

## Chapter 3

# The gender impact of the crisis and the gap in total hours worked<sup>(1)</sup>

### 1. INTRODUCTION

This chapter analyses the issues that contribute to differences between men and women in terms of their labour market participation and behaviour. It is divided into two main parts.

*Part I* reviews the most significant *labour market and social developments since the onset of the crisis from a gender perspective*. While women's labour market outcomes are generally poorer than those of men, the crisis has brought some changes, with gender gaps narrowing since the beginning of the recession. The aim was to see whether these changes resulted from an improvement in the labour market positions of women, or a relatively more intense deterioration in the situation of men on the labour market. It will be seen that, apart from some positive tendencies, such as increased employment among partnered women, most of the reductions in the various gender gaps have resulted from a relative more intense worsening in the position of men on the labour market.

*Part II* explores a fundamental gender-related labour market issue, namely the *gender gap in full-time equivalent employment rates*. While the employment rate of women is generally lower than that of men, this difference is seen to be even larger if employment is measured in terms of full-time equivalents, i.e. taking account of the average hours worked, and

not just the number of people working. Though the gap in full-time equivalent employment rates narrowed during the crisis, which was partly due to an increase in the female employment rate, it seems to have occurred largely because of a relatively more intensive rate of job losses among men, and more men being obliged to accept part-time work.

The gender gap in terms of total hours has many causes and consequences (both positive and negative), which are reviewed in some detail in order to better understand how various factors influence the decision on worked hours, and why and how the volume of hours worked is a relevant factor from both a personal and economic point of view. While less total hours worked can reflect preferences and can be associated with positive implications, it can also have disadvantageous consequences. Moreover, it might stem from barriers and institutional constraints that are leading to disincentives to work more, and as such, gender equality implies that these barriers and constraints are dismantled.

The section presents an overview of the gender gap in full-time equivalent employment rates also from the perspectives of age cohorts and education levels. It then explores factors that are seen as contributors to the persistence of the gender gap in full-time equivalent employment rates such as the division of unpaid work, financial incentives and childcare, part-time work, and working-hours regimes. It will be seen that all

of these factors correlate strongly with the gender gap in full-time equivalent employment rates and with female employment rate, albeit in some cases they have somewhat conflicting effects on these two variables, suggesting the existence of potential policy trade-offs between female hours worked and number of women in work.

Finally, in the Annex a more in-depth analysis of cross-country performance in gender gap in full-time equivalent employment rates is conducted. The Member States are grouped based on the combined outcome in the gender gap in full-time equivalent employment rates and in female employment rates. First a more detailed overview of these groups is presented from the perspectives of age cohorts and education levels. The section then identifies input variables for each of the five fields that have been covered as main contributors (part-time work, working-hours regimes, the division of unpaid work, financial incentives and childcare) and gives an overview of the different country groups' performances in these fields. The objective is to see whether or not similarly performing Member States have similar patterns, and whether and how Member State practices and policies correspond to a narrower or wider gap in the volume of hours worked between men and women. Moreover, it intends to examine whether any effective policy mix emerges that leads to an effective combination of a high female employment rate and low full-time equivalent employment rate gap.

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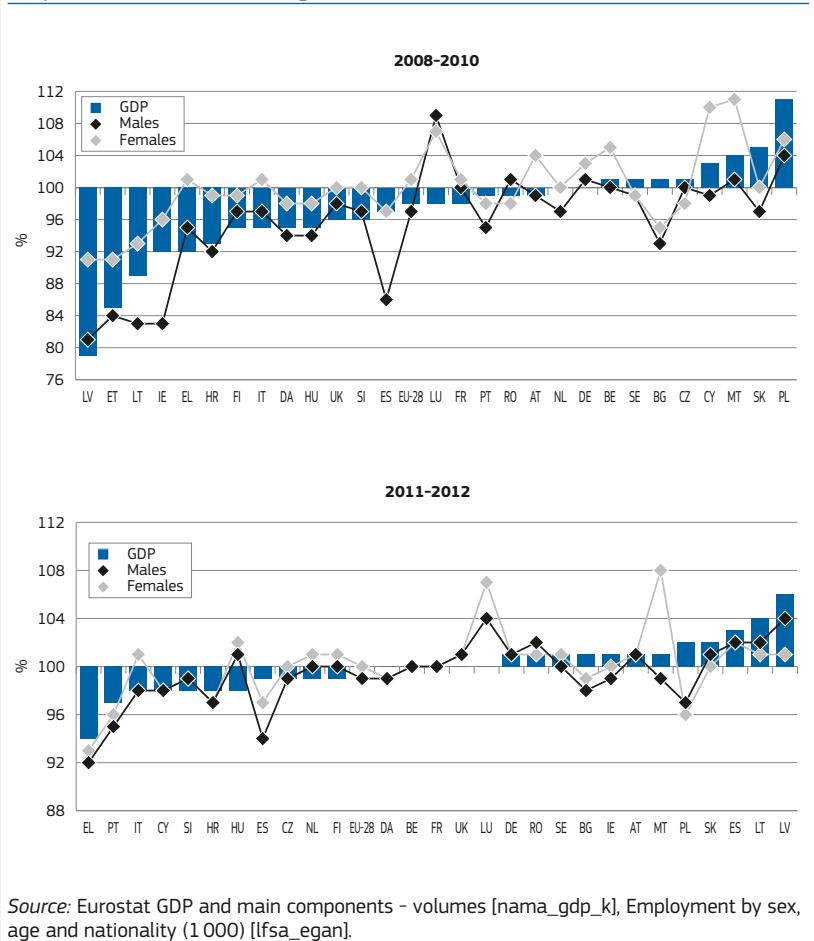
## 2. POST-CRISIS DEVELOPMENTS FROM A GENDER PERSPECTIVE

### 2.1. Employment adjustment affected men more strongly...

The employment of both men and women moved largely *in line with GDP developments* across the Member States in both phases of the economic crisis – between 2007 and 2010 and between 2011 and 2012, – with the employment of men and women generally decreasing more in Member States with strong GDP contractions, and increasing in some of the Member States that had experienced GDP growth, as seen in Chart 1.

There are notable outliers in this pattern, however, reflecting different policy responses to the crisis, varying rates of economic contraction, and the various structures of Member State economies <sup>(2)</sup>. For instance, the employment of men contracted markedly in Spain in both phases of the crisis, despite no major fall in aggregate GDP; with the losses being particularly notable in the construction and industry sectors, indicating the strong exposure of these sectors to the contraction, and stemming partly from the widespread use of involuntary, temporary contracts <sup>(3)</sup>.

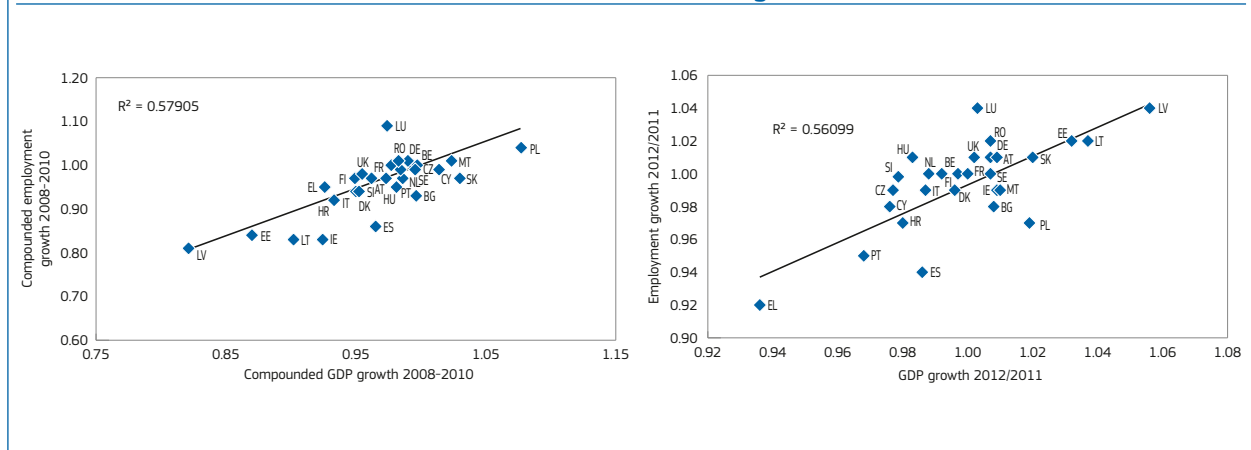
**Chart 1: Compounded change of GDP and of the number of employed males and females between 2008 and 2010 (top chart) and the change between 2011 and 2012 (bottom chart)**



Source: Eurostat GDP and main components - volumes [nama\_gdp\_k], Employment by sex, age and nationality (1 000) [lfsa\_egan].

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**Chart 2: Correlation for GDP growth and employment growth for men between 2008–2010 (left chart) and 2011–2012 (right chart) across Member States**



Source: DG EMPL calculation based on Eurostat: GDP and main components – volumes [nama\_gdp\_k], Employment by sex, age and nationality (1 000) [lfsa\_egan].

Note: Correlation coefficients <sup>(1)</sup>: 0.76 (left chart) and 0.75 (right chart).

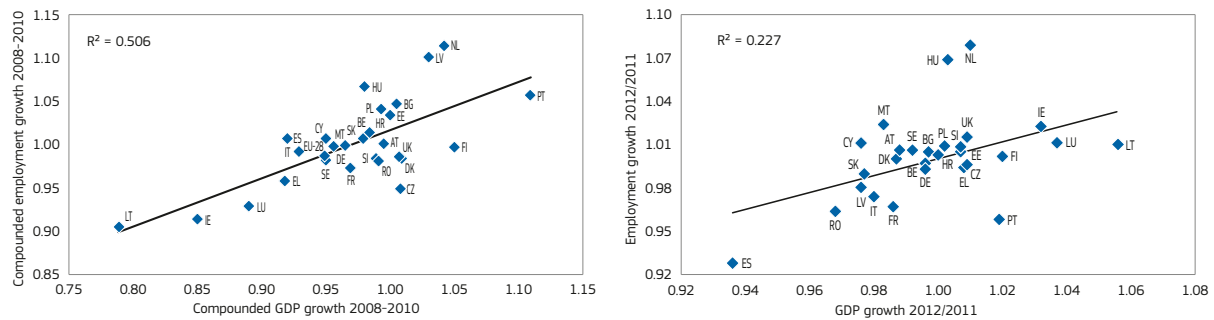
<sup>(1)</sup> Correlation coefficient refers to Pearson product-moment correlation coefficient (Pearson's R), which is a measure of the linear correlation (dependence) between two variables X and Y. R<sup>2</sup> refers to the square of the Pearson product-moment correlation coefficient. The R<sup>2</sup> value can be interpreted as the proportion of the variance in Y attributable to the variance in X.

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<sup>(2)</sup> See also European Commission (2010).

<sup>(3)</sup> See also European Commission (2013a).

**Chart 3: Correlation for GDP growth and employment growth for women between 2008–2010 (left chart) and 2011–2012 (right chart) across Member States**



Source: DG EMPL calculation based on Eurostat: GDP and main components – volumes [nama\_gdp\_k], Employment by sex, age and nationality (1 000) [lfsa\_egan].

Note: Correlation coefficients: 0.71 (left chart) and 0.48 (right chart).

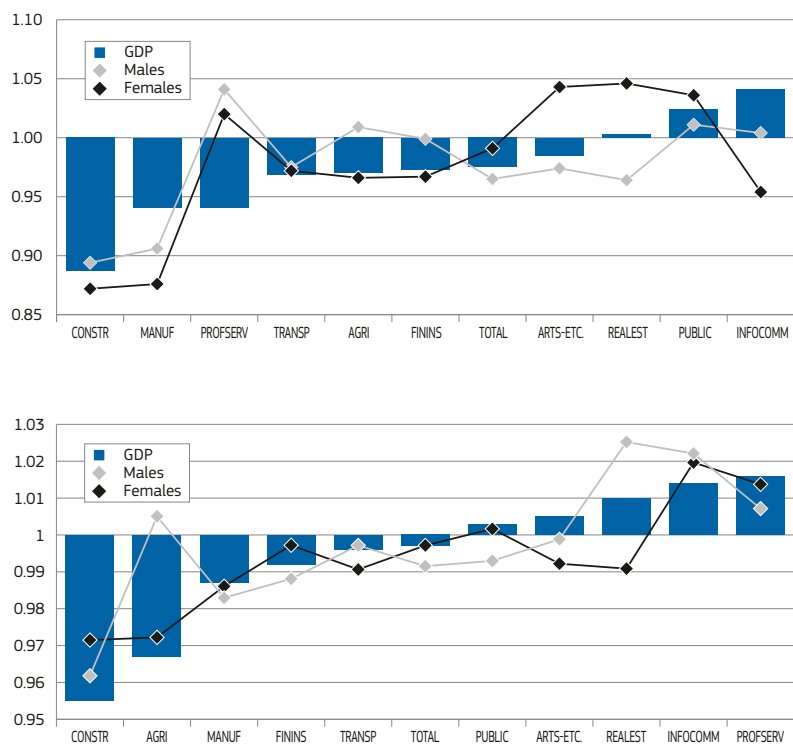
From a gender perspective, the employment of men took the brunt of the fallout of the first phase of the crisis in most Member States. In the second phase, the difference between changes in employment growth for men and women became much less pronounced, although the *employment of men still contracted more, or grew by less*, compared to that of women in most Member States, with the notable exceptions of Latvia, Lithuania and Romania. This resulted in an overall *decrease in the employment gender gap*, with the difference between the average EU *employment rates* of men and women falling from 14.5 percentage points in 2006 to 11.1 percentage points in 2012.

The employment of men thus reacted quite sensitively to the evolution of GDP in both stages of the crisis, while the employment-to-GDP elasticity of women has decreased since the first phase of the crisis and exhibited a weaker correlation with GDP between 2011 and 2012, compared to the period between 2008 and 2010, as seen in Chart 2 and Chart 3.

## 2.2. ...in line with the sectoral patterns of the crisis

The more intense employment adjustment for men is consistent with the fact that the crisis affected *male-dominated sectors* (see Chart 4). GDP contracted most strongly in construction, manufacturing and agriculture (in the latter case, especially in the second phase), all sectors in which men account for a much larger share

**Chart 4: Compounded change of GDP and of the number of employed men and women in selected sectors between 2008 and 2010 (top chart) and the change between 2011 and 2012 (bottom chart)**



Source: Eurostat National Accounts by 10 branches – volumes [nama\_nace10\_k], Employment by sex, age and economic activity (from 2008 onwards, NACE Rev. 2) – 1 000 [lfsa\_egan2].

Note: CONSTR=Construction; AGRI= Agriculture, forestry and fishing; MANUF=Manufacturing; FININS= Financial and insurance activities; TRANSP= Trade, transport, accommodation, food service activities; <sup>(1)</sup> TOTAL= Total - All NACE activities; PUBLIC= Public admin, defence, education, health; ARTS-ETC.= Arts and other activities; household activities, etc.; REALEST=Real estate activities; INFOCOMM=Information and communication; PROFSEV=Professional services.

<sup>(1)</sup> This heading includes trade, transport, accommodation and food service activities. As to the transport sector itself, the proportion of women employed in the sector is very low, only 18.2% in 2012. However, in the accommodation and food service activities, the share of women was 54.5% in 2012. Source: Eurostat: Employment by sex, age and economic activity (from 2008 onward (NACE Rev. 2)) – 1 000 [lfsa\_egan2].

of the workforce than women. However, in all three of these male-dominated sectors, the contraction of employment of women was actually larger in *relative* terms compared to men in the first stage of the crisis (though much smaller in numerical terms). This implies that, while women *in general* have been relatively less affected over the economy, women *working in male-dominated sectors* have been strongly affected by contraction and exposed to layoffs (see also Chart 5).

### 2.3. The crisis had a distinct effect on age groups...

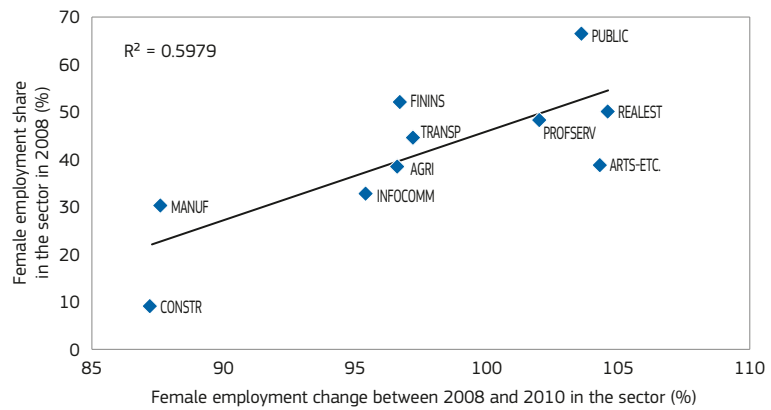
The impact of the crisis was relatively strongly biased regarding *age* as well as *gender*. As the chart below shows, the employment rates of young people – especially *young men* – declined most strongly from the pre-crisis levels, as reflected in the strong rise in their unemployment rates (bottom part of Chart 6). Meanwhile, the supply of labour from the senior age group increased, with employment rate increases being most noticeable for women. The employment rate of prime-age men decreased and their unemployment rates increased while the labour supply of prime-age women increased, probably partly due to partnered women entering the labour market as a result of their partners losing a job (on possible added worker effects see section 2.5).

This strong age bias as a result of the crisis is reflected in the employment to population ratios of those employed on different types of contracts. As seen in Chart 7, the *temporary employment to population* ratios decreased – especially for men – between 2006 and 2012. This can be partly explained by the strong fall in the employment rates of young people, who tended to be over-represented among temporary employees. The exposure of temporary employees to job loss is confirmed by the transition data indicating that, for EU-27, more employees with temporary contracts became unemployed during 2011 than had been the case in 2007, especially so for men <sup>(4)</sup>. Meanwhile, the *part-time employment to population ratio* increased for both men and women (for men it meant an 18.7%

increase, while the number of part-time workers among women increased by 7.5% between 2006 and 2012) as many

companies sought to minimise layoffs by reducing working hours in various ways <sup>(5)</sup>.

