusermann,S. and Schwander,H. (2012). Varieties of Dualization? In P. Emmenegger,S. Häusermann,B. Palier,B. and Seeleib-Kaiser,M. (Eds): *The Age of Dualization: The Changing Face of Inequality in Deindustrializing Societies,* Oxford: Oxford University Press.

Helemäe,J. and Saar,E. (2006). Employment Careers of Men in Estonia. In Blossfeld,H-P. Mills,M. and Bernardi,F. (Eds): *Globalization, Uncertainty and Men's Careers: An International Comparison*, Cheltenham: Edward Elgar

Hipp,L., Bernhardt,J. and Allmendinger,J. (2015). Institutions and the Prevalence of Nonstandard Employment. *Socio-Economic Review,* 13:351-377.

Hout,M. (1988). More Universalism, Less Structural Mobility: The American Occupational Structure in the 1980s. *American Journal of Sociology,* 93:1358–400.

Hout,M. (2018). Americans' Occupational Status Reflects the Status of Both of their Parents. *PNAS*.

Jackson,M., and Evans,G. (2017). Rebuilding Walls: Market Transition and Social Mobility in the Post-Socialist Societies of Europe. *Sociological Science*, 4:54-79.

Jonsson,J.O. and Mills,C. (1993). Social Mobility in the 1970s and 1980s: A Study of Men and Women in England and Sweden. *European Sociological Review*, 9:229-248.

Jonsson,J.O. et al. (2009). Microclass Mobility: Social Reproduction in Four Countries. *American Journal of Sociology*, 114:977-1036.

Levanon,A., and Grusky,D.B. (2016). The Persistence of Extreme Gender Segregation in the Twenty-First Century. *American Journal of Sociology,* 122:573-619.

Li,J.H. and Singelmann,J. (1998). Gender Differences in class Mobility: A Comparative Study of the United States, Sweden and Germany. *Acta Sociologica*, 41:315-333.

Lucchini,M. and Schizzerotto,A. (2010). Unemployment Risk in Four European Countries: A Validation Study of the ESeC. In Rose,D. and Harrison,E. (Eds.), *Social Class in Europe: An introduction to the European Socio Economic Classification,* Routledge.

Mach,B.W. (2004). Intergenerational Mobility in Poland: 1972-88-94. *Social Mobility in Europe*, Oxford: Oxford University Press.

McDaniel,E. and Buchmann,C. (2015). Gender Inequality in Educational Attainment. In: Scott,R. and Kosslyn,S. (Eds.) *Emerging Trends in the Social and Behavioural Sciences*, John Wiley & Sons.

Nightingale.M. (2018). *The 'Low Pay Penalty' Associated with Part-Time Employment and its Gendered Implications*. DPhil Dissertation, University of Oxford.

OECD (2010). *OECD Employment Outlook 2010: Moving Beyond the Jobs Crisis*. OECD Publishing: Paris.

Róbert,P. and Bukodi, E. (2004). Changes in Intergenerational Class Mobility in Hungary, 1973-2000. In: Breen,R. (ed.) *Social Mobility in Europe*, Oxford: Oxford University Press.

Rose,D., and Harrison,E. (2010). *Social Class in Europe: An Introduction to the European Socio-Economic Classification*. London: Routledge.

Titma,M., Roots,A. and Soidla,I. (2010). Gender Differences in Intragenerational Mobility: The Case of Estonia. *European Sociological Review*, 26:337-350.

Torche,F. (2015). Intergenerational Mobility and Gender in Mexico. *Social Forces*, 94:563-587.

Van Bastelaer,A., Lemaître,G. and Marianna,P. (1997). The Definition of Part-Time Work for the Purposes of International Comparisons. *OECD Labour Market and Social Policy Occasional Papers*, 22, Paris: OECD.

Watson,D., Whelan,C.T., and Maître,B. (2010). Class and Poverty: Cross-Sectional and Dynamic Analysis of Income Poverty and Lifestyle Deprivation. In D. Rose, and E. Harrison (Eds.), *Social Class in Europe: An Introduction to the European Socio-Economic Classification,* Routledge.

Williams,M. (2012). Occupations and British Wage Inequality, 1970s–2000s. *European Sociological Review*, 29:841-857.

Wong,R.S.K. (1995). Socialist Stratification and Mobility: Cross-National and Gender Differences in Czechoslovakia, Hungary and Poland. *Social Science Research*, 24:302-328.

Tables & Figures

TABLE 1: Description of the European Socio-Economic Classification (ESeC)

Class	Description
Class 1	Large employers, Higher managers and professionals
Class 2	Lower managers and professionals, high-level supervisors
Class 3	Intermediate occupations
Class 4	Small employers and own account workers
Class 5	Lower supervisors and technicians
Class 6	Lower service, sales and technical occupations
Class 7	Routine occupations

FIGURE 1: Gender differences in rates of absolute mobility (%)

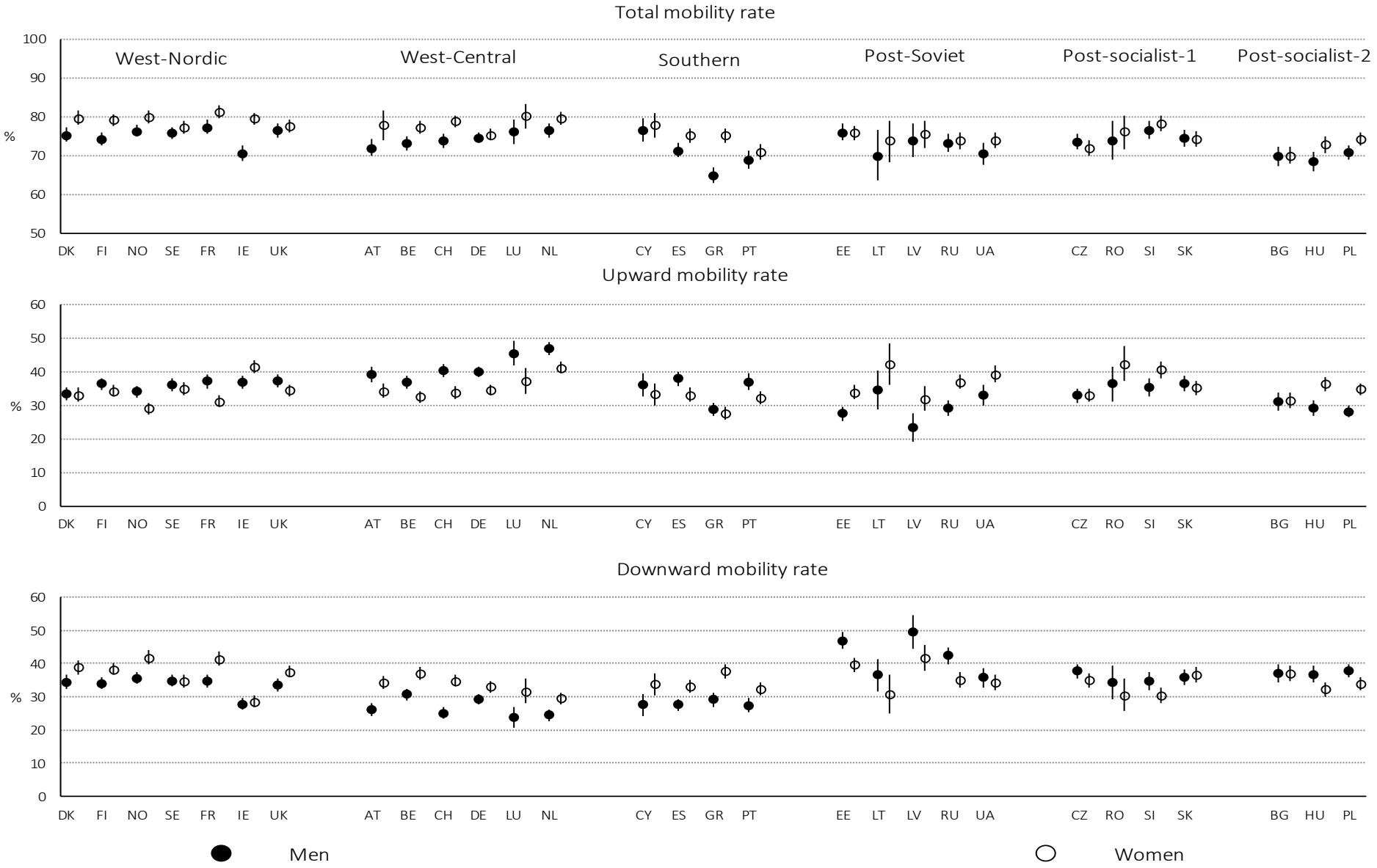


FIGURE 2: Upward and downward mobility rates of men and women by birth cohort and country group