**Chart 5: Correlation between female employment share in 2008 and female employment adjustment between 2008 and 2010 across sectors in the EU-28**

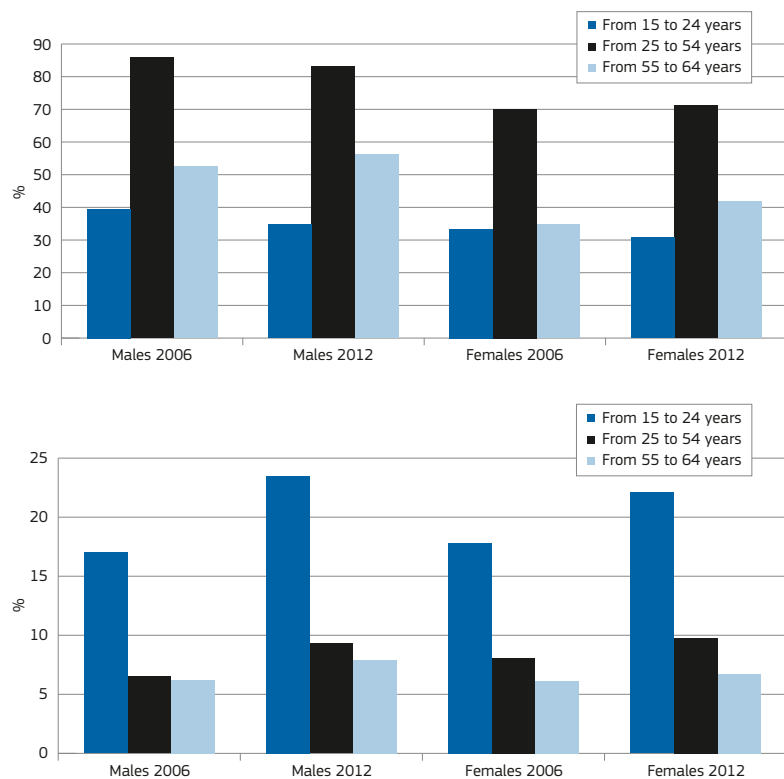


Source: DG EMPL calculation based on Eurostat: Employment by sex, age and economic activity (from 2008 onwards, NACE Rev. 2) – 1 000 [Ifsa\_egan2].

Note: Correlation coefficient: 0.77; sector decoding: see above.

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**Chart 6: Employment rates (top chart) and unemployment rates (bottom chart) for different age groups in 2006 and 2012 for the EU-28**



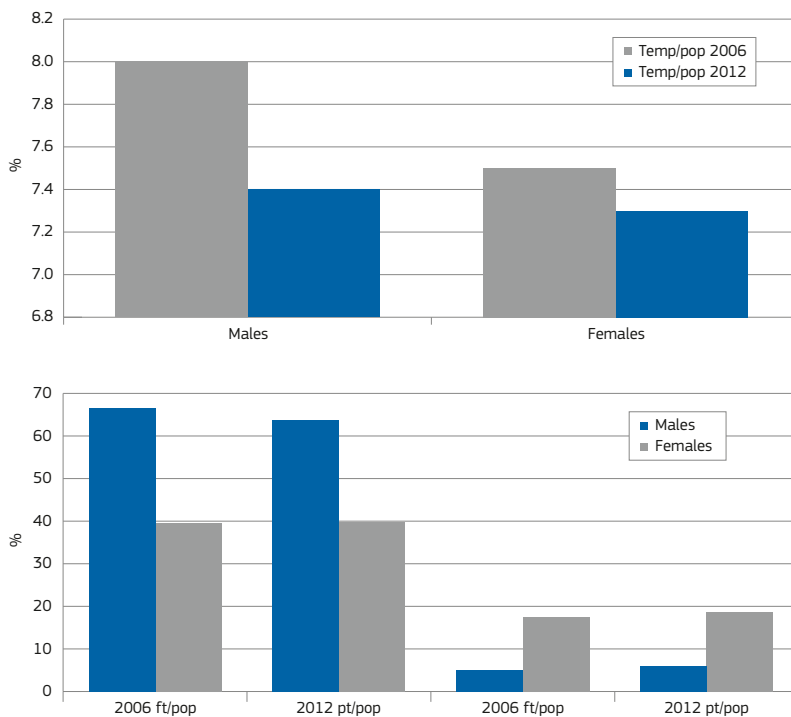
Source: Eurostat, Employment rates by sex, age and nationality (%) [Ifsa\_ergan], Unemployment rates by sex, age and nationality (%) [Ifsa\_urgan].

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<sup>(4)</sup> The corresponding share of temporary employees becoming unemployed has increased from 9.9% to 11.1% for women and 9.3% to 15.5% for men. Source: Eurostat, Labour transitions by type of contract [ilc\_vh32].

<sup>(5)</sup> See also European Commission (2012a).

**Chart 7: Temporary employment to population (top chart), full-time employment to population and part-time employment to population ratios (bottom chart) in 2006 and 2012 for the EU-28**



Source: Eurostat, Temporary employees by sex, age and highest level of education attained (1 000) [lfsa\_etgaed], Full-time and part-time employment by sex, age and highest level of education attained (1 000) [lfsa\_epgaed], Population by sex, age, nationality and labour status (1 000) [lfsa\_pganws]

Notes: Age group 15-64. Temp/pop=number of temporary employees/total population; ft/pop=number of full-time employed/total population; pt/pop=number of part-time employed/total population (breakdown by sex).

## 2.4. ...and it also induced changes in hours worked – more so for men

As mentioned in the previous section, part-time employment increased among both men and women, although

the increase was more pronounced for men. The *share of part-timers* among employed men increased from 6.9% to 8.4% between 2006 and 2012 (for women the rate of increase was smaller, though from a much higher base level, rising from 30.6% in 2006 to 31.9% in 2012). This had a marked effect on

the gender gap in weekly average hours worked, and thus on the gap in full-time equivalent employment rates.

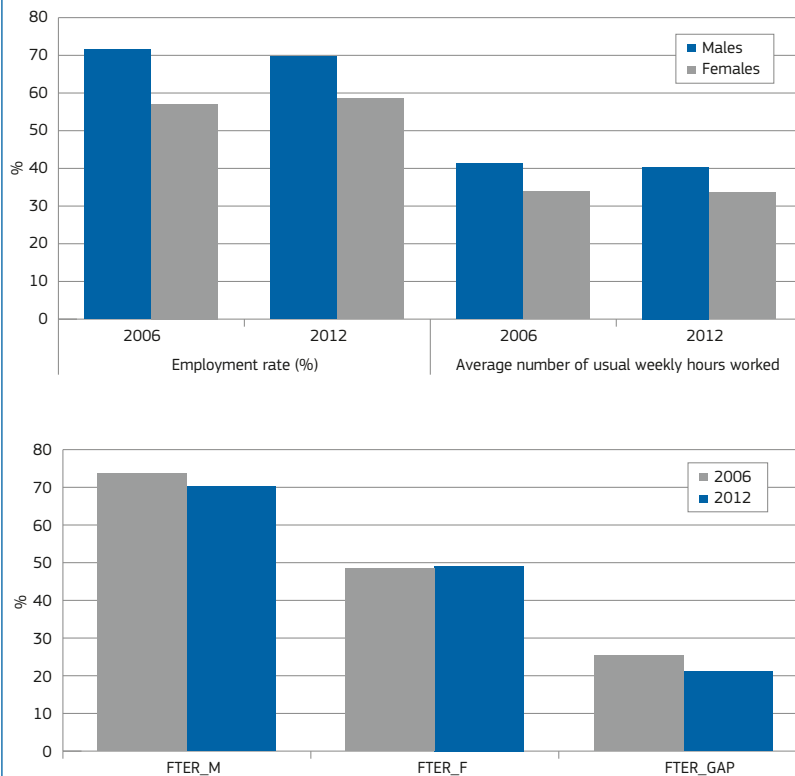
Since the employment rates of women are lower than those of men, and women work fewer hours on average, their employment rates are even lower when calculated in terms of full-time equivalents<sup>(6)</sup>. Nevertheless, the crisis brought some adjustment to this gap as well, as can be seen in Chart 8.

The decrease in the full-time equivalent employment rate gap was due to several factors. First, the crisis resulted in relatively more men than women becoming jobless, leading to a decrease in the male employment rate as opposed to an increase in the female. This reflects not only the relatively more sheltered position of females based on sectoral aspects, but also a possible added worker effect (see the next section). Moreover, as mentioned above, more men have been accepting part-time work compared with pre-crisis levels with, at the same time, a decrease in the full-time employment to population ratio for men, as opposed to a very slight increase for women (see the right part of the chart in the previous section) leading to a relatively sharper decrease in average weekly hours for men.

However, the fact that part-time was seen as a sub-optimal choice by many is indicated by the growing share of *involuntary part-timers* among part-time workers between 2006 and 2012 (rising from 20.3% to 24.4% among women, and from 31% to 38.8% among men).

<sup>(6)</sup> Full-time equivalent employment rates are calculated as the employment/population ratio, multiplied by the average usual hours worked per week per person in employment, then divided by 40. The method is based on (OECD (2012)).

**Chart 8: Employment rates and average number of usual weekly hours worked (top chart) full-time equivalent employment rates and gap in full-time equivalent employment rates (bottom chart) in the EU-28 for selected years (age group 15–64)**



Source: Eurostat: Employment rates by sex, age and nationality (%) [lfsa\_ergan]; Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (1983-2008, NACE Rev. 1.1) - hours [lfsa\_ewhuna]; Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) - hours [lfsa\_ewhun2].

Note: M=Males; F=Females; GAP= FTER\_M – FTER\_F; FTER=full-time equivalent employment rate. FTER is calculated as the employment/population ratio, multiplied by the average usual hours worked per week per person in employment, then divided by 40. Method is based on OECD (2012).

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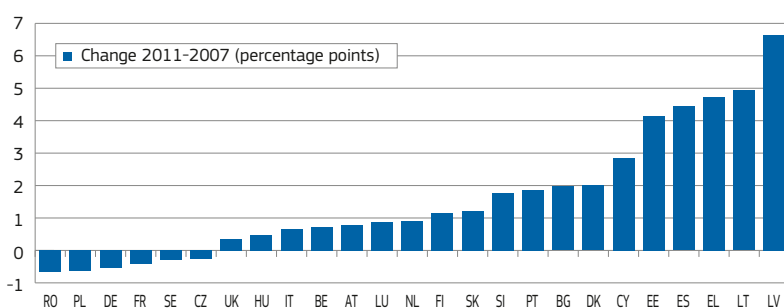
## 2.5. Change of composition of employment within couples, points to possible added worker effect...

While still lagging behind those of men, the activity rates of women have shown a clear increase since the onset of the crisis, with the activity rate for men in 2012 being no higher than it was in 2007. This resulted in a *decrease in the activity rate gap* from a 14.7 percentage point pre-crisis level in 2006 to 12.4 percentage points in 2012 (?).

Some studies (8) have suggested that this development may partly reflect an 'added worker' effect with women increasing their labour supply in response to their spouses' job loss during the crisis. Chart 9 (based on SILC cross-sectional micro-data for 2007 and 2011) shows that, between 2007 and 2011, the share of *working female with a non-working male partner* increased in most Member States (9). The change was especially pronounced in the Baltic States and in Greece and Spain, reflecting the sharp drop in employment of men in those Member States (10).

The evidence in the graph should be treated with caution in that the comparisons do not indicate the behaviour of particular women as a result of a change in their partner's employment position. However, the cross-sectional data (11) points to an increased take-up rate of jobs by partnered women. Moreover, as is visible on Chart 10, the share of *non-working female with a working male partner* households has decreased in the majority

**Chart 9: Change in the sample share of working females with a non-working male partner between 2007 and 2011 (percentage points)**



Source: DG EMPL calculations using EU-SILC data for 2007 and 2011.

Note: Only partnered women are considered where both partners are between the ages of 18 and 59; as to work status, the self-defined current economic status is considered. The term working includes full-time and part-time employment, while non-working includes inactivity and unemployment; a more detailed breakdown is not feasible due to insufficient number of observations.

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(?) The activity rate of men (age 15–64) was 77.5% in 2006, with the same level in 2011 and only slightly higher, 77.9%, in 2012; meanwhile the activity rate of women (age 15–64) permanently increased from 62.8% to 65.5% between 2006 and 2012. Source: Eurostat, Activity rates by sex, age and nationality (%) [lfsa\_argan].

(8) See for instance OECD (2012), pp. 217–218.

(9) Data was available for 25 Member States, but unavailable for Croatia, Malta and Ireland.

(10) An issue that would merit further attention in the future is that if women took on employment after a spell of inactivity – once their partner became unemployed – what type and quality of jobs would they have access to.

(11) Moreover, because of the small number of observations, the *non-working category* combines unemployed and inactive persons; therefore, part of the added worker effect stays hidden (as women could also enter the labour market, but not actually be in a job).

of Member States, providing another indication of a possible increase in the labour supply of women.

At the same time, the proportion of couples where *both partners are working* still fell strongly in some Member States – notably the Baltic States, Greece and Spain – during the crisis along with a strong increase in the number of couples where *neither partner is in work* (see Charts 11 and 12).

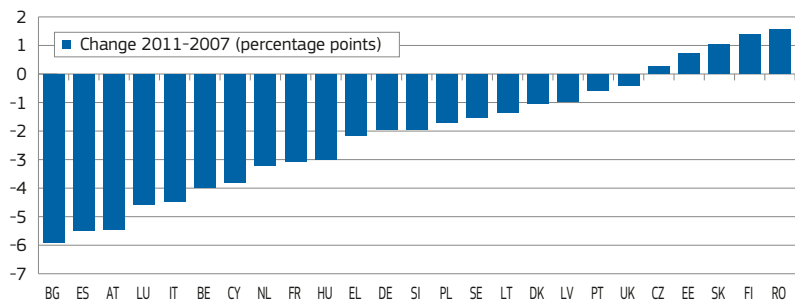
## 2.6. ...which could have contributed to changes in the relative earnings structure within couples

Given the changes in the employment circumstances of couples, similar changes might be expected in relative earnings. Indeed, as Chart 13 shows, the proportion of couples where a woman had no earnings or earned less than her partner decreased in most Member States between 2007 and 2010, with the Baltic States, Spain and Greece all displaying quite sharp changes.

The *relative improvement in earnings of women within a couple* as a result of increased female labour supply was consequently reflected, to some degree, in a *decrease in the gender gap in earnings*. Chart 14 shows the mean hourly earnings for women expressed as a percentage of those for men. The figure shows a relatively large increase in women's earnings expressed in these terms between 2006 and 2010 for a number of Member States such as Estonia, Lithuania, Slovenia and Slovakia, as well as for the Netherlands and Ireland as well as Greece.

This increase in the hourly earnings of women relative to men cannot be interpreted entirely positively, however, since it could also reflect the worsening of the labour market situation of men as well other temporary post-crisis composition effects <sup>(12)</sup>. Moreover, the relative earnings figure remains only somewhat above 80% for EU-27, indicating that differences in earnings between men and women clearly still persist. Furthermore, in a number of Member States – Belgium, Bulgaria, Italy and Hungary – the hourly earn-

**Chart 10: Change in the sample share of non-working females with a working male partner between 2007 and 2011 (percentage points)**

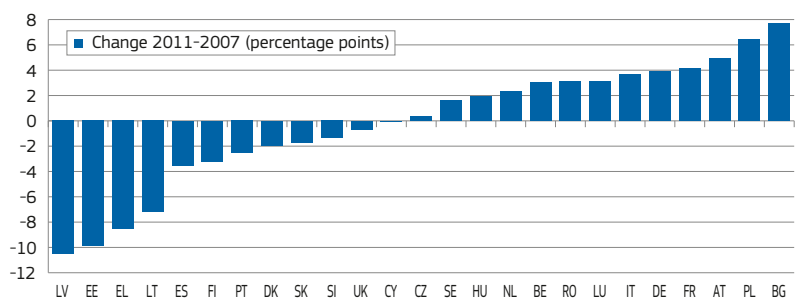


Source: DG EMPL calculations using EU-SILC data for 2007 and 2011.

Note: Only partnered women are considered where both partners are between the ages of 18 and 59; as to work status, the self-defined current economic status is considered. The term working includes full-time and part-time employment, while non-working includes inactivity and unemployment; a more detailed breakdown is not feasible due to insufficient observations.

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**Chart 11: Change in the sample share of working females with a working male partner between 2007 and 2011 (percentage points)**

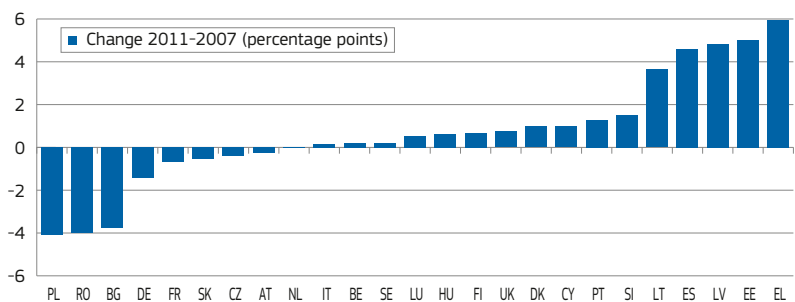


Source: DG EMPL calculations using EU-SILC data for 2007 and 2011.

Note: Only partnered women are considered where both partners are between the ages of 18 and 59; as to work status, the self-defined current economic status is considered. The term working includes full-time and part-time employment, while non-working includes inactivity and unemployment; a more detailed breakdown is not feasible due to insufficient observations.

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**Chart 12: Change in the sample share of non-working females with a non-working male partner between 2007 and 2011 (percentage points)**



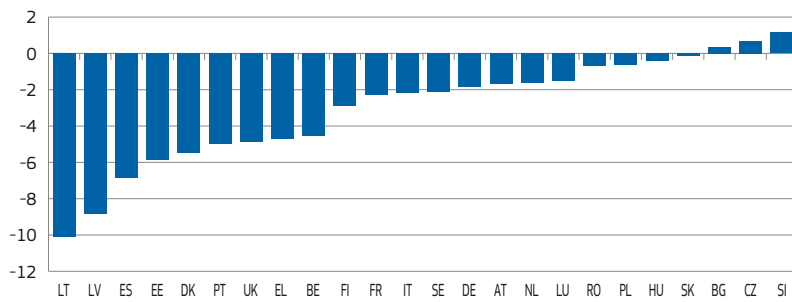
Source: DG EMPL calculations using EU-SILC data for 2007 and 2011.

Note: Only partnered women are considered where both partners are between the ages of 18 and 59; as to work status, the self-defined current economic status is considered. The term working includes full-time and part-time employment, while non-working includes inactivity and unemployment; a more detailed breakdown is not feasible due to insufficient observations.

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<sup>(12)</sup> On the reasons behind the evolution of the gender pay gap see also European Commission (2012b).

**Chart 13: Change in the sample share of couples where a woman has no earnings/earns less than a man (percentage point change between 2007 and 2010)**



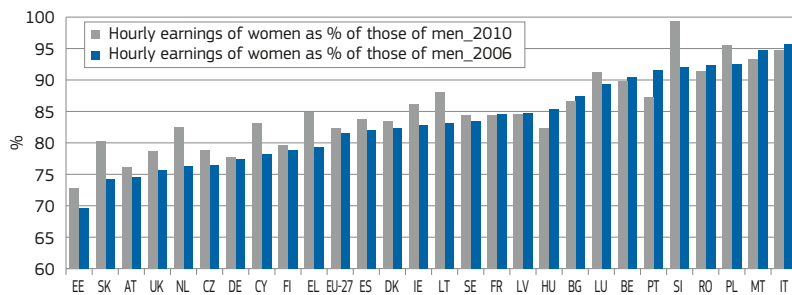
Note: A woman earns less/more than a man if her income is below 45% / above 55% of the joint income of the couple. Only 2 adult households with at least one working partner are considered. Households where at least one partner is self-employed or retired are excluded. DG EMPL calculation using EU-SILC 2007, income data for 2006 and EU-SILC 2010, income data for 2009.