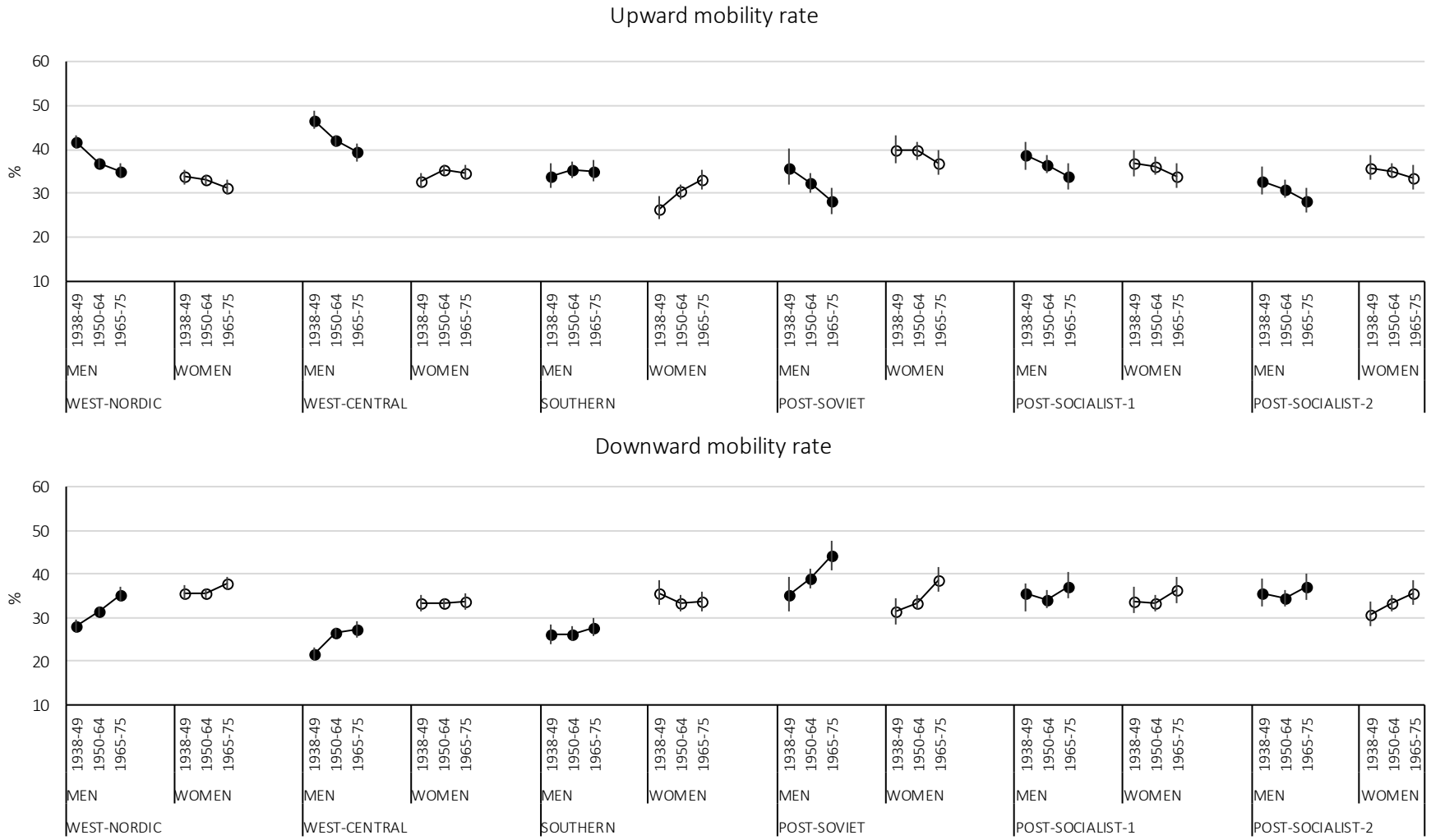
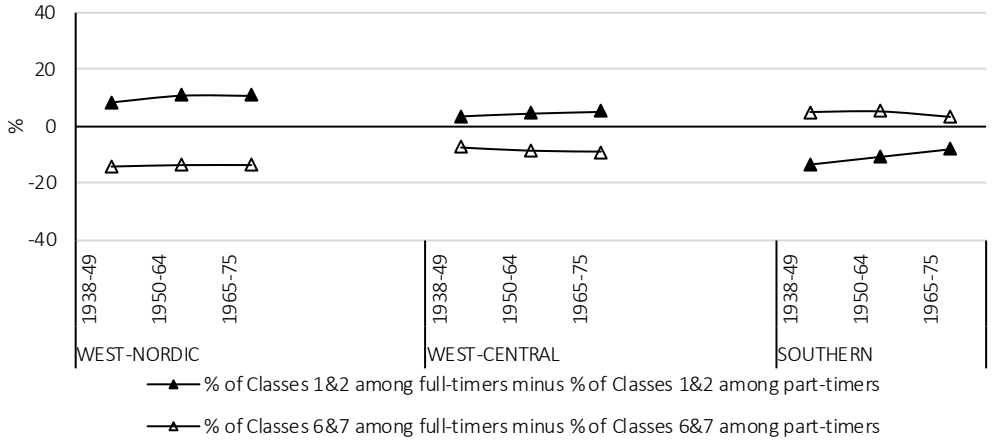


FIGURE 3.1: Difference between women *working (last worked) full-time* and women *working (last worked) part-time* in their rates of upward and downward mobility by birth cohort in three country groups

Difference between the two groups of women in proportion of the salariat (Classes 1&2) and the working class (Classes 6&7)



Upward and downward mobility rates for the two groups of women

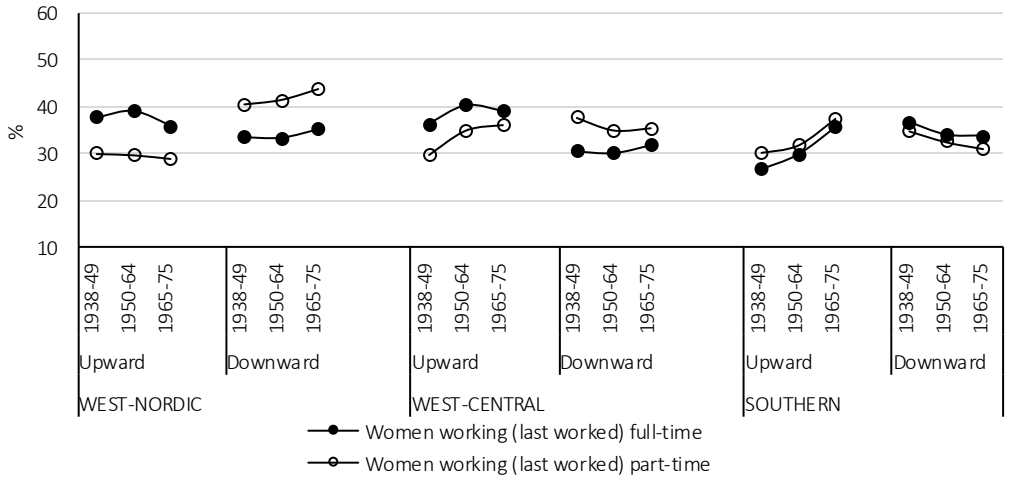
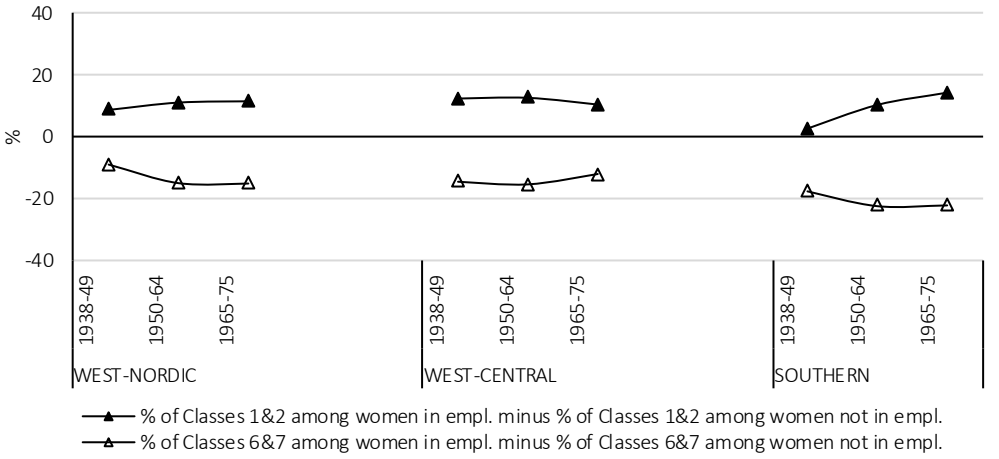


FIGURE 3.2: Difference between women *in employment when interviewed* and women *not in employment when interviewed* in their rates of upward and downward mobility by birth cohort in three country groups

Difference between the two groups of women in proportion of the salariat (Classes 1&2) and the working class (Classes 6&7)



Upward and downward mobility rates for the two groups of women

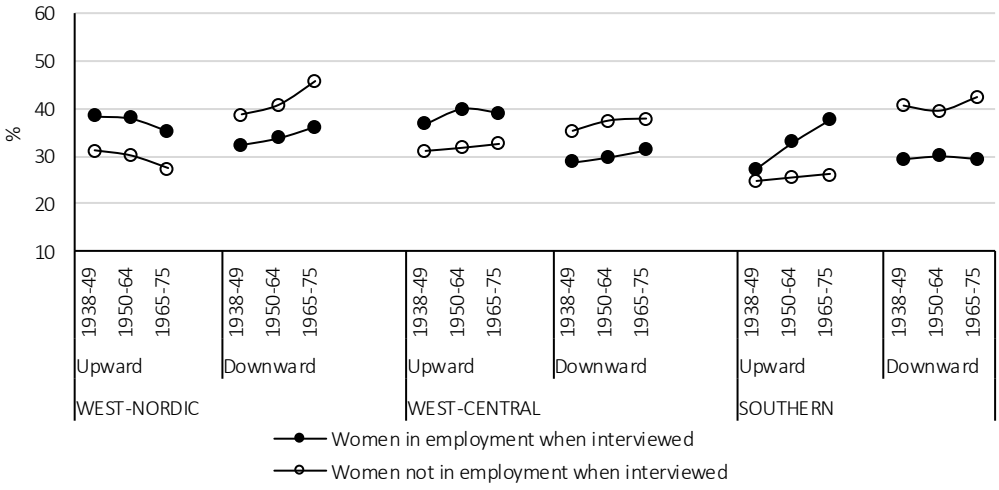


FIGURE 4: Upward and downward mobility rates of men and women in full-time employment by birth cohort and country group

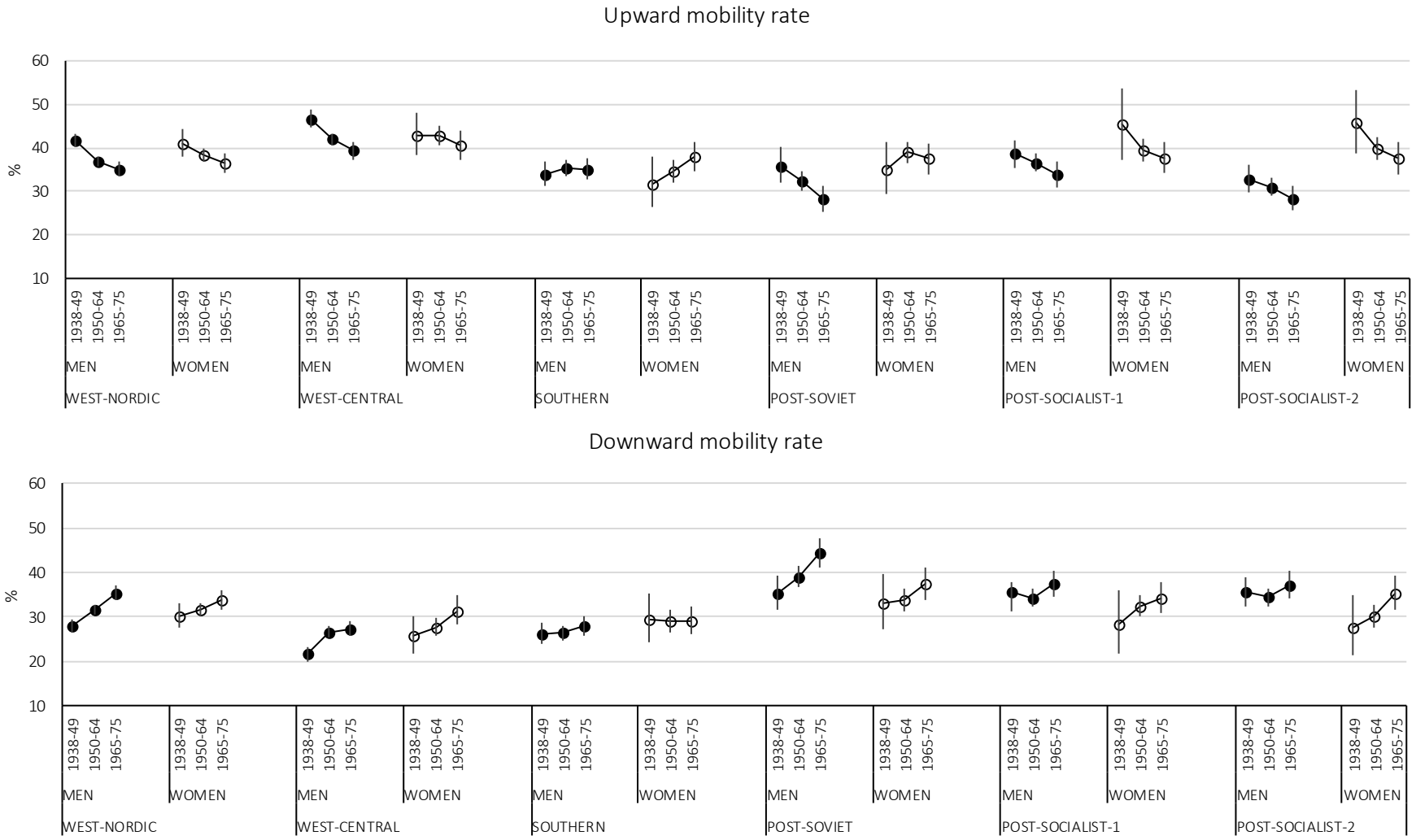


TABLE 2: Fitting a series of log-linear models on tables of Country (C)-Gender (G)-Class of Origin (O)-Class of Destination (D)

	Men vs. Women				Men vs. Women working full-time when interviewed				Men vs. Women working (or last worked) part-time				Men vs. Women not in employment when interviewed			
	G^2	d.f.	p	DI (%)	G^2	d.f.	p	DI (%)	G^2	d.f.	p	DI (%)	G^2	d.f.	p	DI (%)
(1) CGD CO OD	4246.7	2304	0.00	6.0	3260.1	2304	0.00	6.3	3215.0	2304	0.00	6.4	3495.9	2304	0.00	6.4
(2) CGD CO β_GOD	4246.2	2303	0.00	6.0	3258.3	2303	0.00	6.3	3213.5	2303	0.00	6.4	3493.5	2303	0.00	6.4
(2) - (1)	0.5	1	0.48		1.8	1	0.18		1.5	1	0.22		2.4	1	0.12	
(3) CGD CO β_COD	3940.3	2275	0.00	5.7	3062.2	2275	0.00	6.0	3043.1	2275	0.00	6.1	3301.6	2275	0.00	6.2
(4) CGD CO $\beta_C\beta_G$OD	3939.1	2274	0.00	5.7	3062.1	2274	0.00	6.0	3041.8	2274	0.00	6.1	3301.1	2274	0.00	6.2
(4) - (2)	307.1	29	0.00		196.2	29	0.00		171.6	29	0.00		192.4	29	0.00	
(4) - (3)	1.2	1	0.27		0.1	1	0.75		1.3	1	0.25		0.5	1	0.48	
N	132670				94448				80537				89507			

FIGURE 5: Gender differences in relative mobility rates by birth cohort and country group - UNIDIFF parameters [(a)(b)(c)]

Notes

(a) Hollow symbol: Model 4 does not improve on Model 3 (Table 2) - no significant uniform gender difference in relative rates.

(b) Filled symbol: Model 4 improves on Model 3 (Table 2) - significant and uniform gender difference in relative rates.

(c) In Post-Socialist-1 and Post-Socialist-2 country groups, for cohort 1938-49, there is not sufficient statistical power to conduct the analysis involving women working (last worked) part-time.

TABLE 3: Gender differences in pattern of relative class mobility: effects of various types of mobility transitions on all positive log-odds ratios in 7 x 7 mobility tables[(a)] - Coefficients from OLS regression performed on pooled samples of countries

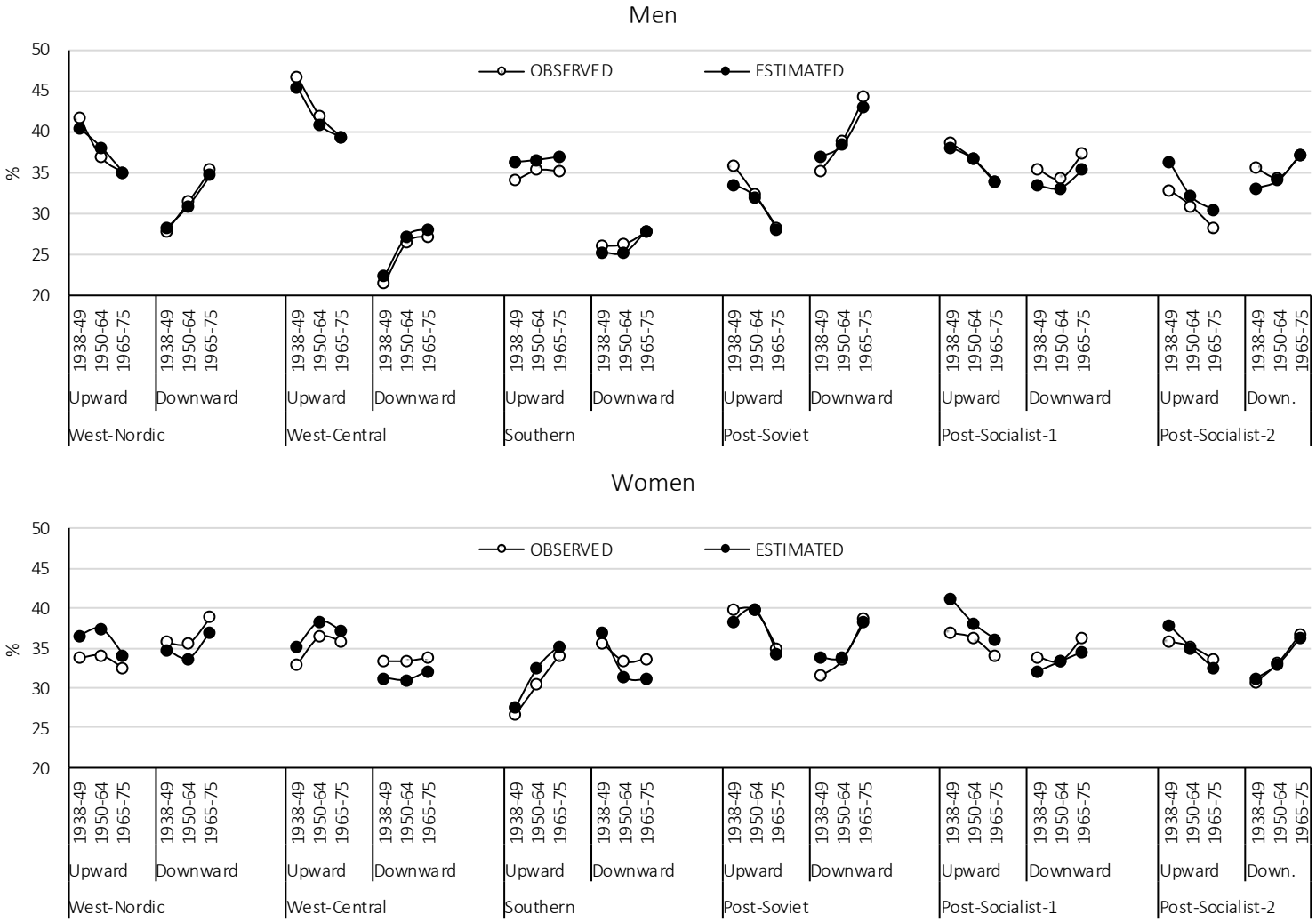
	Men and women		Men and Women in full-time employment	
	M1	M2	M1	M2
Mobility transition involves …				
short-range move	-0.197 **	-0.124 **	-0.115 **	-0.121 **
middle-range move	0.056 **	0.043 **	0.047 **	0.044 **
long-range move	0.400 **	0.389 **	0.407 **	0.390 **
inheritance in Class 1	0.686 **	0.666 **	0.690 **	0.666 **
inheritance in Class 2	0.081 **	0.072 **	0.070 **	0.073 **
inheritance in Class 3	-0.011	0.023 *	0.013	0.023 **
inheritance in Class 4	0.441 **	0.553 **	0.511 **	0.555 **
inheritance in Class 5	0.037 **	0.092 **	0.073 **	0.094 **
inheritance in Class 6	0.106 **	0.111 **	0.105 **	0.112 **
inheritance in Class 7	0.544 **	0.505 **	0.529 **	0.504 **
Women	0.000	0.093 *	-0.001	-0.054
Transitions*Women				
short-range move		-0.115 *		0.019
middle-range move		0.026 *		0.023 *
long-range move		0.031 *		0.063 **
inheritance in Class 1		0.039 $		0.074 *
inheritance in Class 2		-0.015		-0.017
inheritance in Class 3		-0.065 **		-0.033 *
inheritance in Class 4		-0.215 **		-0.131 **
inheritance in Class 5		-0.105 **		-0.061 **
inheritance in Class 6		-0.012		-0.020
inheritance in Class 7		0.077 **		0.077 **
Constant	0.310 **	0.248 **	0.221 **	0.237 **
R^2	37%	38%	37%	38%
N of odds ratios	42057		31052	

Note

(a) Country fixed-effects are also included; robust standard errors applied.