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ings of women as a percentage of those of men actually decreased between 2006 and 2010.

Moreover, in Member States where women have relatively low employment rates, such as Italy or Malta, relatively high hourly earnings of women as a percentage of those of men cannot be necessarily taken positively because they can be partly explained by self-selection effects<sup>(13)</sup> whereby it is the more highly educated women who are in employment. Future increases in female employment in these countries may well be accompanied by falling relative hourly earnings of women, as women with relatively lower educational attainment join the labour force.

**Chart 14: Hourly earnings of women as a percentage of those of men in 2006 and 2010**



Source: Eurostat, Mean hourly earnings by sex, age and economic activity [earn\_ses10\_13], Mean hourly earnings by economic activity, sex, age [earn\_ses06\_13].

Note: No data was available for Croatia.

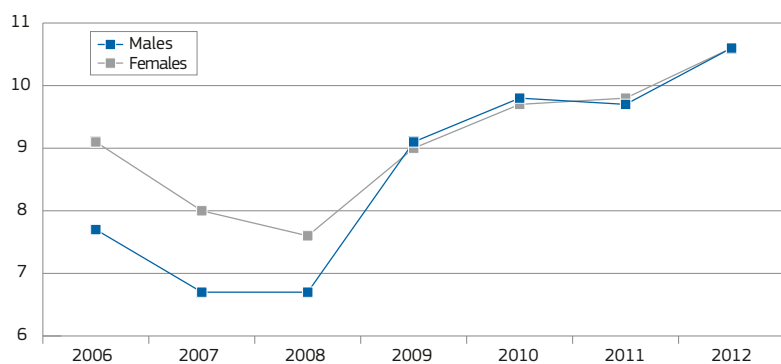
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## 2.7. Unemployment rate gender gap closed but unemployment rates are moving upwards

As the relatively lower unemployment rate of men moved upwards in the face of falling employment rates, it led to a *closing of the gender unemployment rate gap* to the extent that both reached the same level of 10.6% in 2012 (see Chart 15).

However this aggregate EU statistic conceals many differences between the Member States. While the unemployment rates of men and women have been on the low side in 2012 in countries such as Austria, the Netherlands or Germany, they were relatively high in Croatia, Portugal and Spain. Moreover, while the unemployment rate of men exceeded that of women in Ireland, Cyprus or Lithuania, the rate of women was higher in the Czech Republic, Italy and especially in Greece (see Chart 16).

**Chart 15: Unemployment rate in the age group 15–64 in the EU-28**



Source: Eurostat, Unemployment rates by sex, age and nationality (%) [lfsa\_organ].

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While the unemployment rate of the low skilled men exceeds that of women, the unemployment rate of women with medium and high levels of education exceeds that of men (see Chart 17).

<sup>(13)</sup> See also section 4.4 and section on financial disincentives in Annex I.



This is in line with the evidence presented in Chart 18, showing the composition of the unemployed based on their previous employment. It indicates that, while men had a higher probability of losing their employment compared to women in lower skill level occupations (craft, trade, plant and machine operators), relatively more women lost their jobs in services and sales, as well as among professionals and clerical support workers. While this may partly reflect the impact of the crisis on the unbalanced sectoral distribution of men and women, it may also indicate the possible effects of the austerity measures that have particularly affected public sector activities, where many professional and clerical women are employed.

While men tend to lose their jobs more frequently than women (the transition rate from employment to unemployment being 4.3% for men against 3.3% for women in 2011), they also tend to move back to work more easily (over 30% of men moved from unemployment to employment in the same year, compared to under 25% of women).

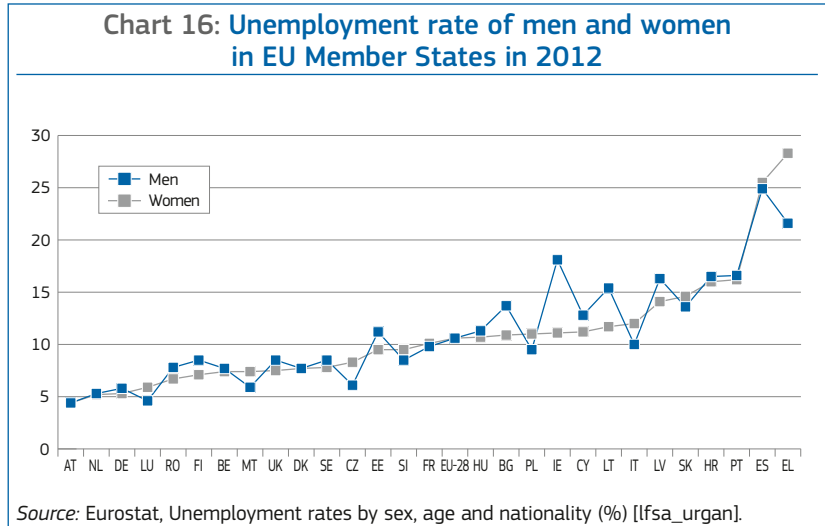
This evidence appears to be broadly consistent with the OECD finding that, while men tend to lose their jobs more easily than women at the beginning of a recession, they are also more able to find a job once recovery gets underway <sup>(14)</sup>.

Moreover, women also get *discouraged* more easily, with a higher probability of choosing to give up searching for a job and leave the labour market <sup>(15)</sup> <sup>(16)</sup>. In this respect the transition data seem to show corresponding movements: the transition rate from unemployment to inactivity has been 11.5% for men and 22.3% for women (see Chart 19).

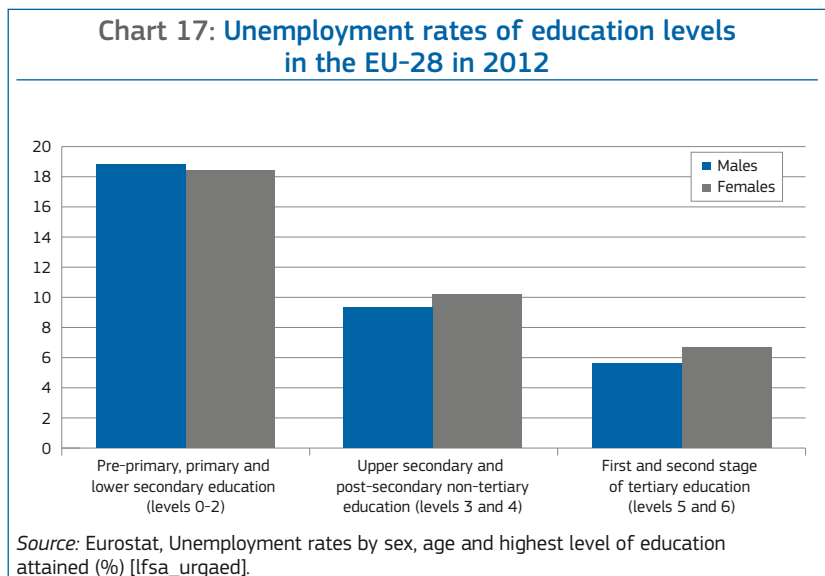
<sup>(14)</sup> See OECD (2012) p. 219.

<sup>(15)</sup> Sabarwal *et al.* (2010) in *idem* p. 219.

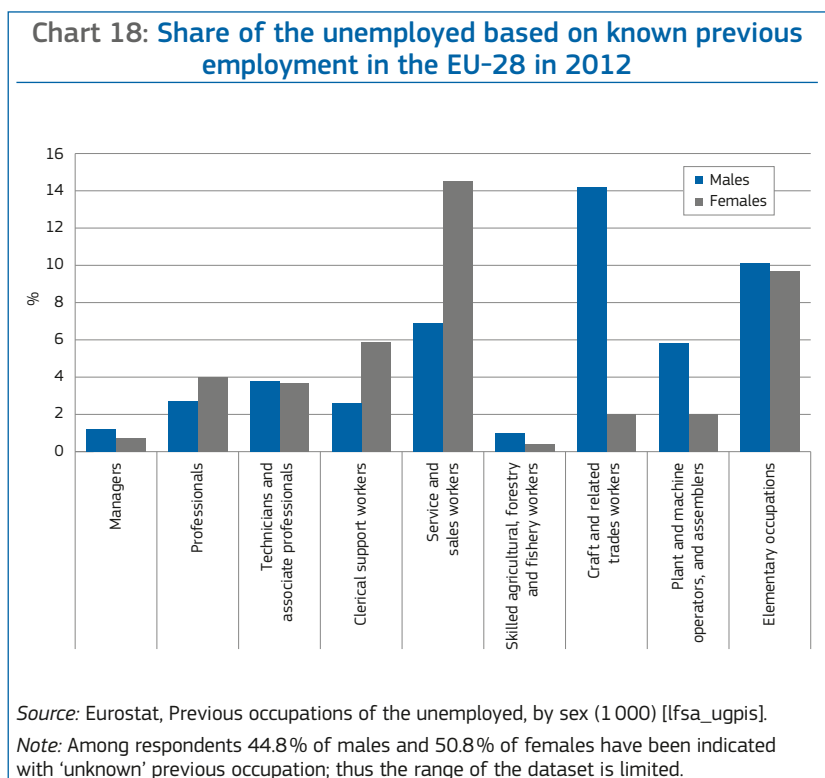
<sup>(16)</sup> An issue to be further explored could be the reasons behind discouragement and the possible links with labour market institutions. For instance one could hypothesise that a possible influencing factor behind opting for inactivity is that women with children and in need of childcare are in less of a position to comply with the rule that they should accept a job offer within a short timeframe, if they are not able to find appropriate childcare arrangements with short notice.



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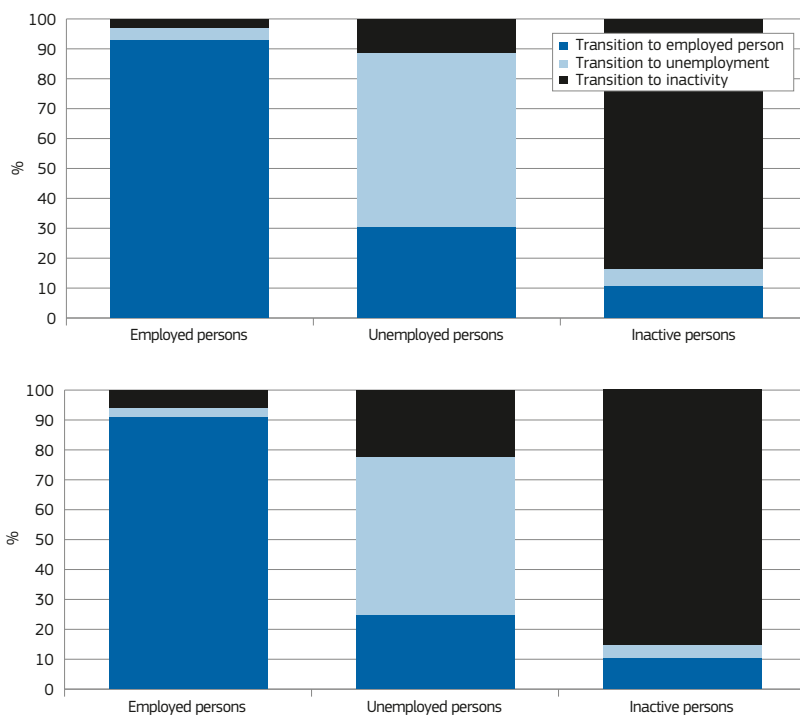


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**Chart 19: Labour transitions by employment status in 2011 for the EU-28 for men (top chart) and women (bottom chart)**



Source: Eurostat, Labour transitions by employment status [ilc\_lvhl30].

## 2.8. Austerity measures affect women heavily

Fiscal consolidation and austerity measures, especially those on expenditure side<sup>(17)</sup>, pose a high risk for gender equality<sup>(18)</sup> <sup>(19)</sup>.

<sup>(17)</sup> Consolidation of public finances has been strong over 2010–12 in the EU and was mainly based on reducing expenditures (European Commission (2013b)). This approach is expected to continue from 2013 to 2016 according to Stability and Convergence Programmes that Member States submitted in Spring 2013.

<sup>(18)</sup> McCracken *et al.* 2013; EGGE (2013).

<sup>(19)</sup> An assessment of 2011 National Reform Programmes showed that only one-tenth of the policy initiatives announced or implemented in response to the crisis took into account gender impact at all policy process stages (EGGE 2013). EGGE (2013) also quantified the fiscal consolidation measures that carry at least *some risks for gender equality* as a percentage of GDP. They amount to less than 1% of GDP in all consolidation years in Austria, the Czech Republic, France, the Netherlands, and Sweden, while the total consolidation plans over the period 2009–15 represented less than 2% of GDP in Austria and Sweden, close to 4% in France and the Netherlands, and more than 4% in the Czech Republic. In Germany and the UK, the gender-related share is little more than 1% in at least one consolidation year, with total consolidation plans over the entire 6 years represented around 3% and 6% respectively. However, in Greece, Hungary, Ireland, and Portugal, the same share is between 2% and 5%. Those countries have also much higher share of total consolidation needs, more than 15% in Greece and Ireland, and around 6% in Portugal and Hungary.

Research has shown that, in countries where fiscal consolidation has been severe and protracted (e.g. Greece, Ireland and Spain), the impact has been severe for both men and women and may well be affecting women more heavily<sup>(20)</sup>. However, fiscal consolidation does not appear to have worked systematically against women in all countries, given that it was comparatively smaller in some countries such as the Netherlands and Finland, or where public deficit issues were addressed early on in the crisis, as in Latvia. However, it is currently difficult to assess the possible medium and long-term impacts.

The expenditure measures likely to have the largest gender impact are those that affect employment and working conditions in the public sector, or which affect unemployment benefits and welfare assistance, pensions, or care and family-related benefits and services. On the revenue side, gender inequality could also be affected by taxation measures, VAT increases, and increases in charges for publicly subsidised services<sup>(21)</sup>.

Given that the *public sector* employs a high proportion of women (see

<sup>(20)</sup> EGGE (2013).

<sup>(21)</sup> See EGGE 2013 and McCracken *et al.* (2013).

Chart 5), any wage freezes, wage cuts, staffing freezes or personnel cuts are highly likely to be disproportionately borne by women. Public sector changes are also important because gender equality policies are often implemented earlier and more strictly in this sector<sup>(22)</sup>.

Women are usually more dependent on *welfare services* due to their lower incomes and their lower activity rates due to their caring responsibilities. In 2011, social transfers were a more important source of poverty reduction for women than for men in two thirds of Member States (Chart 20)<sup>(23)</sup>. Thus women are more exposed than men to a tightening of eligibility criteria for unemployment and/or assistance benefits, or reductions in replacement rates<sup>(24)</sup>.

The *gender pension gap*<sup>(25)</sup> may further increase due to pension reforms that favour occupational and private pensions over public pensions, or which make pensions more dependent on past employment history<sup>(26)</sup>. Women have less access to occupational pensions due to their lower rates of activity, and to private pensions due to fewer financial resources. Strengthening

<sup>(22)</sup> EGGE (2013).

<sup>(23)</sup> For more details on the effectiveness of social protection benefits in poverty reduction, see European Commission (2012c).

<sup>(24)</sup> Data indeed show much lower and even negative growth in social protection expenditures, both of in-kind and cash benefits in 2011 and 2012 in comparison to the period 2001–05 (Bontout and Lokajickova 2013). Further to that, their findings indicate a permanent downward adjustment in social expenditure growth. Social expenditures deviated positively from its trend in 2009 and 2010 when the output gap in the EU was negative. But in 2011 and 2012 they deviated negatively and the expenditure gap turned negative although output gap remained negative.

<sup>(25)</sup> The gender gap in pensions originates in inequalities in the employment histories of women and men and their interplay with the operation of pension systems. Two main disparities in the employment histories of women and men contribute to the gender gap in pensions: first, women earn less than men per hour, partly as a result of slower career progression and the career interruptions they experience during their working life; and second, women work fewer hours per week as they are more likely to work part-time, often due to care responsibilities, and also fewer years during their life: they have more frequent career interruptions to care for children or dependent adults and they tend to retire earlier, often to match the time of retirement with their partner. The shorter careers of women aged 65 and above, however, are mostly explained by interruptions before age 50 and by the share of women who have never entered the labour market, rather than by early retirement (ENEGE 2013a). Women therefore tend to have lower annual and working life earnings than men, and, accordingly, they build up fewer pension entitlements.

<sup>(26)</sup> ENEGE (2013a).

the link between contributions and benefits would further disadvantage women because they have lower wages than men on average, and will normally have accumulated fewer years of work.

Cuts and restrictions in care-related benefits, allowances or facilities increase the *care burden* for children as well as for the elderly and reduce the ability to work, notably for women. In

addition to that, staffing cuts in health and social care sector decrease employment opportunities, again mostly for women (27).

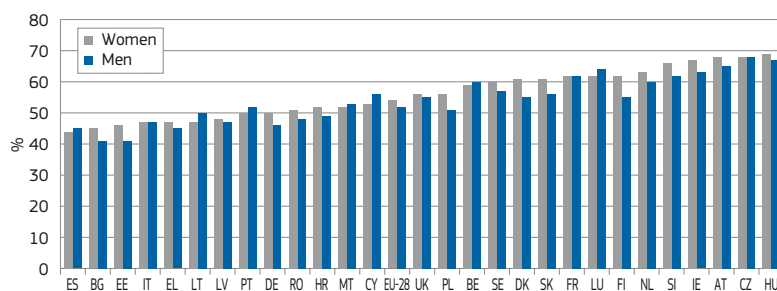
Reductions in housing or family benefits, or increases in taxes or fees, also have a more indirect impact on gender equality (28) in that they affect the poorest households, among which are often female-headed households.

## 2.9. Worsening situation of men during the crisis led to a decrease of the *at-risk-of-poverty rate gap* in most Member States ...yet still women are more exposed to poverty

Women have, on average, higher at-risk-of-poverty rates (AROP) in the EU than men, and this does not appear to have changed between 2008 and 2011 (29). However, the extent of the differences has become somewhat smaller because of the worsening position of men during the crisis, with the at-risk-of-poverty rate for men increasing from 14% to 15.5% between 2008 and 2011, with a corresponding increase for women from 15.3% to 16.5% (30) (Chart 21) (31).

In three quarters of the Member States, the situation of men worsened more than the situation of women, with the reduction in the gap being greatest in Ireland, Estonia, Bulgaria and Latvia. This was not the case in all the Member States, however, as in Sweden, the Netherlands, Slovenia, France, the UK and Cyprus the AROP increased more for women than for men, while in Luxembourg it fell for men and increased for women, causing an increase in the gap.