**: p<0.01; *: p<0.05; $: p<0.10

FIGURE 6: Observed and estimated (under Model 3 in Table 2) upward and downward mobility rates of men and women by birth cohort and country group



Intergenerational class mobility among men and women in Europe: Gender differences or gender similarities?

Online Appendix

APPENDIX 1.1: Distribution of men and women, aged 25-64, by class of destination (D) and class of origin (O)[(a)], by country (%)

West-Nordic

ESeC	DK				FI				NO				SE				FR				IE				UK			
	Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Class 1	17	10	16	15	20	10	9	9	15	7	13	13	20	13	15	14	15	8	13	12	14	10	8	8	18	12	16	16
Class 2	18	25	17	16	18	24	20	18	24	27	26	25	23	26	23	22	20	19	16	16	17	28	14	14	21	26	23	22
Class 3	5	16	4	6	2	13	4	4	5	15	3	4	5	17	6	6	8	21	6	6	3	13	4	4	4	13	4	5
Class 4	11	4	27	25	14	7	32	31	12	5	22	22	11	5	20	20	9	4	20	19	20	5	33	32	15	5	13	13
Class 5	15	9	8	7	7	5	5	5	18	9	11	10	11	6	7	7	11	6	11	12	11	9	8	8	13	9	12	12
Class 6	17	22	15	16	23	25	20	20	16	24	16	16	16	24	20	21	20	22	22	22	17	21	13	13	12	21	17	16
Class 7	17	14	14	15	16	16	10	13	10	13	9	10	14	9	9	10	16	20	12	13	18	14	20	21	17	14	15	16
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	2442	2412	2442	2412	3114	3002	3114	3002	3087	2669	3087	2669	2869	2740	2869	2740	2662	2961	2662	2961	2620	3111	2620	3111	2997	3415	2997	3415

West-Central

ESeC	AT				BE				CH				DE				LU				NL			
	Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Class 1	14	8	10	10	16	9	13	13	18	9	12	13	14	7	10	11	17	8	8	8	23	12	11	13
Class 2	28	24	17	15	21	27	19	19	27	30	17	18	21	26	17	17	24	26	14	14	26	36	21	21
Class 3	9	20	9	9	5	14	5	6	6	20	6	6	6	21	7	8	5	16	4	4	4	16	5	4
Class 4	12	8	23	24	11	7	21	21	13	7	26	26	10	5	12	12	7	5	21	21	11	5	21	20
Class 5	11	6	11	10	16	6	8	7	15	7	12	12	15	7	13	12	16	8	10	10	16	6	13	12
Class 6	16	20	20	20	14	16	18	18	12	15	17	17	19	19	29	28	16	16	22	22	11	16	17	18
Class 7	10	14	10	12	16	21	16	16	9	12	10	8	15	15	12	12	15	21	20	21	8	9	11	12
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	2455	2833	2455	2833	2607	2511	2607	2511	2773	3020	2773	3020	4303	4119	4303	4119	963	842	963	842	2828	3312	2828	3312

Southern

ESeC	CY				ES				GR				PT			
	Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Class 1	12	7	4	6	12	7	8	8	8	6	4	4	5	5	3	3
Class 2	13	17	9	9	13	16	9	10	10	13	5	7	11	14	4	5
Class 3	7	18	5	5	7	15	4	5	4	12	3	3	4	9	3	4
Class 4	17	11	44	41	17	12	27	28	34	21	57	56	16	10	30	27
Class 5	13	5	5	4	12	5	6	6	8	5	3	4	11	4	6	5
Class 6	23	22	14	17	20	20	21	20	21	22	12	11	33	27	29	30
Class 7	15	20	19	18	19	25	23	23	16	21	15	15	20	31	25	26
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	1017	951	1017	951	2774	2509	2774	2509	2559	2642	2559	2642	2235	2957	2235	2957

Post-Soviet

ESeC	EE				LT				LV				RU				UA			
	Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Class 1	14	14	18	19	10	11	11	13	6	8	16	17	14	13	22	21	11	12	17	19
Class 2	10	24	15	17	13	26	16	17	12	21	19	20	12	25	21	20	17	27	18	18
Class 3	2	9	5	5	3	14	4	4	3	11	2	2	2	12	2	2	1	10	2	2
Class 4	10	4	3	3	5	2	4	3	6	4	1	2	8	3	2	2	8	4	2	2
Class 5	11	7	10	10	4	5	3	4	6	6	8	7	11	6	6	6	9	5	7	6
Class 6	26	21	34	33	35	21	23	23	34	28	30	30	28	26	26	27	28	23	24	25
Class 7	28	21	15	13	30	21	40	36	33	22	24	22	25	15	22	22	26	19	30	28
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	1567	2026	1567	2026	840	493	840	493	831	661	831	661	1832	2382	1832	2382	1662	2556	1662	2556

Post-Socialist - 1

ESeC	CZ				RO				SI				SK			
	Destination		Origin		Destination		Origin		Destination		Origin		Destination		Origin	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Class 1	9	5	8	6	12	12	5	7	13	12	12	11	8	6	12	13
Class 2	16	23	22	21	12	18	12	13	16	24	15	15	17	23	14	15
Class 3	4	16	7	7	3	11	2	2	4	15	4	4	3	14	3	4
Class 4	12	6	4	4	6	3	14	11	11	3	14	14	13	5	2	2
Class 5	8	4	8	9	9	4	5	5	20	10	15	13	9	5	10	9
Class 6	27	21	37	37	33	32	38	38	22	17	24	25	25	23	33	32
Class 7	24	25	15	16	25	20	24	24	14	19	16	18	25	24	26	25
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	2627	2655	2627	2655	1001	543	1001	543	1352	1477	1352	1477	1862	2225	1862	2225

Post-Socialist - 2

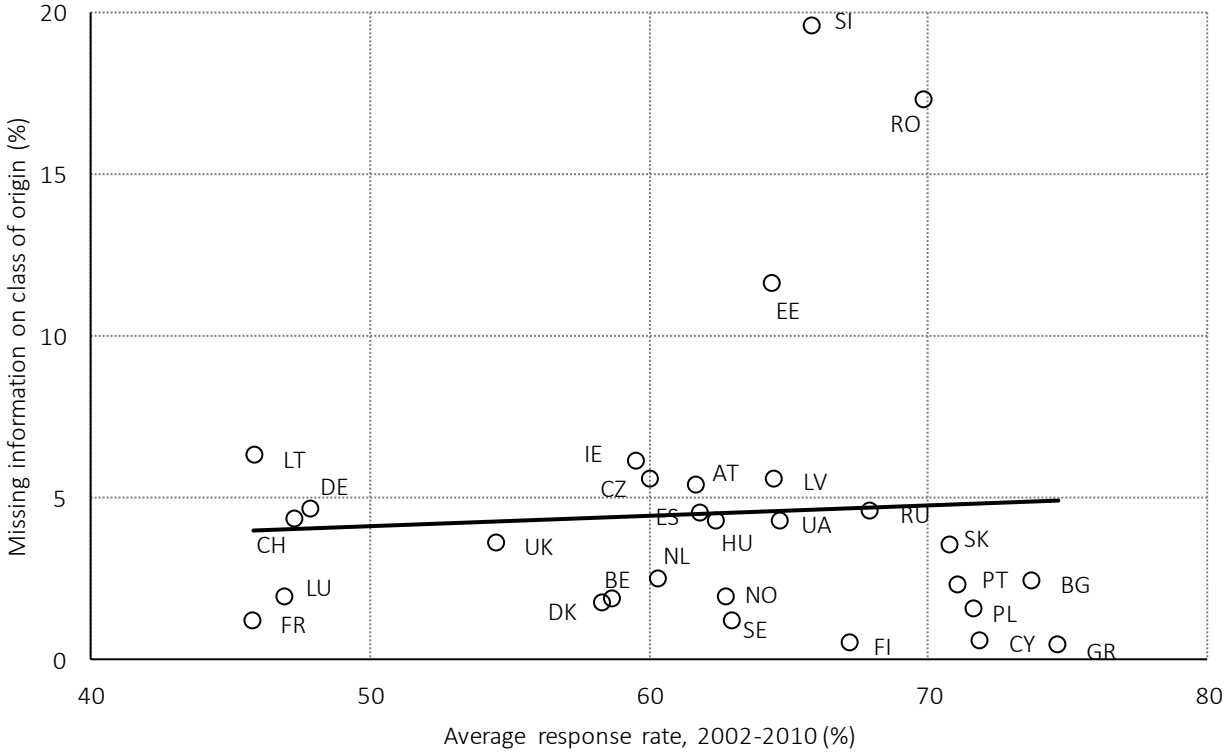
ESeC	BG				HU				PL			
	Destination		Origin		Destination		Origin		Destination		Origin	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Class 1	8	8	10	11	9	6	8	8	9	9	6	6
Class 2	13	17	17	18	13	19	16	15	14	21	16	14
Class 3	3	8	3	4	3	16	5	6	2	12	3	5
Class 4	9	5	5	4	9	4	5	5	19	13	34	34
Class 5	6	4	6	7	7	4	9	8	10	4	7	6
Class 6	31	25	30	27	34	26	31	31	24	20	19	21
Class 7	31	33	28	29	25	25	26	27	21	21	15	14
Total	100	100	100	100	100	100	100	100	100	100	100	100
N	1550	1939	1550	1939	2128	2435	2128	2435	2619	2676	2619	2676

Note: (a) Distribution is based on respondents with valid information on their class of destinations.

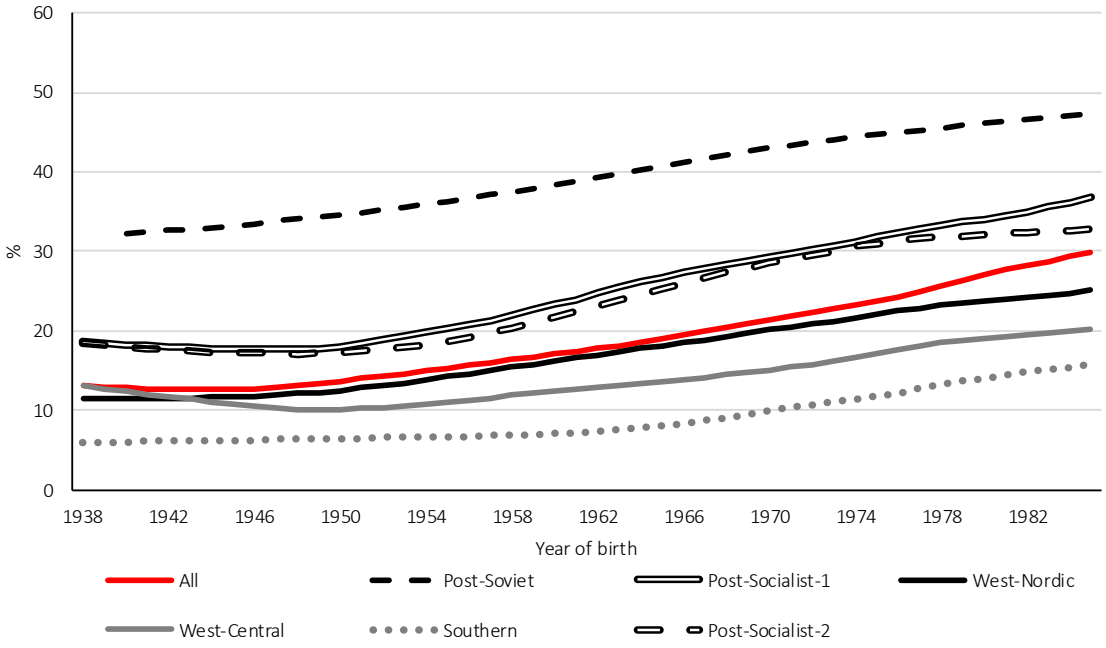
APPENDIX 1.2: Proportion of missing information on class of origin and class of destination by country, men and women aged 25-64; all years (2002-2010)

Country	Men			Women		
	class of destination	class of origin	cumulative	class of destination	class of origin	cumulative
			West-Nordic			
DK	2.8	3.5	6.0	3.3	3.8	6.4
FI	1.2	3.1	4.1	1.1	4.0	4.8
NO	1.0	4.2	4.7	1.3	4.4	5.4
SE	1.4	4.4	5.5	1.3	4.6	5.4
FR	2.2	5.9	7.5	5.0	5.8	10.0
IE	2.5	11.8	13.6	7.9	13.5	18.8
UK	1.9	9.0	10.0	3.5	10.2	12.1
			West-Central			
AT	4.5	8.2	11.3	8.3	10.1	16.5
BE	1.8	8.2	9.5	6.2	8.5	13.4
CH	2.0	6.2	7.8	3.8	6.2	9.2
DE	3.0	7.6	9.5	5.4	9.4	12.8
LU	2.6	6.2	8.5	8.0	7.1	14.2
NL	1.2	6.8	7.4	3.1	8.2	10.5
			Southern Europe			
CY	2.6	1.4	3.7	16.2	1.6	17.2
ES	4.2	8.5	10.7	16.0	8.5	21.5
GR	1.8	2.8	4.4	24.0	2.6	26.4
PT	2.4	5.2	7.4	11.9	6.3	16.7
			Post-Socialist-Post-Soviet			
EE	1.4	12.8	13.5	1.2	12.4	12.9
LT	9.5	13.5	18.6	7.8	10.4	16.2
LV	1.7	4.8	5.9	2.9	6.7	8.8
RU	3.6	7.2	10.1	6.6	6.2	11.6
UA	4.5	5.9	8.6	6.1	6.3	11.1
			Post-Socialist-East-Central-1			
CZ	5.7	7.1	10.0	6.8	6.6	10.3
PL	1.7	3.6	5.1	4.1	3.3	7.0
RO	18.2	25.4	35.5	28.7	28.0	45.6
SI	6.2	23.5	25.7	10.2	23.5	27.3
SK	5.7	5.4	10.3	6.7	6.3	11.6
			Post-Socialist-East-Central-2			
BG	3.2	3.5	6.0	6.2	4.1	9.3
HU	2.8	8.2	10.2	3.6	7.4	10.0
PL	1.7	3.6	5.1	4.1	3.3	7.0

APPENDIX 1.3: Average response rate in ESS (%) and proportion of missing information on class of origin, due to non-response or 'unknown'



APPENDIX 2.1: Proportion of respondents for whom Class of Origin is based on Mother's Class, rather than Father's Class, under the Dominance approach, by year of birth, separately for six country groups



APPENDIX 2.2: Association between Class of Origin and Class of Destination: average global log-odds ratios calculated under different approaches to Class of Origin, separately for men and women in different birth cohorts

		Average global log-odds ratios[a][b]		Difference in centre four average global log-odds ratios between Dominance and Alternative[c]			Average global log-odds ratios[a][b]		Difference in centre four average global log-odds ratios between Dominance and Alternative[c]		
		average	centre four	value	s.e.	sig.	average	centre four	value	s.e.	sig.
		Men					*Women*				
Social origin: Dominance[d] vs Father's Class[d]											
All	Dominance	0.999	1.045				1.061	1.034			
	Father's class	1.033	1.072	-0.026	0.023		1.004	0.984	0.051	0.022	*
Cohort 1938-49	Dominance	0.941	0.981				1.092	1.079			
	Father's class	0.983	1.027	-0.046	0.058		1.054	1.054	0.025	0.056	
Cohort 1950-64	Dominance	0.988	1.038				1.061	1.021			
	Father's class	1.030	1.085	-0.046	0.038		1.014	0.979	0.041	0.035	
Cohort 1965-75	Dominance	1.087	1.136				1.147	1.116			
	Father's class	1.149	1.199	-0.063	0.053		1.017	1.003	0.113	0.050	*
Cohort 1976-85[g]	Dominance	1.001	1.098				0.899	0.914			
	Father's class	0.967	1.081	0.017	0.062		0.798	0.789	0.125	0.059	*
Social origin: Dominance[d] vs Mother's Class[d]											
All	Dominance	0.978	1.019				1.059	1.038			
	Mother's class	0.769	0.823	0.196	0.029	*	0.943	0.940	0.098	0.027	*
Cohort 1938-49	Dominance	0.888	0.912				1.052	1.052			
	Mother's class	0.719	0.748	0.165	0.087		0.966	0.935	0.117	0.081	
Cohort 1950-64	Dominance	0.949	1.006				1.018	0.995			
	Mother's class	0.747	0.824	0.183	0.049	*	0.917	0.902	0.093	0.045	*
Cohort 1965-75	Dominance	1.065	1.103				1.127	1.109			
	Mother's class	0.811	0.859	0.243	0.064	*	0.992	0.982	0.128	0.059	*
Cohort 1976-85[g]	Dominance	1.006	1.067				0.917	0.992			
	Mother's class	0.777	0.863	0.204	0.069	*	0.801	0.854	0.137	0.066	*

Social origin: Dominance[(d)(e)] vs Combined[(e)(f)]

All	Dominance	1.041	1.057			1.055	1.038		
	Combined	0.994	1.035	0.023	0.029	0.982	0.909	0.129	0.028 *
Cohort 1938-49	Dominance	0.934	0.926			1.046	1.046		
	Combined	0.920	0.865	0.061	0.081	0.912	0.761	0.285	0.075 *
Cohort 1950-64	Dominance	0.999	1.031			1.028	1.009		
	Combined	0.959	1.021	0.010	0.049	0.957	0.870	0.139	0.044 *
Cohort 1965-75	Dominance	1.191	1.204			1.126	1.118		
	Combined	1.085	1.130	0.074	0.067	1.076	1.027	0.091	0.061
Cohort 1976-85[(g)]	Dominance	1.014	1.065			0.845	0.902		
	Combined	1.001	1.050	0.016	0.075	0.803	0.838	0.064	0.069

Notes

(a): Global log odds ratios are calculated for 5 by 5 mobility tables, where categories of Class of Destination are the following: Class 1; Class 2; Classes 3, 4 and 5; Class 6, Class 7.

(b): We average over four global log-odds ratios that result from separating (1) the first two rows and the first two columns of the table from the other categories; (2) the first two rows and the first three columns of the table from the other categories; (3) the first three rows and the first two columns of the table from the other categories; and finally, (4) the first three rows and the first three columns of the table from other categories.

(c) Standard error for difference in average global log odds ratios between Dominance and Alternative is calculated using the procedure proposed by Cox et al. (2009).

(d): Categories of Class of Origin: Class 1; Class 2; Classes 3, 4 and 5; Class 6, Class 7.

(e): Only if there is information on *both* father's and mother's class positions.

(f): First, we cross-classify the 5-class version (see (d)) of father's and mother's class positions. Second, using this 5x5 table, we construct a 25-category variable for father's and mother's joint class distribution that takes into account the pattern of class homogamy/heterogamy among parents. Third, based on the distribution of the 25-category variable, we approximate to quintiles.

(g): Age range: 25-34.