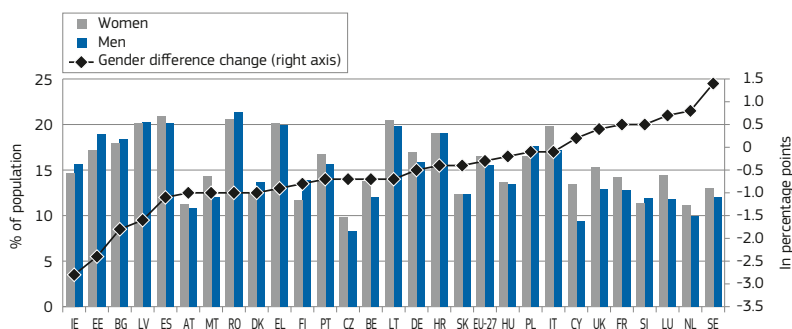
**Chart 20: Relative reduction in the at-risk-of-poverty rate (AROP) due to social transfers in 2011, population aged 18–64 years, by gender**



Source: EMPL calculations using EU-SILC data on the at-risk-of-poverty rate before social transfers (pensions included in social transfers) by poverty threshold, age and sex (source: EU-SILC) [ilc\_li09] and at-risk-of-poverty rate by poverty threshold, age and sex (source: EU-SILC) [ilc\_li02].

Notes: a) Countries are sorted according to ascending importance of social transfer in reducing the at-risk-of-poverty rate. b) Relative reduction (as a %) = ((AROP before social transfers - AROP)/AROP before social transfers)\*100.

**Chart 21: At-risk-of-poverty rate by gender in 2011 and changes in gender difference in the at-risk-of-poverty rate between 2008 and 2011, population aged 18–64 years**



Source: DG EMPL calculations based on Eurostat, At-risk-of-poverty rate by poverty threshold, age and sex [ilc\_li02].

Notes: a) a positive value of gender difference change indicates that the relative position of women has worsened, while negative values reflect a relative worsening of the position of men; b) AROP is measured at 60% of median equivalised income after social transfers; c) Pensions are included in social transfers.

(27) There is a danger that social services supporting women's entry in the labour are treated as luxuries and expenditures for them are cut especially if the 'male breadwinner model' is (implicitly) seen as the norm (EGGE 2013).

(28) EGGE (2013).

(29) Data refers to EU-27.

(30) Age 18–64, percentage of total population. Source: Eurostat, the at-risk-of-poverty rate by poverty threshold, age and sex (source: SILC) [ilc\_li02].

(31) Monetary measures of poverty are calculated using household income, which restricts individual and gender comparisons of at-risk-of-poverty indicators since they assume an equal sharing of resources within households on the basis of the equivalised income. For example, a female spouse who works part-time and relies on her husband's earnings as the main source of household income will probably not appear in the household statistics as being on a low (equivalised) income. The estimation of the gender risk of poverty is therefore only possible in the case of single adults or single parents. For more details see European Commission (2012d).

## 2.10. Overview – Gender gaps have been *narrowing...* but they remain significant and a large part of this phenomenon stems from men being more affected by the crisis

As seen in Table 1, gender gaps in activity rates, employment rates and unemployment rates have all reduced for the EU as a whole since the onset of the crisis, together with the gender pay gap, the at-risk-of-poverty rate gap, and the gap calculated for full-time equivalent employment rates.

However, this is mostly attributable to the sharper worsening of the situation of men as a result of the crisis, and much less because of any improvement in the labour market conditions of women. Since the crisis had a sharp sectoral focus, it mostly affected sectors where men were over-represented, and where more men lost their jobs relative to women. As such, it accompanied the decreasing male full-time employment rate and the sharp increase in the at-risk-of-poverty rates of men.

In addition, many more men have had to accept part-time, although often reluctantly, as indicated by the data on the growing share of involuntary part-time workers. These effects could also have contributed to the narrowing of the gender gap in hours worked and in full-time equivalent employment rates.

Some positive tendencies are, nevertheless, visible regarding women and the labour market. An example could be the increased female labour participation, as shown by the increase in female employment rates and by the higher share of working partnered women. It could also have contributed to better relative earnings position for women compared to pre-crisis.

Meanwhile, unemployment has been increasing for both men and women, which is a threat for all concerned in terms of negative personal, social and societal consequences, including the risk of poverty. In this respect, austerity measures are liable to have negatively impacted women, as they predominantly impacted on public sectors (where women are concentrated) and public services (of which women are chief

consumers). Furthermore, in so far as women are more at risk of becoming discouraged and leaving the labour market, it could add to the risk of marginalising women on the labour market.

## 3. GENDER GAP IN TOTAL HOURS WORKED

### 3.1. Introduction

#### 3.1.1. Gender gap in total hours worked narrowed but is still *persisting...*

As explained in the previous section, the crisis could have contributed to the narrowing of the gender gap in terms of total hours worked and full-time equivalent employment rates between men and women. Nevertheless, there remains a persistent gap in terms of total hours worked *over the lifecycle between men and women*, resulting notably from career pathways involving breaks, inactive periods and jobs associated with fewer hours. This is reflected both by the *lower average hours worked by women once employed* and by the *lower participation of women compared to men over the life course* <sup>(32)</sup>.

**Table 1: Gender gaps for selected variables between 2006 and 2012 for the EU-28**

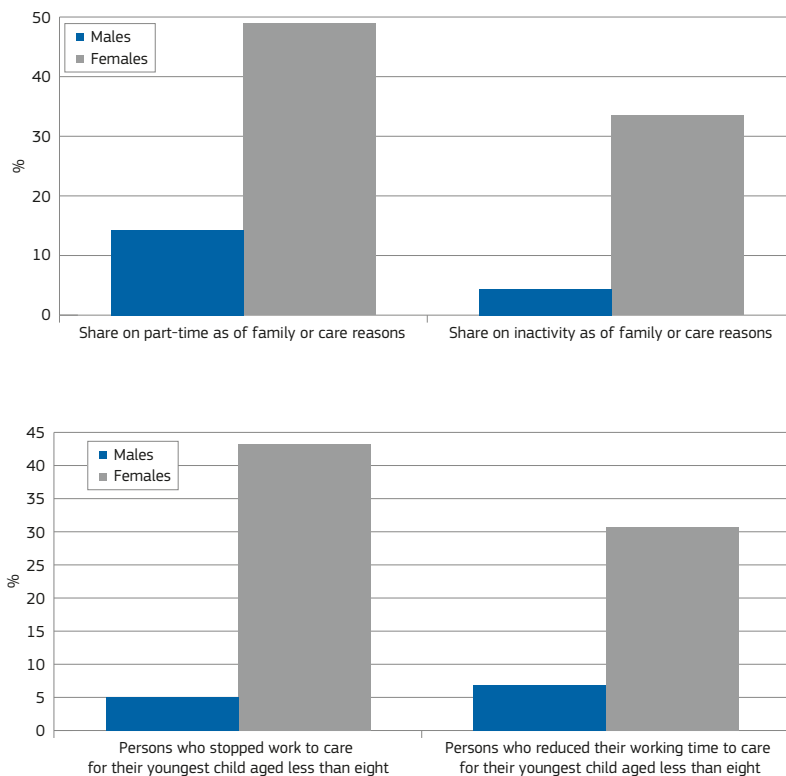
|   | 2006  | 2012   |
|---|-------|--------|
| GAP_Activity rate (age 15–64)                       | 14.7  | 12.4   |
| GAP_Employment rate (age 15–64)                     | 14.5  | 11.1   |
| GAP_Employment rate (age 15–24)                     | 6.1   | 4      |
| GAP_Employment rate (age 25–54)                     | 15.9  | 11.9   |
| GAP_Employment rate (age 55–64)                     | 17.7  | 14.6   |
| GAP_Part-time employment as a % of total employment | –23.7 | –23.5  |
| GAP_Unemployment rate (age 15–64)                   | –1.4  | 0      |
| GAP_Unemployment rate (age 15–24)                   | –0.8  | 1.4    |
| GAP_Unemployment rate (age 25–54)                   | –1.6  | –0.5   |
| GAP_Unemployment rate (age 55–64)                   | 0.1   | 1.2    |
| Gender pay gap                                      | 17.3* | 16.2** |
| Full-time equivalent employment rate gap            | 25.4  | 21.2   |
| At-risk-of-poverty rate (age 18–64) gap             | –1.3* | –1**   |

Source: Eurostat, Activity rates by sex, age and nationality (%) [lfsa\_argan]; Employment rates by sex, age and nationality (%) [lfsa\_ergan]; Part-time employment as a percentage of the total employment, by sex, age and nationality (%) [lfsa\_eppgan]; Unemployment rates by sex, age and nationality (%) [lfsa\_urgan]; Gender pay gap in unadjusted form as a % - NACE Rev. 2 (structure of earnings survey methodology) B-5 excluding 0 (earn\_gr\_gpgr2); Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (1983-2008, NACE Rev. 1.1) - hours [lfsa\_ewhuna]; Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) - hours [lfsa\_ewhun2].

Note: GAP = corresponding figure for MALES – corresponding figure for FEMALES; \* 2008; \*\* 2011.

<sup>(32)</sup> See Annex II Chart A.1.

**Chart 22: Share of inactive and part-time workers on family or care-related reasons (top chart) and share of persons who stopped work or reduced their working hours to care for their youngest child aged less than eight (bottom chart)**



Top chart: *Source:* Eurostat: Main reason for part-time employment - Distributions by sex and age (%) [lfsa\_epgar]; Inactive population - Main reason for not seeking employment - Distributions by sex and age (%) [lfsa\_igar].

*Note:* Share of those who denoted other family or personal responsibilities or looking after children or incapacitated adults. Data for the EU-28 average for 2012. Age group: 25–64.

Bottom chart: *Source:* Eurostat: Persons who stopped work to care for their youngest child aged less than eight, by duration of absence (1 000) [lfsa\_10lstopwo] Persons who reduced their working time to care for their youngest child aged less than eight (1 000) [lfsa\_10lredwor].

*Note:* Age group 15–64. Data for EU-27 average for 2010 <sup>(1)</sup>.

<sup>(1)</sup> Share of persons who stopped work to care for their youngest child aged less than eight = Number of persons who stopped work to care for minimum 1 month / (Number of persons who stopped work to care for minimum one month + Number of persons who stopped work for 0 months). Share of persons who reduced their working hours to care for their youngest child aged less than eight = Number of persons who reduced their working hours / (Number of persons who reduced their working hours + Number of persons who did not reduce their working hours).

### 3.1.2. ...with reasons behind less total hours worked being multiple...

While both men and women work fewer average hours when they are younger or older than they do in their prime age years, the gap in total hours worked over the lifecycle can be particularly strongly linked to *family and care activities*, which leads, in practice, to women decreasing their labour market activity. This is reflected in the fact that gender gaps for average hours worked and for activity rate both start to widen once prime

childbearing age is reached. Moreover, the gaps widen further beyond age 55, suggesting irreversible labour market effects associated with career breaks or temporary withdrawals from the labour market.

The importance of family reasons can also be seen in the Chart 22, showing the main reasons for men and women working part-time or being inactive, with a much larger proportion of women reporting lower hours or non-participation due to family and care-related reasons (top chart). Moreover, it is mainly

women who reduce their working hours or stop working in order to care for a small child (bottom chart). This means, parenthood has a greater influence on mothers' work outcomes than on fathers'.

The gender gap in total hours worked mirrors both *pre-determined gender roles* and *traditional gendered models* that see women more as care-givers and men more as main breadwinners, with women expected to cut down on their working hours or withdraw from the labour market once faced with family duties. This, in turn, contributes to the *reproduction* of these role-models that limit women's choices and create barriers to achieving long-run gender equality.

The gender gap in total hours worked can, nevertheless, be associated with numerous other factors as well, such as *structural barriers*, institutional constraints, sub-optimal public policies and *regulations* that push those with care responsibilities, or those who have lower earnings potential in the couple (typically women), towards inactivity or jobs that are associated with fewer hours. A lack of available, quality care facilities not meeting the needs of full-time working parents could lead to work-life reconciliation problems. Meanwhile, tax-benefit systems could also discourage participation or increased work efforts in so far as they penalise increased work efforts by imposing excessive tax burdens. At the same time, care costs can also induce women to stay at home by diminishing their prospective financial return from work.

Nonetheless, the motivations behind women *'voluntarily'* choosing not to work, or working fewer hours, are complex and the subject of much reflection and speculation by researchers. According to Hakim's preference theory, values and attitudes are important predictors of behaviour, and *personal lifestyle preferences* have a major impact on women's choices between family work and employment. It argues that, where options are open, women may choose different basic lifestyles that can be a predictor of work choices: home-centred (prefer not to work); adaptive (wants to work but not totally committed to a career); and work-centred (committed to work).

However, Grant *et al.* (2005) quote several researchers<sup>(33)</sup> who have argued that women make their ‘choices’ based on their circumstances, and this notion incorporates not only self-perceptions or within-family relations, but also economic and social conditions, all of which serve to *condition women’s choice*.

Other researchers point to the risk of *reverse causation in preference formation*. For instance, according to Kitterod *et al.* (2011), ‘it is difficult to distinguish between “real” preferences and “accommodated” preferences, i.e. between women who work part-time because that is what they really want and women who prefer part-time given the impossibility of balancing a full-time job with other obligations.’ They point out the difficulties in deciding ‘whether preferences determine women’s labour market outcomes or whether preferences shift to reflect such outcomes’<sup>(34)</sup>.

Moreover, the fact that it is mostly women who cut back on their working hours once faced with care considerations might also stem from the fact that *men may also be constrained* in their choices. Long and rigid work hours for instance might prevent them from engaging in family activities and unpaid work, which contributes to the reproduction of the ‘one earner (male) – one carer (female)’ model. Therefore, gender equality implies that work-life reconciliation policies target both sexes, not only women, so that a transition could be made towards a dual earner – dual carer model.

### 3.1.3. ...and numerous implications

Working fewer hours *reduces total earnings* because of the lower volume of work and *lower hourly earnings*. In 2010,

part-time workers earned, on average, less per hour than full-time workers in the majority of EU countries. In this respect wage gaps could, in theory, be explained by the human capital theory, with a lower level of human capital investment found among part-time workers because they are more likely to experience depreciation of their skills and less likely to receive additional training<sup>(35)</sup>.

Low work intensity households and households with dependent children are more at risk of poverty. Lower work intensity leads to lower total household income, while the presence of dependent children reduces a household’s work intensity because it increases the likelihood of a career break or of part-time work among adult household members. Finally, the presence of children means that the household income is shared among a larger number of household members, which reduces the equivalised income of all concerned.

Part-time workers receive *less training provided by employers*. The Fifth European Working Condition Survey showed that, in 2010, training was received by 38% of employees working full-time and 34% of those working part-time<sup>(36)</sup>. Moreover, the participation of part-time workers in all training activities, provided by employers or paid by them, is highly gender biased, with women tending to choose part-time when they have care duties, while men typically opt for part-time when undergoing some form of education.

The likelihood of *skill mismatch*<sup>(37)</sup>, which often takes the form of over-qualification, increases with part-time work. This might be because part-time jobs are more often characterised by standardised tasks, being less demanding, having lower levels of autonomy, task

complexity and problem-solving aspects, as well as higher levels of monotony<sup>(38)</sup>.

Part-time work offers *fewer opportunities for career advancement*. According to the results of the 2009 European Company Survey, only one quarter of European companies offered part-time jobs in positions that need high qualifications or management experience<sup>(39)</sup>. A study in the UK showed that women in higher management positions were exposed to downward mobility on moving from full-time to part-time work<sup>(40)</sup>. Another study, also in the UK, found that women working in smaller-scale managerial positions and moving from full-time to part-time work were likely to be downgraded to an occupation with lower qualification level<sup>(41)</sup>. At the same time though, part-time work can increase *companies’ costs* because of the need to find, retain, train and coordinate employees’ work<sup>(42)</sup>.

Shorter working careers are associated with *larger gender pension gaps*<sup>(43)</sup>. Women tend to receive less on a per hour basis, which creates a gender pay gap while working and contributes to a pension gap in retirement. Moreover, women tend to work fewer hours per year (e.g. part-time), accumulate fewer years of work due to career breaks (mainly for caring reasons), and retire earlier.

Fewer hours worked leads to the *underutilisation of human capital*, not just on a personal level, but in the economy as a whole. Convergence in the intensity of labour force participation between women and men could significantly increase the labour force size and GDP in the future, according to projections by OECD<sup>(44)</sup>. A 50% reduction in the gender labour force participation gap could yield an additional gain in GDP in 21 EU

<sup>(33)</sup> Grant *et al.* quoting for McRae (2003) or Fagan (2001): *Idem* page 4.

<sup>(34)</sup> *Time spent in unpaid work* is also influencing the ‘choices’ made about paid work. Women tend to spend more hours than men in unpaid work (including care work) each day, regardless of the employment status of their spouses; while men tend to spend more time in paid employment. As a result, the gender difference in total working time – the sum of paid and unpaid work, including travel time – is close to zero in many countries. See OECD (2012). See also section 4.3.

<sup>(35)</sup> See e.g. Roman (2006).

<sup>(36)</sup> Eurofound (2012a).

<sup>(37)</sup> Skill mismatch generates significant economic and social costs for individuals (e.g. lower earnings), companies (e.g. lower productivity) and societies (e.g. lower long-run growth). For more details see European Commission (2012a).

<sup>(38)</sup> Eurofound (2007).

<sup>(39)</sup> Eurofound (2011).

<sup>(40)</sup> Connolly and Gregory (2008).

<sup>(41)</sup> Lyonette *et al.* (2010).

<sup>(42)</sup> Buddelmeyer *et al.* 2008 and Eurofound (2010a).

<sup>(43)</sup> ENEGE (2013a).

<sup>(44)</sup> Thevenon *et al.* (2012).

countries<sup>(45)</sup> amounting to 6.2% by 2030, with a further 6.2% gain (12.4% in total) if complete convergence occurred<sup>(46)</sup>. Bringing the labour market into full gender balance could therefore increase the unweighted GDP for EU-27 by a quarter, with increases in Member States varying between 14% (Slovenia) to more than 40% (Malta, Greece, the Netherlands)<sup>(47)</sup>.

At the same time, working fewer hours can have a range of positive effects. Several studies confirm that the volume of working hours is the main dimension that determines the work-life balance<sup>(48)</sup>, and that the *likelihood of work-life balance* problems decreases with lower average weekly working hours. Employed men and women who have established a positive work-life balance are found to have higher *life satisfaction levels* than those with problems in reconciling family and private life<sup>(49)</sup>. Nevertheless, it is important to underline that establishing a satisfactory work-life balance involves more than issues of time. Satisfaction with the work-life balance tends to be higher in countries with more developed opportunities for the *reconciliation* of work and private life, such as available and affordable full-time care services<sup>(50)</sup>.

In this respect part-time employees are more likely to have *control over their working time* than full-time employees. They are less likely to work at anti-social times or work excessive hours in a day. Part-time employees are also *less likely* than full-time employees to report that their jobs are *stressful* or present a risk to their health and safety<sup>(51)</sup>.

For employers, the main advantages of part-time and other atypical (flexible) working time arrangements are

improved *adaptability and flexibility* in relation to both regular and predictable fluctuations in customer demand and changes in the economic cycle<sup>(52)</sup>. Part-time work can help employers meet customer demand without the cost and inconvenience of under-employment in off-peak times, overtime payment in busy periods, to allow extended opening hours on evenings or weekends. Moreover some studies find that, in addition to the better management of peaks and troughs in demand and changes in operating hours, standard part-time *increases motivation and reduces absenteeism*<sup>(53)</sup>. Likewise, companies with higher flexibility profiles tend to perform better financially and have higher *labour productivity through less fatigue*, higher job satisfaction and organisational commitment, and thus higher work effort intensity per hour<sup>(54)</sup>.