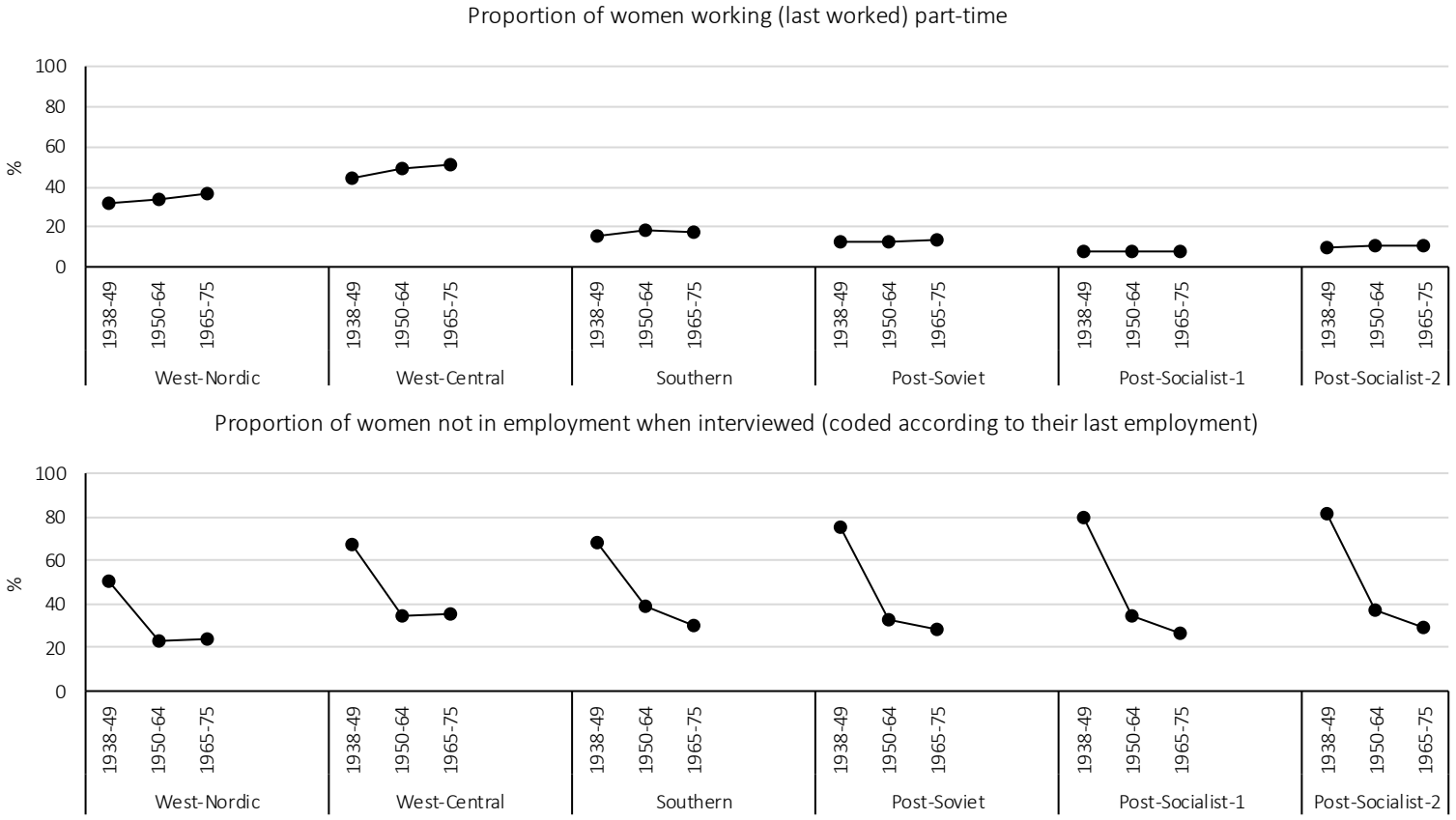
APPENDIX 2.3: Fitting four log-linear models on tables of Source of Information on Class of Origin (I) [(a)]-Gender (G)-Class of Origin (O)-Class of Destination (D), separately by birth cohorts

	All						Cohort 1938-49						Cohort 1950-64						Cohort 1965-75					
	G^2	d.f.	p	DI (%)	β_G	β_I	G^2	d.f.	p	DI (%)	β_G	β_I	G^2	d.f.	p	DI (%)	β_G	β_I	G^2	d.f.	p	DI (%)	β_G	β_I
(1) IO GD OD	1205.2	133	0.00	3.1			297.6	133	0.00	3.5			514.9	133	0.00	3.1			460.3	133	0.00	4.5		
(2) IO GD β_GOD	1203.0	132	0.00	3.1			296.6	132	0.00	3.5			514.8	132	0.00	3.1			459.3	132	0.00	4.5		
(2) - (1)	2.2	1	0.14		1.02		1.0	1	0.32		1.02		0.1	1	0.75		1.00		1.0	1	0.32		0.99	
(3) IO GD β_IOD	1003.3	132	0.00	3.0			291.5	132	0.00	3.5			433.0	132	0.00	3.0			394.6	132	0.00	4.2		
(3) - (1)	201.9	1	0.00				6.0	1	0.01				81.8	1	0.00				65.7	1	0.00			
(4) IO GD $\beta_I\beta_G$OD	999.9	131	0.00	3.0			290.4	131	0.00	3.5			433.0	131	0.00	3.0			394.1	131	0.00	4.2		
(4) - (2)	203.1	1	0.00				6.1	1	0.01				81.7	1	0.00				65.2	1	0.00			
(4) - (3)	3.4	1	0.07		1.03	0.73	1.1	1	0.29		1.03	0.90	0.0	1	0.99		1.00	0.73	0.5	1	0.48		0.98	0.68
N	132670						24137						52940						25596					

Note

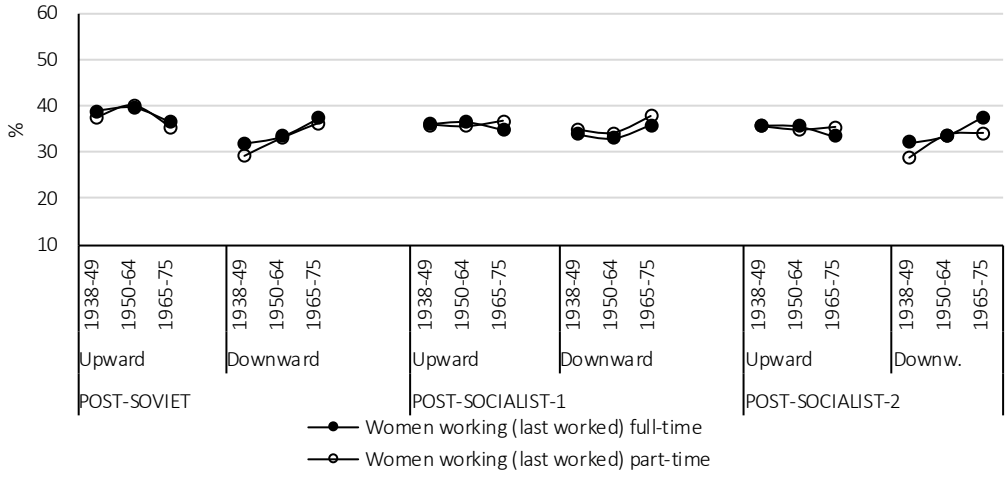
(a) If I=1, source of information on class of origin: father; If I=2, source of information on class of origin: mother.

APPENDIX 3.1: Difference in the proportion of women in different employment situations by birth cohort and country group

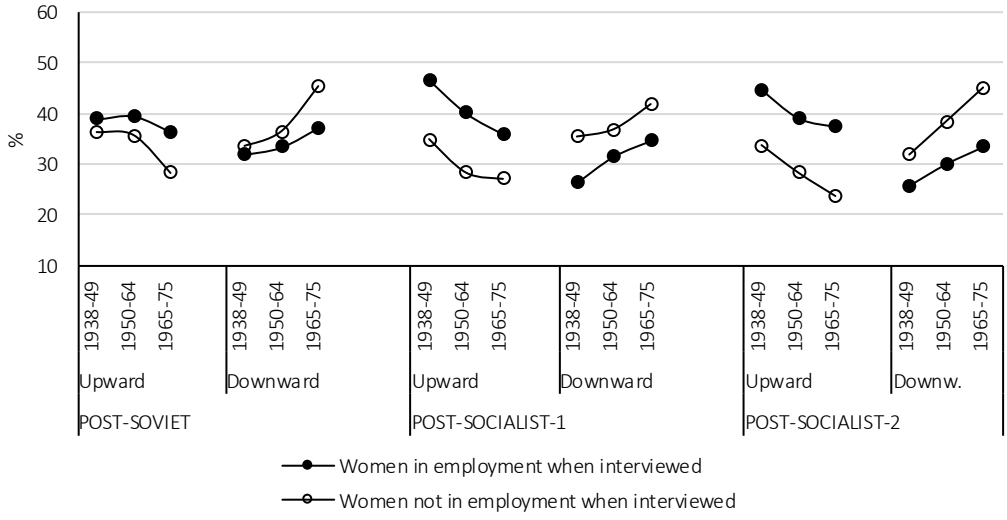


APPENDIX 3.2: Upward and downward mobility rates for women in different employment situations in the three post-socialist country groups by birth cohort