Some employers may also use part-time jobs to *screen workers* for full-time positions, given their difficulty in assessing likely performance before recruitment<sup>(55)</sup>. Such screening is potentially more relevant in economic downturns when the risks for companies may be higher<sup>(56)</sup>, while in growth periods a company might offer part-time workers full-time positions (known as ‘tap effects’). On the other hand, employers may also introduce part-time and flexible time arrangements to meet *employees’ preferences* and to respond to their requests (i.e. voluntary part-time).

Part-time work can contribute to a *better utilisation of the workforce* and be a viable alternative to inactivity if appropriate incentives are in place. The main reasons for inactivity and part-time work are closely aligned, but they may vary over the life cycle and by sex: study periods for young people, caring responsibilities for prime-age women, and sickness or retirement for older workers. Thus, fewer hours of work, such as part-time work, may provide opportunities for groups who could not work otherwise and thus helps *mobilise labour*.

## 3.2. Cross-national comparison of full-time equivalent employment rate gaps

### 3.2.1. Member States’ overall performance varies, yet some countries share similar outcomes

The gap in total hours worked between males and females can best be seen in terms of the *employment rate (ER)*, which is lower for women than men in all the Member States<sup>(57)</sup> and even lower if employment is measured in terms of *full-time equivalents (FTE)*<sup>(58)</sup> since, even when in employment, women tend to work *fewer hours* on average than men. This gap is very wide even in some Member States where the female employment rate is relative high, for instance the Netherlands, Ireland, Germany and the UK (see Chart 23).

Overall, when comparing the full-time equivalent employment rate gaps across the Member States, the *female employment rate* should also be taken into account since the full-time equivalent employment rate gap can also be low if both male and female employment rates are low. Hence a low gap does not *per se* indicate favourable female labour market outcomes. In that sense, the best outcome is when a *high female employment rate is achieved alongside a low full-time equivalent employment rate gap*.

- The Chart 24, based on the situation in 2012 for the total working age population of 15–64 years, suggests that the *relative best performing* Member States in this respect have been the Nordic States (Finland, Sweden, Denmark) and the Baltic States (Estonia, Latvia and Lithuania) with full-time equivalent employment rate gaps below the EU average, but employment rates of women above the EU average. Slovenia, Portugal, Cyprus, France are also to be found in this group, although their performance is more average in terms of the employment rate of women, while they perform somewhat better than average in terms of the FTE gap.

<sup>(45)</sup> The EU-21 countries include Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom.

<sup>(46)</sup> Analysis of the growth potential did not consider the impacts of increased female labour intensity, i.e. women working more hours. According to authors, changes in working hours have potential effects on multi-factorial productivity which they could not properly account for in their model.

<sup>(47)</sup> Lofstrom (2009).

<sup>(48)</sup> Plantenga and Remery (2009) quote Burchell *et al.* (2007).

<sup>(49)</sup> Eurofound 2010b and Eurofound (2012b).

<sup>(50)</sup> Eurofound (2013).

<sup>(51)</sup> OECD (2010).

<sup>(52)</sup> Eurofound (2011), Buddelmeyer *et al.* (2008), Kohler and Spitznagel (1995), Nelen *et al.* (2011).

<sup>(53)</sup> Hagemann *et al.* (1994) in Cataldi *et al.*

<sup>(54)</sup> Brewster *et al.* (1994) in Cataldi *et al.*; Eurofound (2010a); Kelliher and Anderson (2010); Golden (2011).

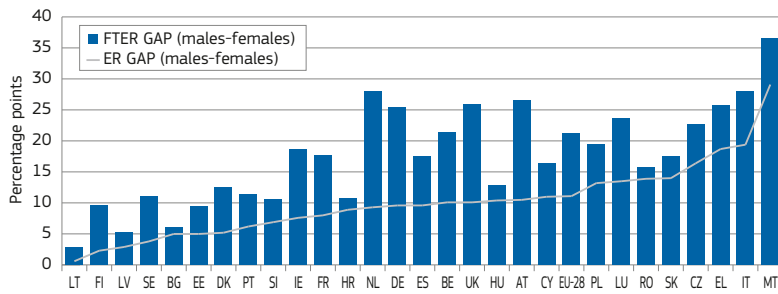
<sup>(55)</sup> Houseman (2001) in Buddelmeyer *et al.* (2008).

<sup>(56)</sup> Job-seekers (suppliers) have some amount of private information about their abilities while employers (demand side) are less informed.

<sup>(57)</sup> See Annex II Chart A.2.

<sup>(58)</sup> FTE is calculated as the employment/population ratio, multiplied by the average usual hours worked per week per person in employment, then divided by 40. Method is based on OECD (2012).

**Chart 23: Gaps between male and female full-time equivalent employment rates (FTER) and employment rates (ER) in 2012**



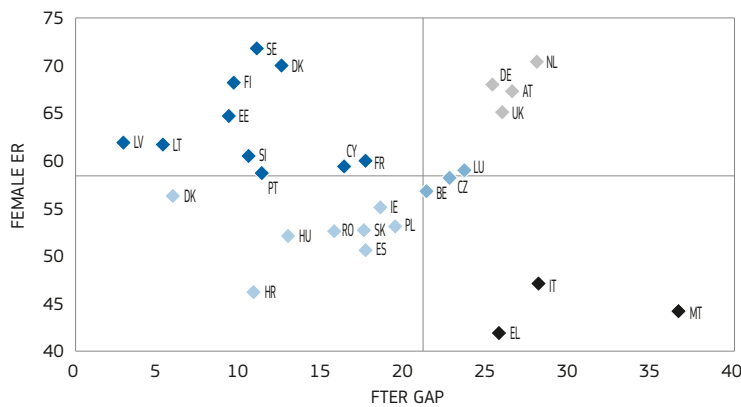
Source: Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [lfsa\_ewhun2], Employment rates by sex, age and nationality (%) [lfsa\_ergan].

Note: Age group 15–64.

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**Chart 24: Full-time equivalent employment rate gap (percentage points) and female employment rate (%) in the EU Member States in 2012**



Source: Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [lfsa\_ewhun2], Employment rates by sex, age and nationality (%) [lfsa\_ergan].

Note: Age group 15–64; Axes cross at the EU-28 average. Horizontal axis: full-time equivalent employment rate gap (males-females); vertical axis: female employment rate.

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- The second group could be called 'higher than average female employment with shorter working hours' group, comprising Germany, Netherlands, Austria and the UK. All have high levels of female employment, but the higher than average full-time equivalent employment rate gap suggests that lower total hours are generally worked by women compared to men.
- Mostly Central Eastern European countries (Bulgaria, Hungary, Romania, Slovakia, Poland and Croatia) together with Spain and Ireland form the group of 'longer work hours combined with smaller female employment' group. Here female employment is lower

than average but, if women work, they tend to work longer hours and/or the employment of men is also lower.

- Luxemburg, Czech Republic and Belgium are *average performers*, being very close to the crossing point of the two axes.
- The *relative worst outcomes* are in Italy, Malta and Greece with the lowest employment rates for females and the highest full-time equivalent employment rate gaps. This indicates that relatively fewer women work and, even if they do, they work shorter hours and/or there is a large gap between the employment rates of men and women.

### 3.2.2. Hours worked gap is highest in *prime and senior age*...

When the gender gap is considered in terms of the average number of weekly hours usually worked by different age cohorts (<sup>59</sup>), the gap is highest in most countries for the *prime age group and even higher for the older age cohort* (for instance Belgium, Ireland, Austria, Germany, the UK and the Netherlands). In a few cases, however, it is highest for the young (in the case of Slovenia, Finland, Sweden, Denmark and also Lithuania and Estonia, although the latter two display rather low hours worked gaps in general) (<sup>60</sup>).

When the cohorts are viewed separately, for the *young* there are no extreme gender gaps either in the hours worked or in the employment rates, although in some Member States young men work considerably longer hours than women (the case in Denmark, Sweden, Finland and Slovenia) while there is a rather pronounced gap between the employment rates of men and women in others (such as Slovakia, Poland, the Czech Republic and Austria) (<sup>61</sup>).

Irrespective of the gaps, however, the countries with the higher employment rates in the youth cohort (such as Netherlands or Denmark) seem to have the shortest hours worked. The Chart 25 demonstrates a quite strong negative correlation between hours worked and the employment rate of young people, corresponding to the view that shorter work hours might be helpful for the participation of young people on the labour market (see also at part 4.1. on part-time work).

For the *prime age cohort* there are some striking gaps both between the hours worked and the employment rates of men and women. While the hours worked gap is most marked in the Netherlands, Germany, the United Kingdom and Austria, the employment rate gaps are highest in Malta, followed by Italy and Greece (see Chart 26). Some Member States have a lower than average employment rate gap, since both female and male employment rates are relative low, as in Spain and Croatia.

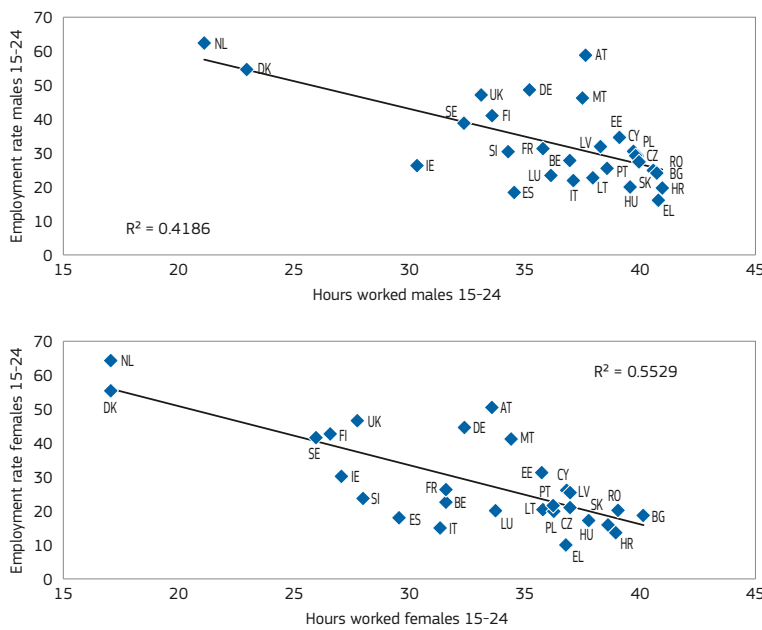
<sup>(59)</sup> Age group 15–24; 25–54; and 55–64.

<sup>(60)</sup> See Annex II, Chart A.3.

<sup>(61)</sup> See Annex II, Chart A.4.



**Chart 25: Correlation between hours worked and employment rate for young males (top chart) and young females (bottom chart)**



Source: DG EMPL calculations based on Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours (lfsa\_ewhun2); Eurostat, Employment rates by sex, age and nationality (%) [lfsa\_ergan].

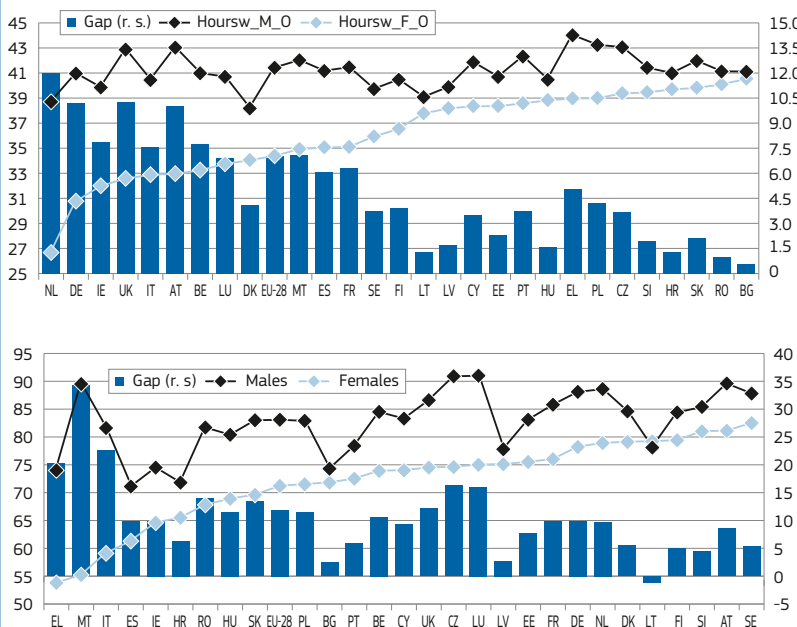
Note: Correlation coefficient males: -0.65; correlation coefficient females: -0.74.

The generally strong negative correlation between the hours worked and the employment rate of the young does not hold for prime age men<sup>(62)</sup>, and becomes much weaker for prime age women as well.

Regarding the size of the gaps, a somewhat similar pattern seems to hold for the *older age cohort* as for the prime age cohort both in terms of hours worked and the employment rates<sup>(63)</sup>. Chart 27 shows a very strong positive correlation between the gender gap in average weekly hours worked for prime age and older age cohorts, as well as a positive (albeit somewhat weaker) correlation between the gender gap in employment rates for prime age and older age cohorts. This suggests that the hours worked gap and the employment rate gap both tend to carry over from prime age into the older age group.

Moreover, there seems to be a strong ‘stability’ with respect to hours worked, which suggests that similar working hours patterns are affecting both age groups across the Member States (either shorter or longer working hours over the career cycle, starting from prime age). Nevertheless, the fact that most Member States lie above the theoretical 45° line (which represents the state where the prime age employment gender gap equals the older age employment gender gap) suggests that the gender employment rate gap widens from prime age onwards.

**Chart 26: Average number of usual weekly hours of work for the prime age male and female (age 25–54) cohort and gap (top chart) and corresponding employment rates of males and females and gap (bottom chart) in EU Member States in 2012**



Source: DG EMPL calculations based on Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours (lfsa\_ewhun2); Eurostat, Employment rates by sex, age and nationality (%) [lfsa\_ergan]; HOURS\_M\_P stands for usual average weekly hours worked for prime-age males

Note: HOURS\_F\_P stands for usual average weekly hours worked for prime-age females.

### 3.2.3. ...and on lowest education levels

Two patterns emerge concerning the gender gap in terms of the average number of weekly hours usually worked by groups with high, medium and low levels of educational attainment (see Chart 28). First, compared to other Member States, they are generally, but not always, *parallel* with each other in that all gaps are on the lower end in Bulgaria, Lithuania, Latvia, Hungary or Slovakia, and all are found at the higher end in Germany, Belgium, Ireland, UK and the Netherlands. Second, the hours worked gender gap is generally highest for the *lowest education* levels (with the

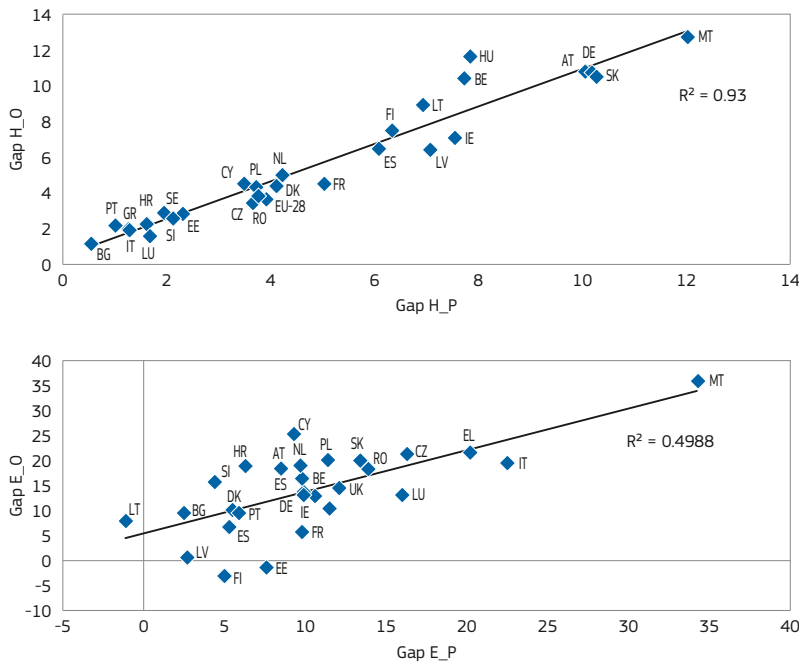
<sup>(62)</sup> 0.05 for males, -0.14 for females.

<sup>(63)</sup> See Annex II, Chart A.5.

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**Chart 27: Correlations between the hours worked gender gap for the prime age and older cohorts (top chart) and between the gender employment rate gap for the prime age and older cohorts (bottom chart)**



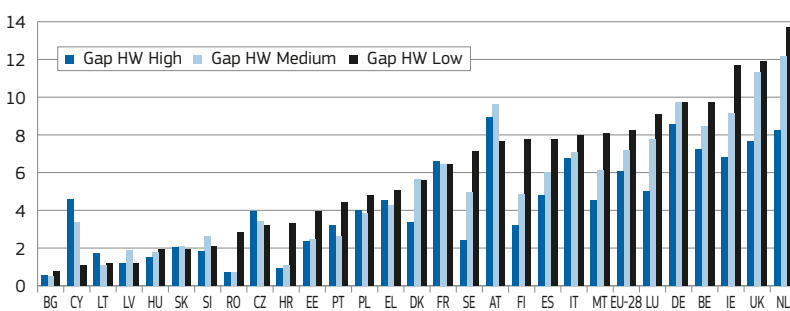
Source: DG EMPL calculation based on Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours (lfsa\_ewhun2).

Note: Correlation: 0.96 (top chart) and 0.71 (bottom chart) Gap H\_O stands for the gap in usual average weekly hours worked between males and females in the older (55–64) age cohort; Gap H\_P stands for the gap in usual average weekly hours worked between males and females in the prime age (25–54) age cohort; gap E\_P stands for the gap between male and female employment rates for the prime age cohort, gap E\_O stands for the gap between male and female employment rates for the older age cohort.

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**Chart 28: Gender gaps in average number of usual weekly hours worked (males-females) on various education levels in the Member States in 2012**



Source: DG EMPL calculation based on Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours (lfsa\_ewhun2).

Note: 'Gap HW' stands for the gender gap (males-females) in average number of usual weekly hours worked; 'High' stands for high education (ISCED 5-6); 'Medium' stands for medium education (ISCED 3-4) and 'Low' stands for low levels of education (ISCED 0-2). Age group: 15–64. Gap=corresponding figure for males – corresponding figure for females.

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notable exception of Cyprus and Austria and to a lesser extent Lithuania, Latvia, the Czech Republic and France) <sup>(64)</sup>.

## 4. POLICY DRIVERS OF THE FULL-TIME EQUIVALENT EMPLOYMENT RATE GAP ARE VARIOUS...

The following section describes the main factors that could be driving the gender gap in total hours worked, and covers issues of part-time work, working time regimes (volume of working hours and working time arrangements), divisions between paid and unpaid work within a family, financial incentives, and child-care. Each factor is assessed in terms of its influence on the full-time equivalent employment rate (FTEER) gap and on the female employment rate.

### 4.1. ...with part-time work clearly being one of the main factors leading to lower full-time equivalent employment rates for women compared with men

As Chart 29 shows, the lower employment to population ratio for women becomes even lower if part-time employment rates are transformed into full-time equivalents <sup>(65)</sup>. Meanwhile, for men the gap is much narrower.

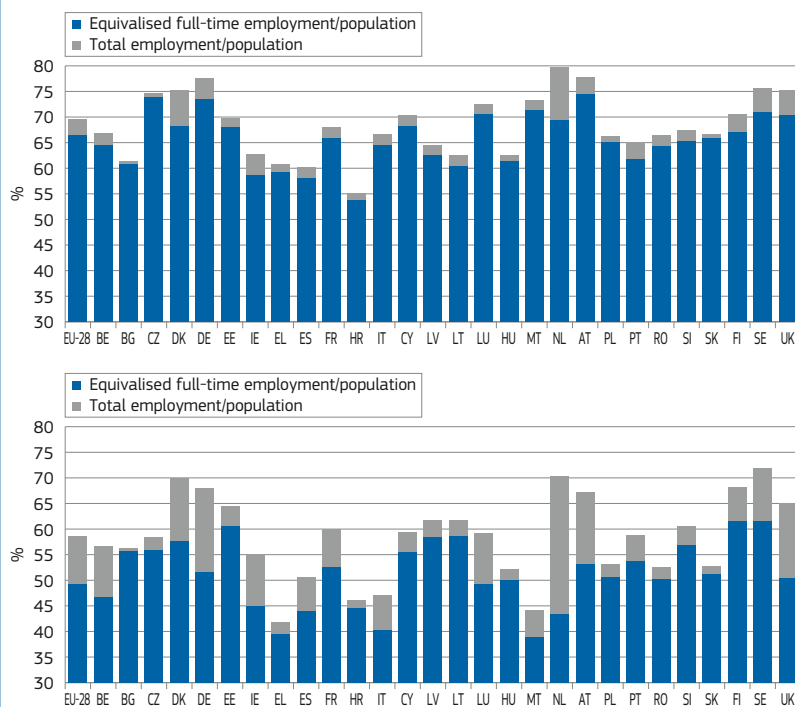
Personal characteristics, gender, jobs and labour market characteristics and policy measures can all affect the probability of working part-time <sup>(66)</sup>. The presence of

<sup>(64)</sup> This exacerbates the problem that not only is employability of and/or willingness to work among low educated women much lower than that of high educated women – in 2012, for the age group 15–64 on the EU-28 average, employment rate of women has been 36.9% for ISCED level 0-2 compared to 78.3% for ISCED level 5-6. But even when working, low educated women are more likely to be found in low hours jobs (for instance the share of part-time workers to total workers among low educated women was 40.8%, compared to 24.8% for high educated women on average in the EU in 2012). At the same time, the share of part-time work among low educated men was 11.3% compared to around 7% for high educated men (meaning a much narrower gap in part-time shares based on education for men).

<sup>(65)</sup> By taking the number of full-time employed and adding to that the number of part-time employed multiplied by average number of weekly hours on part-time employment, divided by 40 hours.

<sup>(66)</sup> In terms of personal characteristics, according to Jaumotte (2004), part-time is most preferred by married women, mothers of young children, and those with husbands who have a high income.

**Chart 29: Employment to population ratio and equivalised full-time employment to population ratio for men (top chart) and women (bottom chart) in 2012 (age group 15–64)**



Source: DG EMPL calculations based on Eurostat, Population by sex, age, nationality and labour status (1 000) [lfsa\_pganws]; Full-time and part-time employment by sex, age and highest level of education attained (1 000) [lfsa\_epgaed]; Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [lfsa\_ewhun2] Data for NL for 2011.

Note: Equivalised full-time employment/population =  $[\text{number of full-time employed} + (\text{number of part-time employed} * \text{average number of usual weekly hours worked in part-time job})/40]/\text{population}$ .

children tends to increase the possibility of women working reduced hours in most Member States<sup>(67)</sup>. Part-time work is more prevalent among the *young and/or older cohorts*, which might also reflect parallel activities such as participation in education<sup>(68)</sup> or preparation for retirement<sup>(69)</sup>. In

terms of job and labour market characteristics, the more *'feminine'* a sector, the more widespread is part-time employment among females<sup>(70)</sup>; which may reflect sector specificities (since women are more concentrated in the service sector)<sup>(71)</sup> but also a possibly stronger demand for skilled women<sup>(72)</sup>.

Public policies are also influential, with, for example, tax regimes or incentives influencing the choice between inactivity and part-time work, and between part-time and full-time work. Likewise, the availability and affordability of childcare affects not only the decision between inactivity and activity, but also that between full-time and part-time employment<sup>(73)</sup>.

*Part-time work has a dual role*, however. While it may mean fewer total hours per week compared to full-time work, it can contribute to increased *labour market participation* in certain stages of a person's life when faced with parallel duties. A relative short period of part-time work can, for example, be helpful in terms of work-life balance for those with *care responsibilities*, as it offers the possibility of having an uninterrupted professional career at the same time as it facilitates the combination of paid work and caregiving work<sup>(74)</sup>.

Young people who are studying, or elderly people gradually moving out from the labour market, can also benefit from part-time work. Thus, insofar as it helps maintain continued activity, *part-time work may actually decrease the FTER gap*. This can be seen in the Chart 30, which show that the part-time to population ratio correlates negatively with inactivity rates among the female population, and positively with respect to the female employment to population ratio<sup>(75)</sup>.

<sup>(67)</sup> See Annex II, Chart A.6. Again, it needs to be underlined that gender equality would imply that *both sexes* are able to take on part-time work once caring for a small child, not only women. See also section 4.3. on paid and unpaid work division between sexes.

<sup>(68)</sup> However, labour market segmentation, especially in the case of young cohorts, (ENEGE 2013b) can also add to the likelihood of women working part-time. Some research shows, for example, that women who enter the labour market after spell of inactivity are often competing for the same jobs as young people.

<sup>(69)</sup> See Annex II, Chart A.7.

<sup>(70)</sup> See Annex II, Chart A.8.

<sup>(71)</sup> It can also be argued that women might self-select themselves into occupations where they know it will be easier to reconcile work with family life, in particular to work part-time. This search for shorter hours may considerably restrict their choice of occupation, see for instance EGGE (2009a).

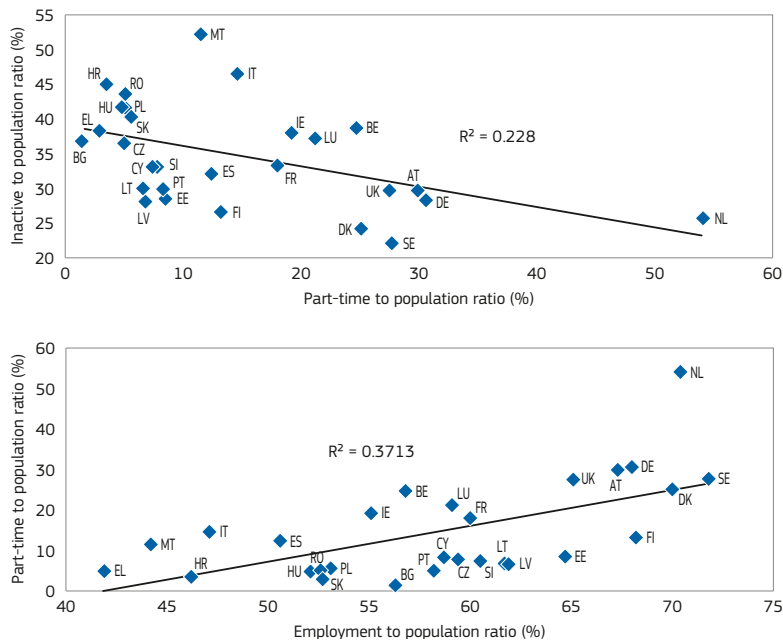
<sup>(72)</sup> Buddelmeyer *et al.* (2005) for instance point out that, for EU-15, the part-time employment share is highest for elementary occupations and is mainly concentrated in the service sector, which may reflect peaks in demand at certain times of the day or week. Other theoretical arguments include, for instance, Kjeldstad and Nymoen (2012) referring to Tijdens (2002) and finding that increased female part-time employment in female-dominated occupations could reflect a desire to attract and retain productive female workers when they have family responsibilities.

<sup>(73)</sup> See Jaumotte (2004). Gash (2007) uses event history analysis of part-time workers' transitions, and also finds evidence that inadequate childcare is a constraint for full-time participation for worker-carers.

<sup>(74)</sup> See Plantenga (1996). Booth and Van Ours (2013) also indicate that, without the existence of part-time jobs, female labour market participation would be substantially lower if, when confronted with a choice between full-time job and zero working hours, women opt for the latter.

<sup>(75)</sup> See also OECD (2010), table 4.3 on p. 238.

**Chart 30: Correlation between part-time employment to population and inactivity rate, and employment to population ratio among females in 2012**



Source: Eurostat, Full-time and part-time employment by sex, age and highest level of education attained (1 000) [lfsa\_epgaed]; Population by sex, age, nationality and labour status (1 000) [lfsa\_pganws].

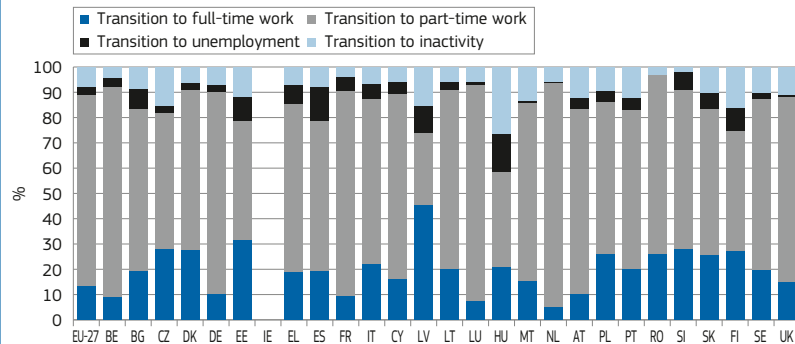
Note: Correlation coefficients: - 0.48 (top chart) and 0.61 (bottom chart) Age group: 15-64.

Nevertheless, *part-time work may also increase the FTER gap as it leads to lower workforce utilisation for groups not affected by life transitions, and if the people concerned become trapped in part-time work, either because employers are reluctant to hire them full-time, or because public policies (such as lack of adequate care facilities) or other disincentives (such as tax arrangements etc.) effectively restrict them to part-time jobs.*

The contribution of part-time work to the persistence of the FTER gap can also be seen in the data on *transition rates from part-time to full-time employment* (see Chart 31). This shows that, in many Member States, part-time work rarely serves as a stepping stone to full-time work (76), and this appears to be especially the case in countries with high female part-time employment rates, such as the Netherlands, Germany and Austria. Data for these countries indicate that transition rates for females out of part-time into full-time are very low. In some other countries, notably those where part-time is relative less common, such transition rates are higher than average. A notable exception is Denmark, where part-time work is widespread, but the transition rates from part-time to full-time are also amongst the highest in the EU.

Even when women want to increase their working hours, they may be unable to do so. For example, among women aged 25-49, the share of *involuntary part-time* (those who are unable to find a full-time job) can be considerable in some Member States, whether due to

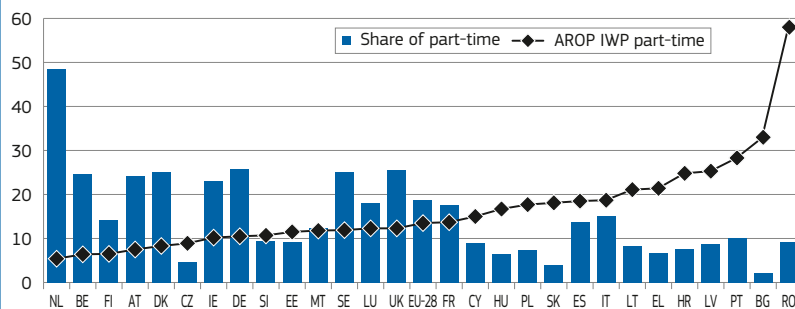
**Chart 31: Transition rates from part-time work to various labour market states for women**



Source: Eurostat, Labour transitions by employment status [ilc\_lvhl30].

Note: Age group: 15-64; Year: 2010

**Chart 32: Share of part-time in total employment and in-work at-risk-of-poverty rate across Member States in 2011**



Source: Eurostat, In-work at-risk-of-poverty rate by full-/part-time work (source: EU-SILC) [ilc\_iw07]; Part-time employment as a percentage of the total employment, by sex and age (%) [lfsa\_eppga].

(76) Buddelmeyer *et al.* (2005) showed that part-time work served as a stepping stone into full-time employment only for a small proportion of individuals (less than 5%). (Stepping stone effect was captured by the rate of transition from non-employment into part-time and then into full-time work). Blank (1989) finds on US data that out of the 3802 women in the 9 year sample only 256 demonstrate a pattern of moving from inactivity to part-time and then to full-time; 77% of the sample spend six or more years out of nine in the same labour market state. This 'stability' for part-time can be partially explained by managers' reluctance towards transition of employees from part-time to full-time in Europe. On average, only 27% of managers in the 21 countries that were included in the Establishment Survey on Working Time (ESWT), said that part-time employees could easily get a full-time job; 43% said that this could happen only exceptionally, while 27% said there is 'no chance' of such a change (Eurofound (2011)).

labour market constraints and/or transition problems <sup>(77)</sup>.

The decision to take up part-time work can also be influenced by *financial considerations*. Chart 32 shows the share of part-time workers in total employment and the at-risk of in-work poverty rate for part-time workers <sup>(78)</sup>. The negative relationship between the two <sup>(79)</sup> suggests that a decision not to take up part-time jobs may be determined not just by the availability of jobs, but also by the low rates of pay.

## 4.2. Working hours regimes are important for work-life balance...

The search for work-life balance is an important factor influencing work choices and hence the gender FTER gap. Since the time spent at work and the particular working hours arrangements will both affect a person's overall work-life balance, the importance of the two factors needs to be taken into account when analysing the FTER gap.

### 4.2.1. ...with the volume of working time having a natural influence on full-time equivalent employment rate...

The lower the number of usual weekly hours worked, the lower is the rate of full-time equivalent employment. Apart from the prevalence of part-time employment among the female workforce, as discussed above, part of the FTER gap stems from the fact that, in several Member States, even when on *full-time work*, women work fewer average hours than full-time working men <sup>(80)</sup>. This leads to a lower equivalent full-time employment ratio for females compared to males, and thus

<sup>(77)</sup> Kjeldstad and Nymoen (2012) find, for instance, that female-dominated, low-skilled service and care occupations are very much exposed to involuntary part-time work. Moreover, OECD (2010) warns that the definition of involuntary part-time fails to incorporate the satisfaction of women with their situation, and also those women who would like to work more hours (but not necessarily full-time); thus the *actual rate* of involuntary part-time could be much higher. See Annex II, Chart A.9.

<sup>(78)</sup> Both figures show the situation for both sexes in general, as the in-work poverty rate breakdown for sex is not available. However, since part-time jobs are mostly filled by women, it can still reflect and proxy the female situation.

<sup>(79)</sup> With a correlation coefficient of  $-0.49$ .

<sup>(80)</sup> See Annex II, Chart A.10.

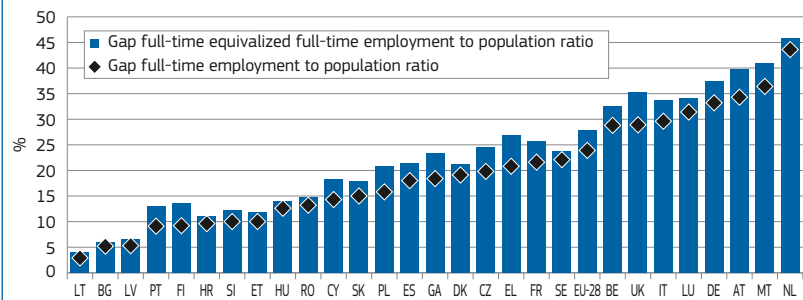
a higher gap between males and females compared to that calculated in terms of simple full-time employment to population ratios (see Chart 33 and Chart 34).

While men tend to work longer hours, *overtime* can also account for a considerable part of the gap. According to Eurostat, in 2004 in the EU-27, the

average number of overtime hours was 1.4 for men compared to 0.8 for women, with 13.4% of men working overtime compared to 8.7% of women <sup>(81)</sup> (see Chart 34, bottom one).

Working longer hours (defined here as over 40 hours) might be assumed to be a pattern typical for men. However, in most

**Chart 33: Gap in full-time employment to population ratio and in full-time equivalised full-time employment to population ratio (males-females) in 2012**



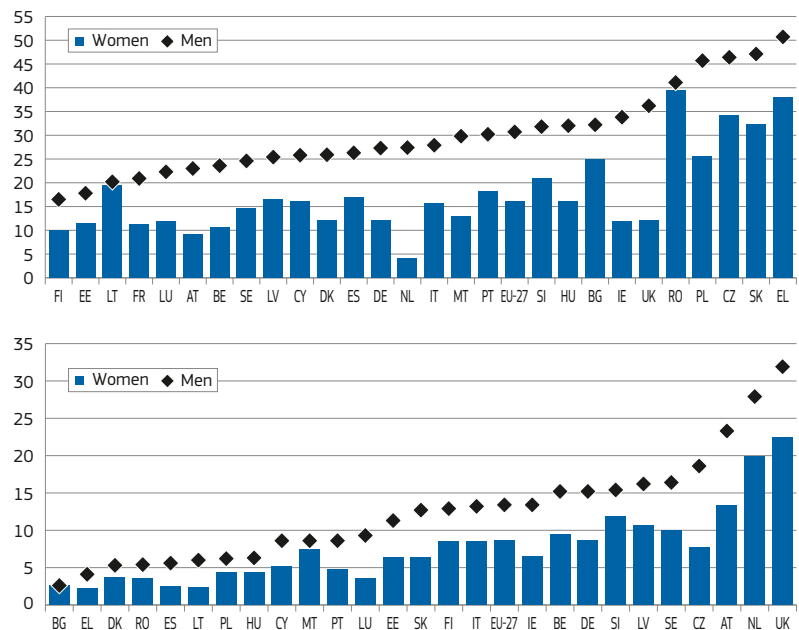
Source: Eurostat: Population by sex, age, nationality and labour status (1 000) [lfsa\_pganws]; Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [lfsa\_ewhun2].

Note: Data for Netherlands were available for 2011; Full-time equivalised full-time employment to population ratio = full-time employment to population ratio \* average number of hours worked in full-time job/40; Age group: 15–64.

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**Chart 34: Share of respondents working more than 40 hours in 2010 (top chart); Percentage of employees (aged 15–64) working overtime in 2004 (bottom chart)**



Source: EWCS 2010: How many hours do you usually work per week in your main paid job? (q18); Eurostat: Percentage of employees working overtime, by sex, age and occupation [lfs0\_04peovisco].