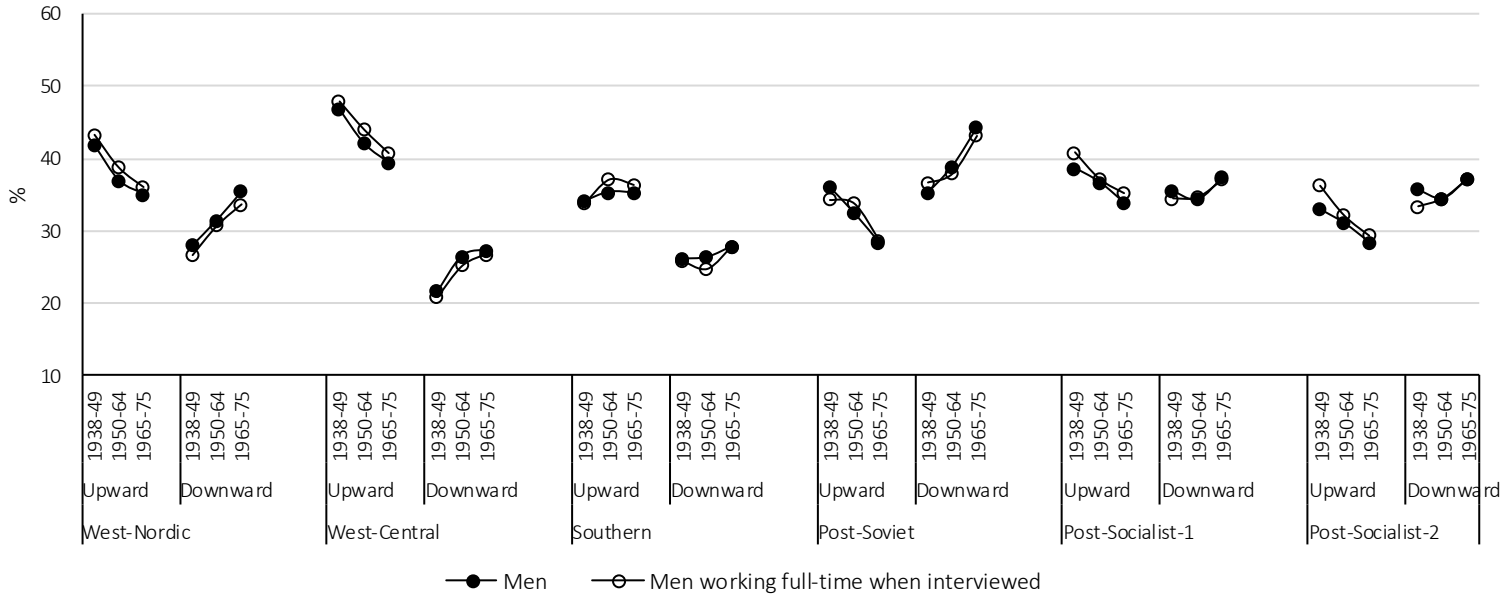
Women working (or last worked) full-time versus women working (or last worked) part-time



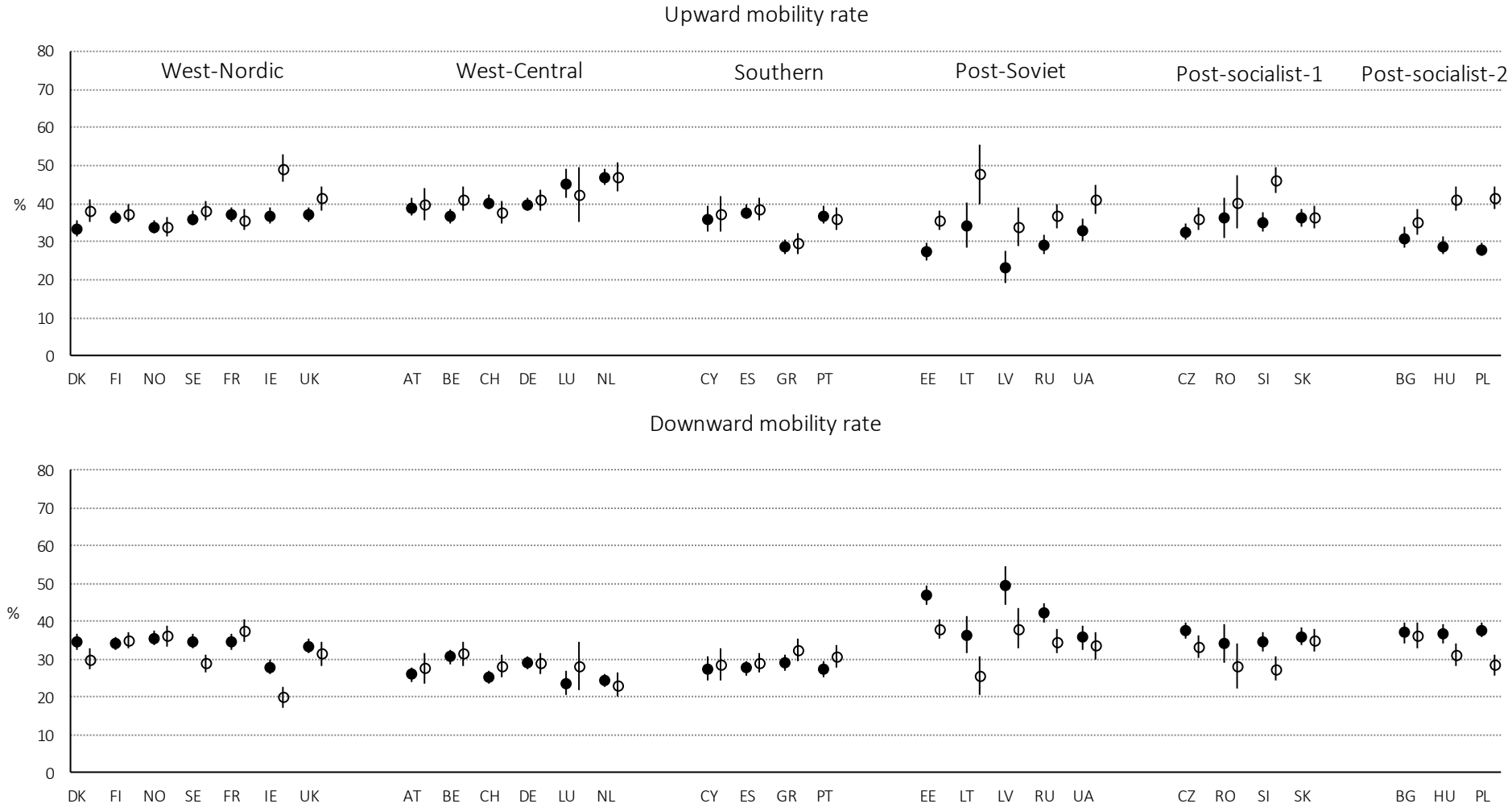
Women in employment when interviewed versus women not in employment when interviewed



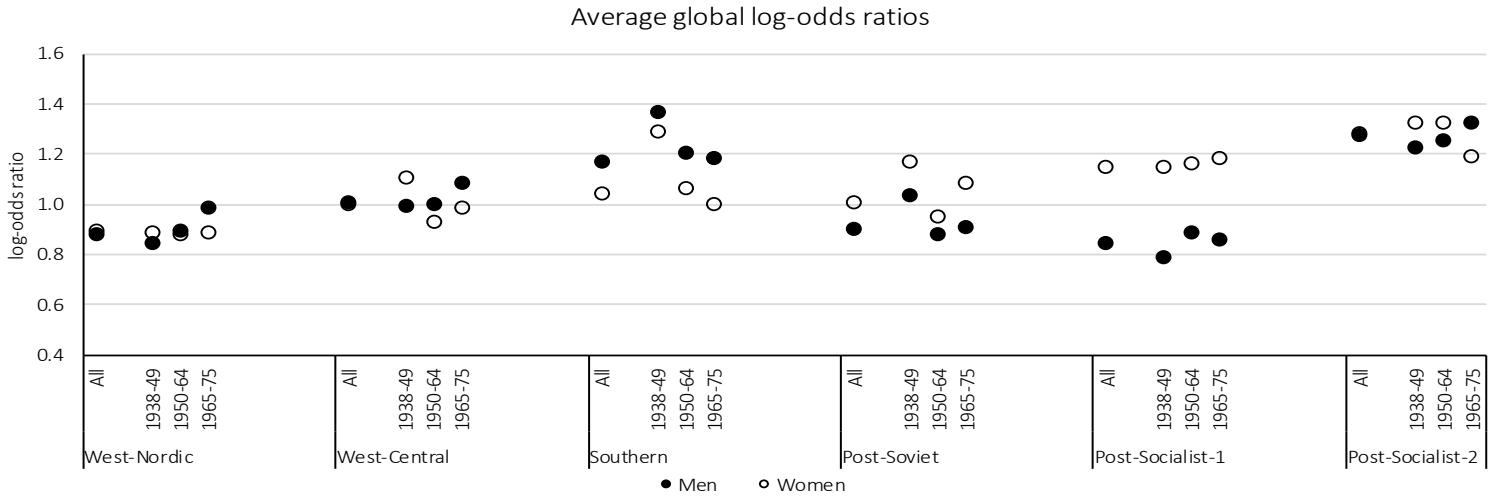
APPENDIX 3.3: Upward and downward mobility rates of *all* men and men *working full-time* when interviewed by birth cohort and country group

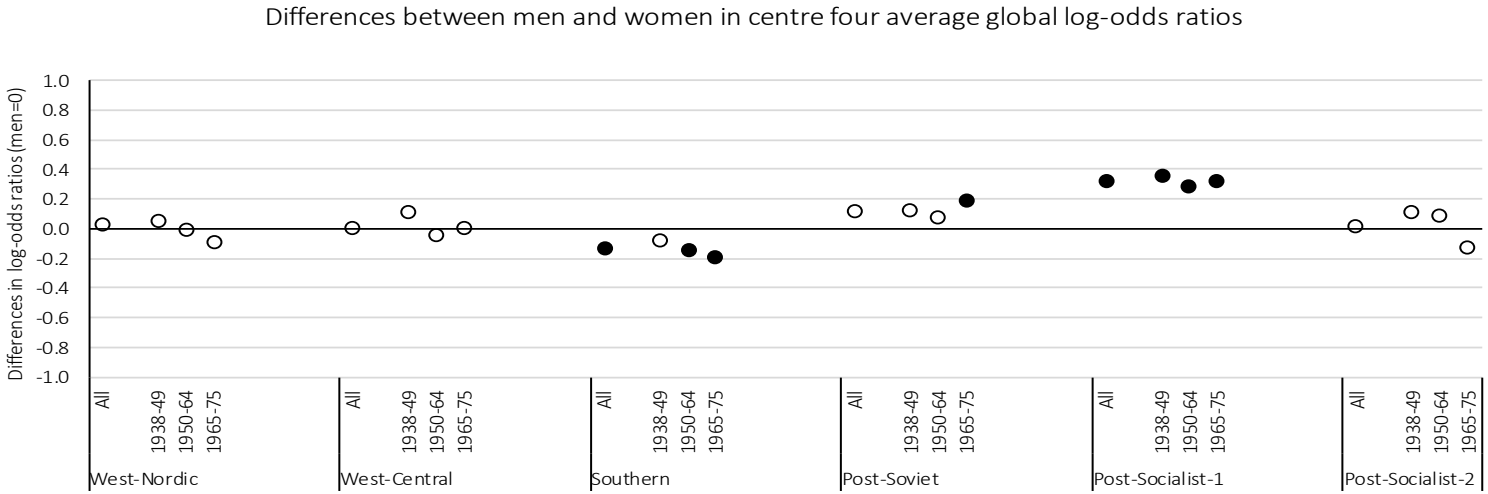


APPENDIX 4: Gender differences in rates of upward and downward mobility (%) - men and women working full-time compared



APPENDIX 5.1: Gender differences in average global log-odds ratio by birth cohort and country group [(a)(b)(c)]





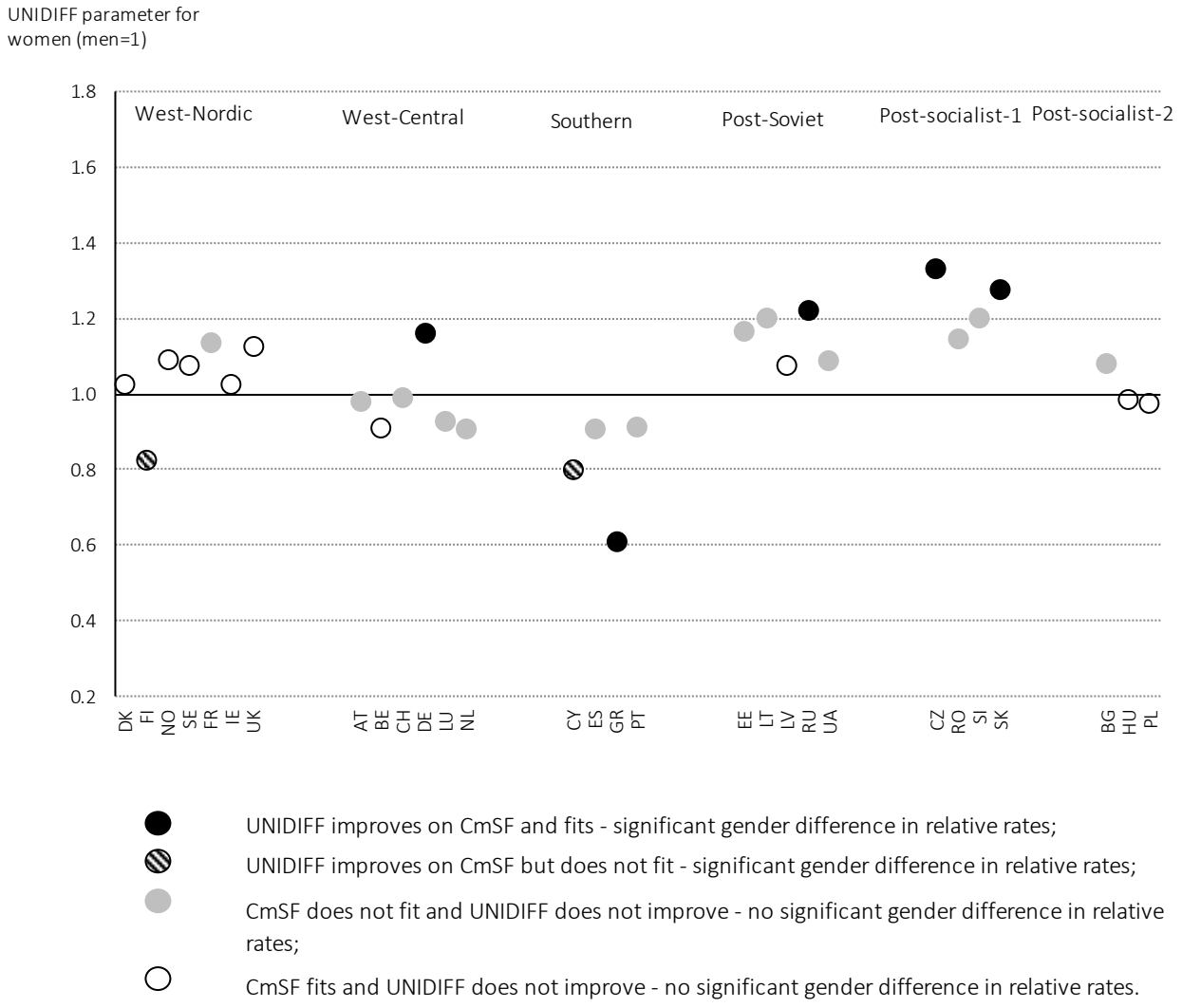
Notes

(a) Global log odds ratios are calculated for 5 by 5 mobility tables, where categories of Class of Origin and Class of Destination are the following: Class 1; Class 2; Classes 3, 4 and 5; Class 6, Class 7.

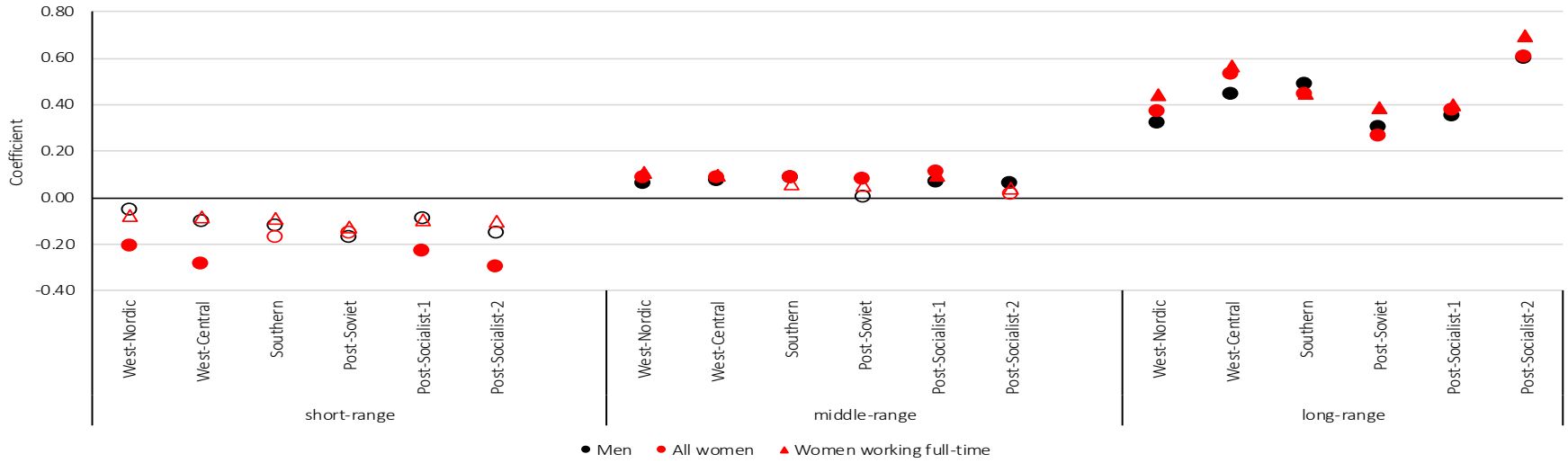
(b) Standard error for difference in central four average global log odds ratios between men and women is calculated using the procedure proposed by Cox et al. (2009).

(c) Filled symbol: significant difference between men and women in average global log-odds ratios.

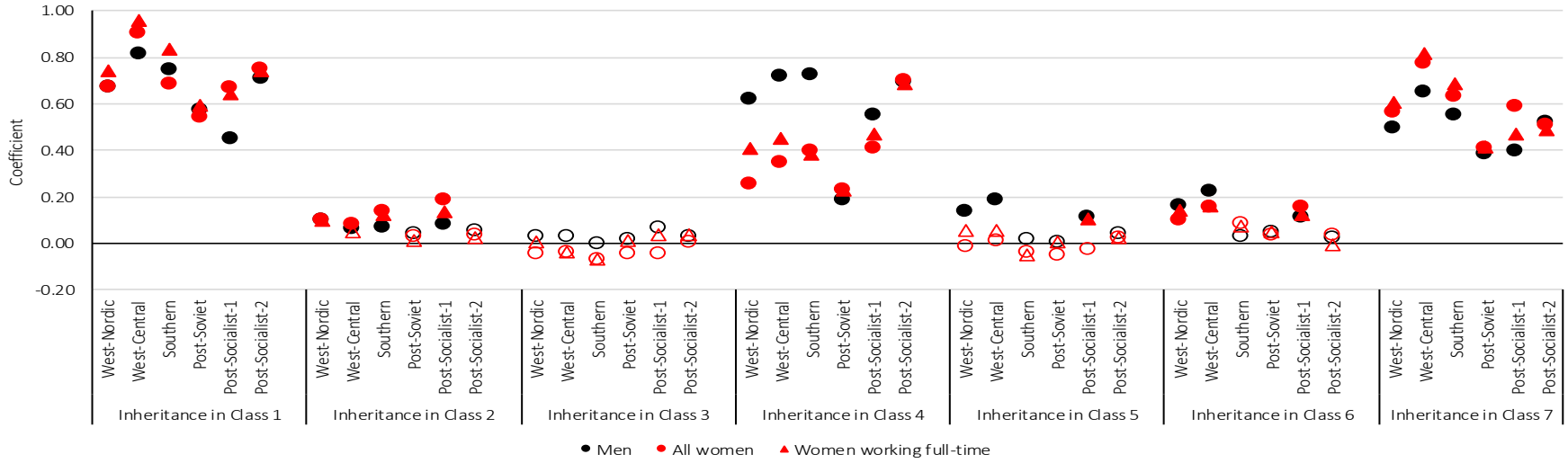
APPENDIX 5.2: Gender differences in relative mobility rates by country - UNIDIFF parameters



APPENDIX 6.1: Effects of range of mobility transitions on all positive log-odds ratios in 7 x 7 mobility tables, separately by gender and country group - Coefficients from OLS regression



APPENDIX 6.2: Effects of inheritance in different classes on all positive log-odds ratios in 7 x 7 mobility tables, separately by gender and country group - Coefficients from OLS regression



Notes

Filled symbol: coefficient is significant; Hollow symbol: coefficient is not significant.