<sup>(81)</sup> Source: Eurostat, LFS Ad-Hoc modules: Average number of overtime hours of employees, by sex, age and occupation [lfs0\_04avovisco]; Percentage of employees working overtime, by sex, age and occupation [lfs0\_04peovisco].

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Member States the larger share of men on long hours is strongly and positively correlated with a larger share of women on long hours (see Chart 35). The same pattern is visible for overtime work, which suggests the presence of a 'long working hours culture' in some Member States.

While the share of women working long hours correlates negatively, albeit weakly, with the FTER gap<sup>(82)</sup>, it correlates positively and more strongly with female inactivity (see Chart 36). This suggests that there could be a *trade-off* between the existence of a long working

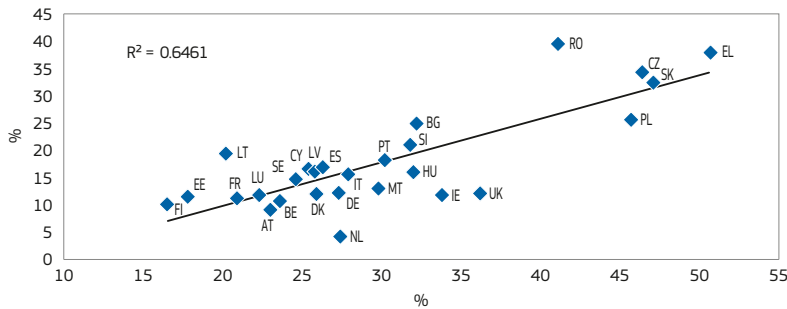
hours culture and female participation, which follows logically from the assumption that work-life balance aspirations influence work choices.

This suggests that a long working hours culture can be a *barrier* and prevent women entering the labour market – especially where relatively little part-time work is available – although, once working, such long female hours can contribute to a smaller gender FTER gap<sup>(83)</sup>.

This means that moving away from rigid *long working hours* regimes could be beneficial for participation where other (mostly family) commitments are present. On the other hand, even when working *non-full-time hours*, there can be large differences in whether relative *shorter or relative longer weekly hours* are prevalent among the female workforce. In several Member States most women work longer hours – either longer part-time or shorter full-time (30–39 hours) while in some others a significant proportion work very short weekly hours (1–19 hours)<sup>(84)</sup>, which correlates positively with a wider FTER gender gap (see Chart 37).

According to the data (available for EU-21 only), it is clear that short weekly hours are more typically worked by young women and/or senior women, compared to those of prime age (25–54)<sup>(85)</sup>. Moreover, there is a rather strong negative correlation between female inactivity and the proportion of women working very short (1–19) hours, suggesting that this type of work can act as a bridge between inactivity and work where there are other

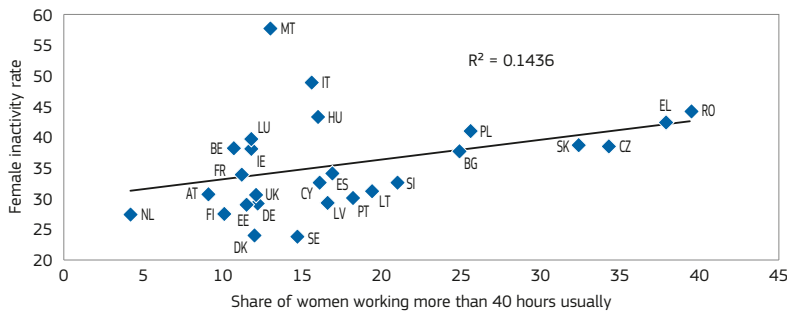
**Chart 35: Correlation between share of men and women usually working more than 40 hours (2010)**



Source: EWCS 2010: How many hours do you usually work per week in your main paid job? (q18).

Note: Correlation coefficient: 0.80. Horizontal axis: share of men; vertical axis: share of women.

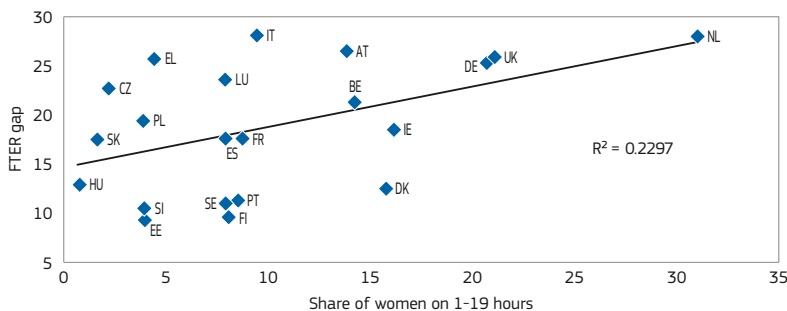
**Chart 36: Correlation between the share of women usually working more than 40 hours and female inactivity rate (2010)**



Source: EWCS 2010: How many hours do you usually work per week in your main paid job? (q18); Eurostat: Inactive population as a percentage of the total population, by sex and age (%) (lfsa\_ipga).

Note: Correlation coefficient: 0.38.

**Chart 37: Correlation between share of women on 1–19 hours and the FTER gap**



Source: OECD, Incidence of employment by usual weekly hours worked in 2011; DG EMPL calculations based on Eurostat, average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [lfsa\_ewhun2], Employment rates by sex, age and nationality (%) [lfsa\_ergan], all Eurostat data for 2012.

Note: Correlation coefficient 0.48; data for EU-21.

<sup>(82)</sup> Correlation coefficient: -0.11.

<sup>(83)</sup> OECD (2011) quotes (Luci and Thévenon, 2011) pointing out that workplace practices, such as long working hours and working weeks make it harder to match work and care commitments. Gash (2007) also underlines, that countries with a long working hours culture are more likely to have worker-carers working part-time, through long working hours acting as a constraint to moving to full-time.

<sup>(84)</sup> In the Netherlands over 30% of total female workers work below 20 hours a week, while in the UK and in Germany the ratio exceeds 20%: see Annex II, Chart A.11.

<sup>(85)</sup> According to Kjeldstad and Nymo (2012), work with short hours attracts both men and women when they are young or older. They conclude that this type of contract provides a rational and flexible solution for both employers (matching labour input to changing workload) and employees (enabling young people, who are mostly not solely dependent on income from own work, to build a stepping stone to a career, while for older workers it may provide a gradual transition to retirement). See Annex II, Chart A.12.

commitments <sup>(86)</sup>. However, in some Member States, a relatively larger proportion of *prime age females* (25–54) work 1–19 hours (especially compared to men) <sup>(87)</sup> (see Chart 38).

This suggests that, while *moving away from a long working hours culture* could

help improve the work-life balance for women with care activities, and therefore be beneficial for female participation decisions, *minimising* the share of *prime-age female workers* without parallel commitments on very short non-full-time hours could help diminishing the gender FTER gap further. Moving away

from a long working hours culture could also be beneficial in terms of a *father's work-life balance*, and thus contribute to the involvement of fathers in care activities <sup>(88)</sup>.

#### 4.2.2. ...but flexibility of work arrangements is also influential on work-hour choices

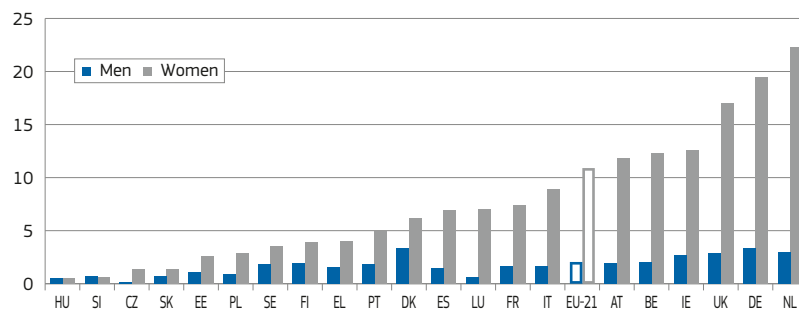
As addressed in the previous section, it is not just the volume of working time but also the perceived flexibility regarding work arrangements that influences work-life balance, and thus choices regarding work, to the extent that it makes it possible to *adjust* work schedules to non-work commitments.

Rigid work schedule arrangements – measured by the share of workers on work schedules entirely set by the employer – tend to affect the female workforce to a greater extent in most Member States (with a few exceptions, such as Romania, Portugal, Germany, Sweden, Luxembourg and the Netherlands), adding to the potential work-life balance reconciliation constraints that the female workforce faces <sup>(89)</sup>.

It should be noted, however, that there is some positive, albeit weak, correlation between flexibility and work-life stress. This might be explained by the fact that flexibility can increase work-life stress if it leads to unclear boundaries between work and private life, as already underlined in section 2. Nevertheless, the much stronger positive correlation between the *rigidity of working schedules* and *work-life stress* (Chart 39, bottom chart) suggests that flexible scheduling still leads, in general, to more strongly perceived work-life balance.

As with the volume of working time, flexibility appears to have a *twofold consequence*. On the one hand, rigidity

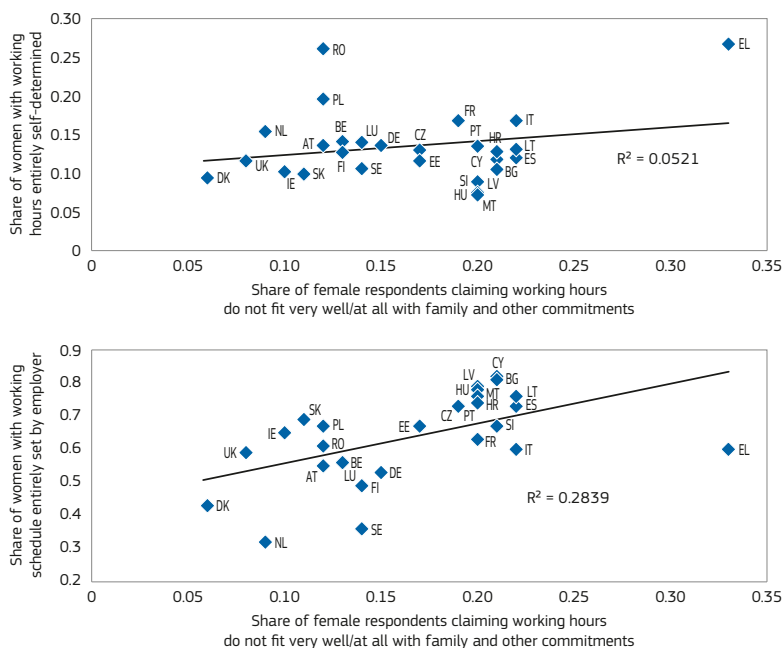
Chart 38: Share of women and men on 1–19 hours usual weekly hour bands in 2011



Source: OECD, Incidence of employment by usual weekly hours worked.

Note: Age group: 25–54.

Chart 39: Correlation between flexibility of working schedules and work-life stress (top chart) and between the rigidity of working schedules and work-life stress (bottom chart) for women



Source: EWCS 2010, Q39 How are your working time arrangements set? Q41 In general, do your working hours fit in with your family or social commitments outside work very well, well, not very well or not at all well?

Note: Correlation coefficients: top chart: 0.23; bottom chart: 0.53.

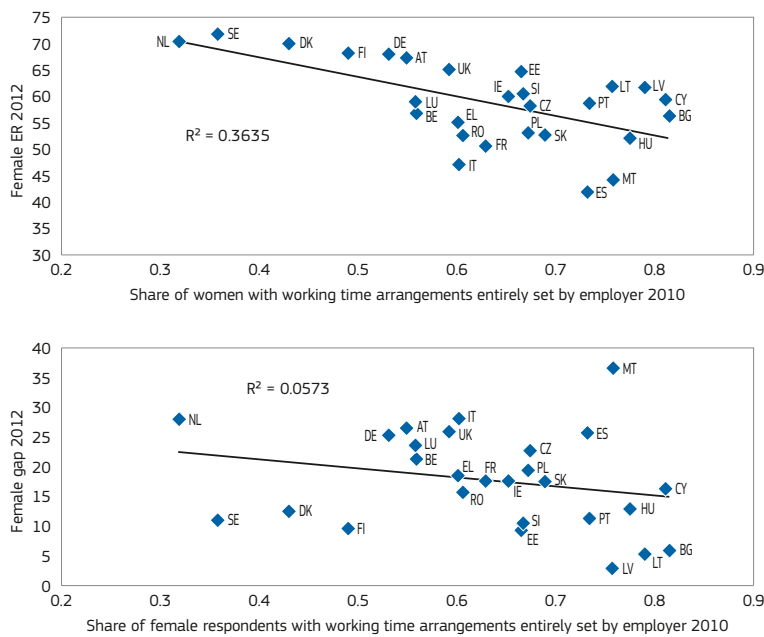
<sup>(86)</sup> Correlation coefficient: –0.44 (data was available only for EU-21).

<sup>(87)</sup> While non-full-time longer weekly hours worked may be seen as preferential compared to non-full-time short weekly hours in terms of addressing the FTER gap, they may also be preferential from a productivity point of view, as suggested by Cataldi *et al.* (forthcoming), who find that long part-time workers are significantly more productive than short part-time and full-time workers.

<sup>(88)</sup> In this respect Kitterod & Pettersen (2006) point to the over-representation of men in professions with long working hours that may limit men's possibilities for more active fathering. This finding, together with a finding of Kitterod *et al.* (2011) implying that 'a prerequisite for more full-time involvement among mothers of young children may be a greater household involvement of fathers' point to the importance of influence of long hours on fathers' involvement (see the next section for more details on the division of paid and unpaid work).

<sup>(89)</sup> See Annex II, Chart A.1.3.

**Chart 40: Correlation between the rigidity of working schedules for women and female ER (top chart) and the rigidity of working schedules for women and FTER gap (bottom chart)**



Source: EWCS 2010; Q39 How are your working time arrangements set? DG EMPL calculation based on Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [lfsa\_ewhun2], Employment rates by sex, age and nationality (%) [lfsa\_ergan]. Note: Correlation coefficients: -0.60 (top chart); -0.24 (bottom chart). HR excluded.

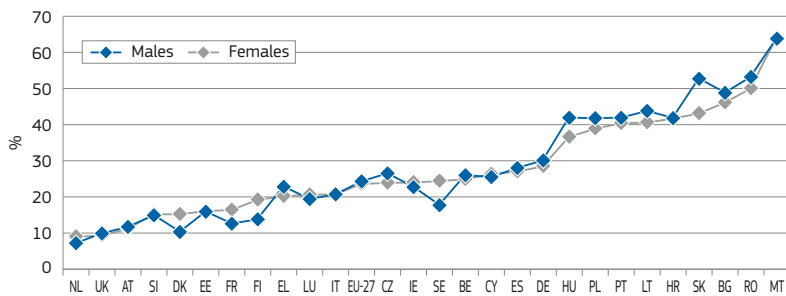
is negatively correlated with the FTER gap, albeit weakly, while there also seems to be a stronger, negative correlation with the female employment rate (see Chart 40). This suggests that rigid work organisational systems and the absence of control by employees over their work schedules can have a negative impact on female participation.

This, again, suggests that, for females who are facing reconciliation issues, flexible workplace practices can be helpful when making decisions about participation. Based on the strength of correlation, potential gains (in terms of participation) could outweigh losses (in terms of hours). The importance of flexibility in terms of working hours related to family reasons is underlined also by the negative correlation between the possibility of varying start or stop times to match family requirements and work-life stress <sup>(90)</sup>.

While this flexibility is strongly positively correlated with the share of part-time work <sup>(91)</sup> – suggesting that it is more widespread in those countries where other types of flexibility are more common – and thus positively correlated with the FTER gap <sup>(92)</sup>, it is also quite strongly positively correlated with female employment <sup>(93)</sup> and negatively with female inactivity <sup>(94)</sup>, suggesting that it could be an influential factor in terms of female participation decisions.

The evidence from Charts 41 and 42 suggests that, in most Member States, flexibility is either an option for both sexes or for neither, suggesting that different flexibility 'cultures' and/or

**Chart 41: Share of respondents who do not have any kind of possibility to vary start and/or stop of their working day for family reason in 2010**



Source: Eurostat, Employees by their perceived possibility to vary start and/or stop of the working day for family reasons (1 000) [lfsa\_10fposste]; 2010 Ad Hoc module. Note: No data available for Latvia.

<sup>(90)</sup> Source: Eurostat: Employees by their perceived possibility to vary start and/or stop of the working day for family reasons (1 000) [lfsa\_10fposste]; EWCS 2010 Q41 In general, do your working hours fit in with your family or social commitments outside work very well, well, not very well or not at all well? Note: Correlation coefficient: -0.44.

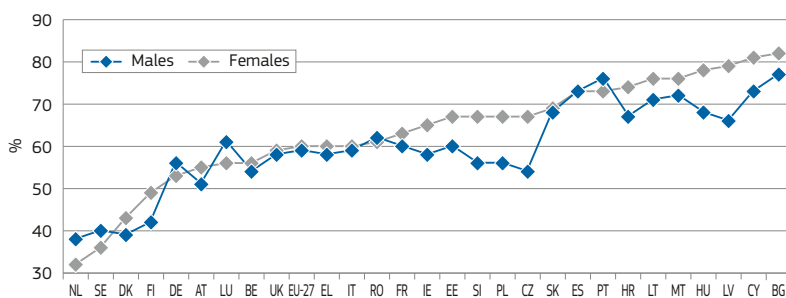
<sup>(91)</sup> The correlation coefficient between the share of females claiming that varying start and/or stop working day as of family reasons is generally possible for them and the share of female part-timers in female employment is 0.74. Source: DG EMPL calculation based on Eurostat Ad Hoc module 2010: Reconciliation between work and family life (lfsa\_10); Employees by their perceived possibility to vary start and/or stop of the working day for family reasons (1 000) [lfsa\_10fposste]; Part-time employment as percentage of the total employment, by sex, age and nationality (%) (lfsa\_eppgan) Note: HR excluded.

<sup>(92)</sup> Correlation coefficient is 0.30.

<sup>(93)</sup> Correlation coefficient 0.52.

<sup>(94)</sup> Correlation coefficient -0.44.

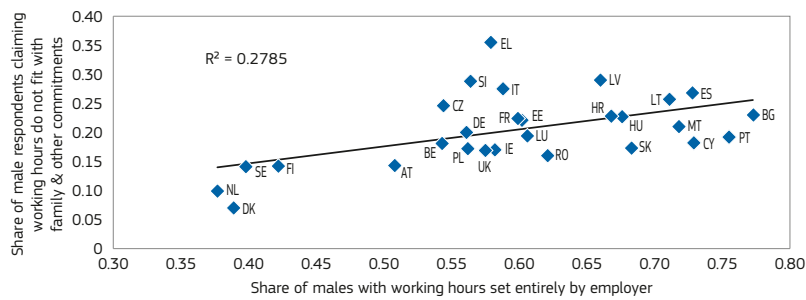
**Chart 42: Share of respondents whose working time arrangements are set entirely by the employer**



Source: EWCS 2010; Q39 How are your working time arrangements set?



**Chart 43: Respondents with working hours entirely set by employer and respondents claiming their work hours do not fit their family and other commitments among men**



Source: EWCS 2010, Q39 How are your working time arrangements set? Q41 In general, do your working hours fit in with your family or social commitments outside work very well, well, not very well or not at all well?

Note: Correlation coefficient: 0.53.

typical organisational norms, appear to exist across countries, similarly to the existence of typical 'working hours cultures' as described in the previous section.

Rigidity can hamper *male work-life balance* as well as female participation, as reflected by Chart 43, which shows a positive correlation between the share of employer-set schedules and work-life stress levels of males, all of which could adversely affect out of work activities (such as care-related activities), act as an obstacle to role sharing, and contribute to re-enforcing existing gender roles.

### 4.3. Division of unpaid work within a couple is significantly influencing female paid working hour choices

Compared to men, women devote a significantly larger part of their time to unpaid household work, including caring for children, for sick household members, and for the elderly<sup>(95)</sup>, all of which contributes to fewer female hours of paid work. Chart 44 shows that, for all the Member States, the share of males in *total* unpaid working time is below 50%, while the share in *total* paid working time is above 50%.

Nevertheless, some Member States have a more gender-equal sharing of paid and unpaid work than others. Slovenia, the Baltic States and the Nordic States show the highest male involvement in unpaid work, while the male share in paid working time is not much above 50%. In

some Member States, however, the relative higher share of male unpaid working time goes together with a relatively high share of male paid working time, which may reflect the fact that a large share of females work part-time, as in the United Kingdom and the Netherlands.

Many factors influence the allocation of time between paid and unpaid work, being partly driven by individual preferences, cultural and societal attitudes towards *traditional gender roles* (men as breadwinners and women as carers)<sup>(96)</sup>. Nonetheless, it can be argued that it is the presence or absence of *adequate policy measures* such as affordable childcare and/or the possibility for flexible employment opportunities that can ultimately determine outcomes, whatever the nature of the preferences.

*Family models* are important in determining individual preference formation and the gender division of paid and unpaid work<sup>(97)</sup>, but this division

<sup>(96)</sup> The 'hegemonic masculinity' concept, for instance, is seen as a cultural norm that connects men to power and economic achievements European Commission (2012f). The gender identity hypothesis by Akerlof and Kranton (2000) points to the presence of traditional societal prescriptions forming individual choices, while the preference theory of Hakim (2004) argues for the existence of pre-existing home-centred preferences for some women (as opposed to a carrier-preferences for others).

<sup>(97)</sup> Fernandez *et al.* (2002) point out that those men who have experienced family life with a working mother will have a more positive attitude towards working women and be more inclined to marry women who themselves were skilled or who worked. They argue that this evolution of male preferences has contributed to the dramatic increase in the proportion of working and educated women in the population over time. Moreover, working mothers can positively affect the future labour supply of any daughters through their attitudes towards work (Del Boca *et al.* (2000)).

between couple households is also likely to be influenced by the practical issue of the *relative wage* that each partner can command and the perceived longer-term cost of taking time out of work to care for children<sup>(98)</sup>. In so far as women are second earners in a household, it is therefore more likely that they will reduce their working hours or temporarily withdraw from the labour market in such cases.

Beside issues of traditional gender roles, public policies and relative wage considerations, there are others that can influence or distort the division of paid and unpaid work, such as *occupations*<sup>(99)</sup> and *organizational cultures*<sup>(100)</sup>.

Veerle (2011) found a strong negative correlation between a country's female employment rate and the average unpaid working time of women when seen from a cross-country perspective across OECD countries. At the same time, there is some substitution between female paid work and male unpaid work: the higher the female employment rate, the more men are engaged in unpaid work. According to the available data, this finding is confirmed for the EU Member States, as indicated on Chart 45.

This evidence suggests that policies that contribute to a *more equal intra-household sharing of unpaid work can facilitate better female employment*

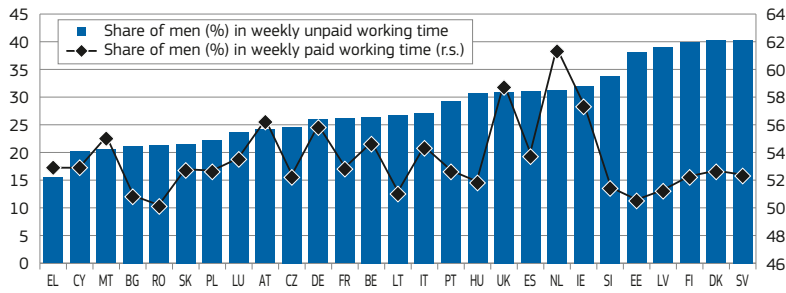
<sup>(98)</sup> OECD (2010).

<sup>(99)</sup> Kjeldstad and Nymoen (2012) quoting Abrahamsen (2002) concluding that while female-dominated workplaces in Norway are often characterised by a great variety of working-time norms and practices, many male-dominated occupations are characterised by predominantly negative attitudes towards part-time work.

<sup>(100)</sup> Plantenga *et al.* (1999) quotes Gregory and Milner (2006, 2008) who point to 'organisational career cultures' that prevent men from overtly choosing a work-life balance that might harm their career, thereby reinforcing the traditional separation of gender roles. According to European Commission (2012f). The care-giving role of men is more associated with a downwards social mobility, compared to the upwards social mobility associated with women's increased presence in professional work. Lack of social recognition by employers, work pressure (culture of overtime) and a fear of adverse effects on the career could all act contrary to increased male engagement.

<sup>(95)</sup> See, for instance, OECD (2012).

**Chart 44: Share of men (%) in total weekly unpaid and paid working time**



Source: European Commission (2012f), Annex 4.1 Average weekly paid and unpaid working time by gender, by country, 2010 <sup>(1)</sup>.

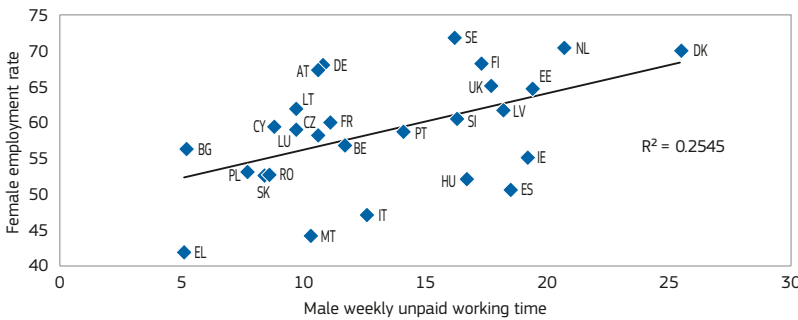
Note: No data were available for Croatia.

<sup>(1)</sup> European Commission (2012f), p. 200.

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**Chart 45: Correlation between the employment rate (%) of women and male weekly unpaid working time (hours)**



Source: European Commission (2012f), Annex 4.1 Average weekly paid and unpaid working time by gender, by country, 2010.

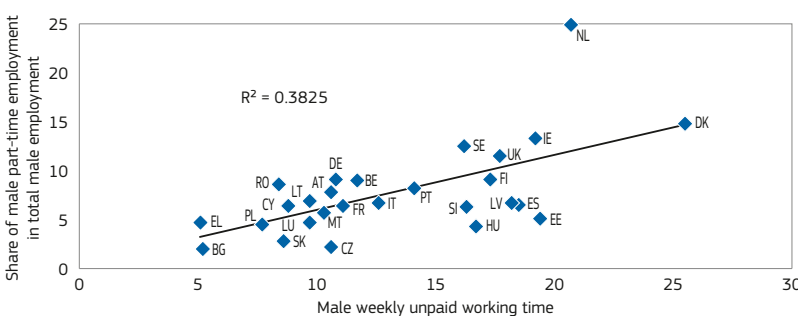
Note: No data was available for Croatia. Eurostat: Employment rates by sex, age and nationality (%) [lfsa\_ergan].

Note: Correlation coefficient: 0.50.

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**Chart 46: Correlation between male engagement in unpaid work and the share of male part-time employment**



Source: European Commission (2012f), Annex 4.1 Average weekly paid and unpaid working time by gender, by country, 2010, Eurostat, Part-time employment as a percentage of the total employment, by sex, age and nationality (%) (lfsa\_eppgan).

Note: No data for Croatia were available; data for part-time male employment are for 2012; Correlation coefficient: 0.62.

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outcomes <sup>(101)</sup>. This could be helped, for instance, through a more *gender balanced parental leave system*, including parts available for fathers, which could be expected to encourage engagement in care-related activities <sup>(102)</sup>. In several Member States paternity leave already exists for the exclusive use of fathers, ranging from just a few days up to 90 days in Slovenia and, in most Member States, a part of the parental leave is transferable between parents <sup>(103)</sup>. In spite of this, it is still mostly the mothers who take the leave, while the take-up rate of fathers is still low in most Member States.

At the same time, part-time work/reduced work hours and flexible working arrangements could also be provided *for those men who face care-related duties*, and it could contribute to a more equal sharing of paid and unpaid work between partners. In this respect the Chart 46 shows a rather strong positive correlation between male engagement in unpaid work and the share of male part-time employment.

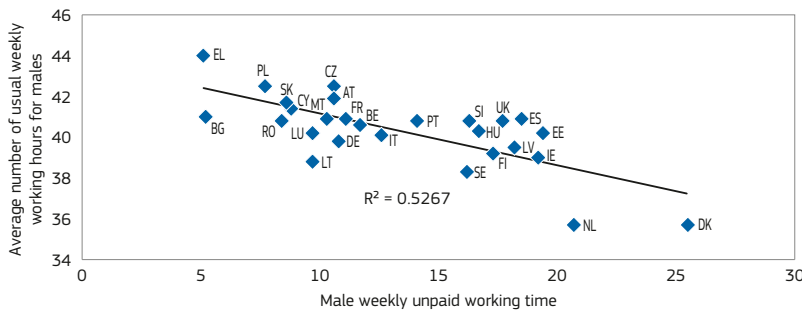
At the same time, and recognising that correlation does not necessarily imply causality, it does appear that a long work hours culture seems likely to prevent fathers engaging in unpaid work, given the negative correlation between average male weekly working hours and male engagement in unpaid work, as well as the further negative correlation between the rigidity of working time arrangements and engagement in unpaid work, as shown in Charts 47-48.

<sup>(101)</sup> OECD (2011), for instance, quotes Dex (2010), who suggests that such policies are likely to be most effective if they intervene at points in time when men are most open to changing their behaviour – for example when they become fathers. DG JUST (2012) points to improved contact with children, satisfaction with life, relationship satisfaction, and other positive effects for men through their participation in care tasks and domestic work at home. This participation in domestic tasks is also strongly associated with women's relationship satisfaction, general well-being, and happiness. (They quote Bauer, (2007); Holter, Svare & Egeland, (2009); Scott, Dex & Plagnol, (2012)).

<sup>(102)</sup> OECD (2011) underlines that 'A strategy combining various elements, possibly including greater opportunities for flexible use of leave, increased payment rates for shorter duration, and an increase in the non-transferable paternal entitlement to paid leave will increase the chances of more equal leave sharing between mothers and fathers' (idem, p. 131).

<sup>(103)</sup> See European Commission (2012f), Annex 9 for an extensive overview of parental leave systems in the Member States: pp 216-268.

**Chart 47: Correlation between the weekly unpaid working time (hours) of men and the average number of usual working hours of men**



Source: European Commission (2012f), Annex 4.1 Average weekly paid and unpaid working time by gender, by country, 2010, Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [Ifsa\_ewhun2].

Note: Weekly hours are for 2012 except for the Netherlands (2011); no data were available for Croatia on weekly male unpaid working time, Correlation coefficient: –0.73.

## 4.4. Financial disincentives can contribute to second earners working less hours

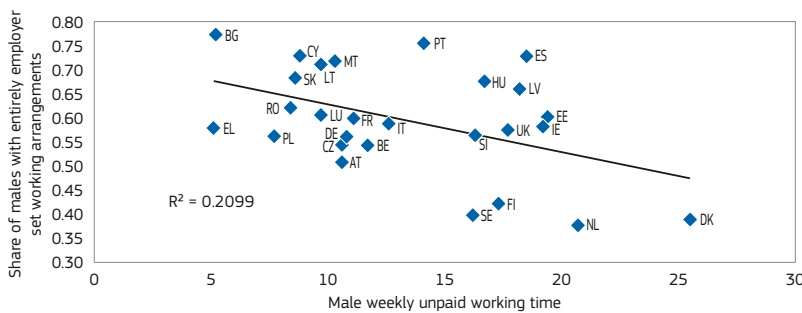
Empirical studies generally find that partnered women have a more elastic labour supply, meaning that they are more likely to react to financial incentives or disincentives than men <sup>(104)</sup> (or single women).

Two factors help to explain this. First, the labour supply decision of married women is likely to be partly a *conditional* decision related to that of their spouse. A further explanation may be that women often enter or exit the work force in order to *adjust* family income to overall needs. Moreover, women arbitrate between leisure, labour and the *home production of goods and services* (including caring for their children). In effect, children increase the elasticity of the female labour supply to the market wage in as far as they provide both the demand and opportunities for home production <sup>(105)</sup>.

Work by OECD (2008) has pointed out that the marginal tax burden *on working longer hours* can trap people in shorter working hours jobs as increases in tax rates, or losses of benefits can increase the marginal effective tax rate (METR) of second earners when increasing their working hours <sup>(106)</sup>.

Available data indicates that when second earners increase their working hours – for example moving from part-time to full-time work, proxied by moving from 50% of the average wage to 100% – the marginal effective tax rates can exceed 40% in some Member States (for instance in Austria, Netherlands, Slovenia, Germany, Belgium) although in some it is lower, at around 30% <sup>(107)</sup>.

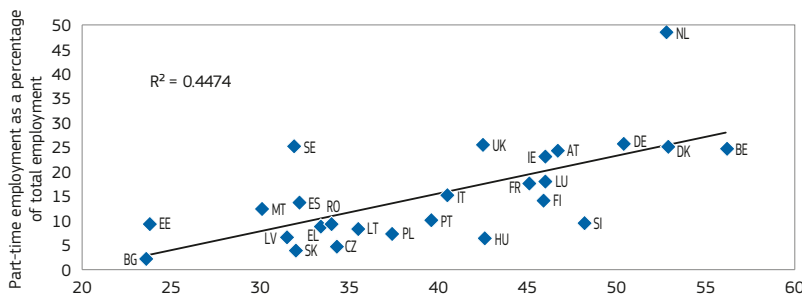
**Chart 48: Correlation between the weekly unpaid working time (hours) of men and the share of men who have working arrangements entirely set by their employer**



Source: European Commission (2012f), Annex 4.1 Average weekly paid and unpaid working time by gender, by country, 2010; EWCS 2010, Q39 How are your working time arrangements set?

Note: No data were available for Croatia; Correlation coefficient: –0.46.

**Chart 49: Correlation between marginal effective tax rate when increasing 50% of AW to 100% of AW and share of part-timers in 2011**



Source: OECD tax benefit model.

Note: no data were available for CY and HR; Correlation coefficient: 0.67.

<sup>(104)</sup> See Evers *et al.* (2008).

<sup>(105)</sup> See Jaumotte (2004).

<sup>(106)</sup> Moreover, OECD (2010) notes that, for low wage part-timers, the tax and benefit system can substantially reduce the payoff from taking up a full-time job in so far as the increase in total gross earnings is offset by increased social contributions or income taxes and reduced social transfers. If means tested benefits are withdrawn at higher rates as earnings increase it can also severely reduce the financial return from working longer hours.

<sup>(107)</sup> See Annex II, Chart A.14.

The data nevertheless confirm some positive correlation between the share of part-time workers and the average METR when moving from part-time to full-time jobs (see Chart 49).

Although the elasticity with respect to the decision to *participate* <sup>(108)</sup> exceeds the elasticity of the decision regarding hours worked <sup>(109)</sup>, based on available data, the average effective tax rate (AETR) is around 30% for most Member States, exceeding 40% only in four cases (Slovenia, Germany, Denmark, Belgium) <sup>(110)</sup>.

*Childcare costs* also have a negative influence on both full-time and part-time female employment by increasing the total effective financial burden on mothers <sup>(111)</sup> EGGE (2009b) <sup>(112)</sup>. Several studies on the relationship between childcare costs and availability and labour force participation indicate that, when costs go down, labour force participation goes up, especially among mothers. OECD (2011) has also suggested that high childcare costs are often the reason for high AETRs and limited financial incentives to work. According to Chart 50, based on their data for 2008, childcare costs can raise the otherwise relative low total effective tax burden quite considerably, or add to the already high tax burden of parents. The former situation was found to exist in the UK and Ireland, while the latter was the case in Denmark and Germany.

Finally, the existence of the *gender pay gap* also needs to be recognised as a disincentive for female work. While there is a part of the pay gap that can, in theory, be accounted for by differing objective characteristics of women and men in the labour market, such as their shorter lengths

<sup>(108)</sup> That is the elasticity on the extensive margin.

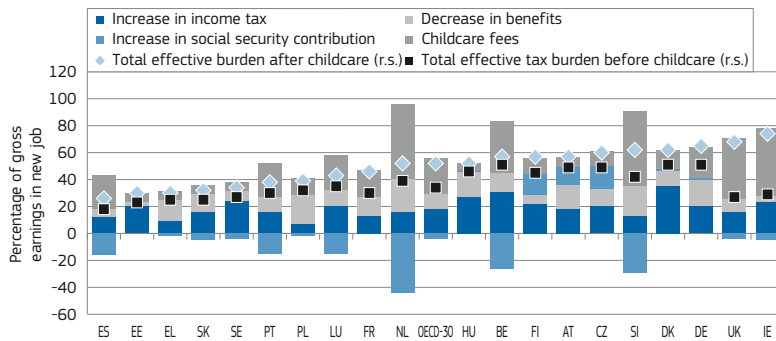
<sup>(109)</sup> That is the elasticity on the intensive margin. Evers *et al.* (2008) p. 26.

<sup>(110)</sup> See Annex II, Chart A.15.

<sup>(111)</sup> Jaumotte (2004), for instance, refers to a number of micro-econometric studies that found a negative elasticity of female labour force participation (or employment) to childcare costs, such as for instance Blau (2000) or Anderson and Levine (2000).

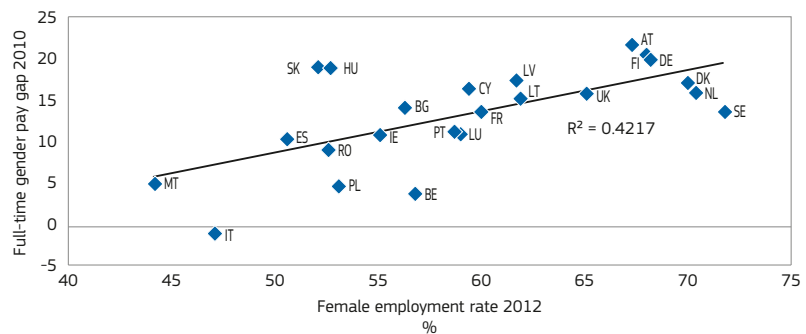
<sup>(112)</sup> For Germany, they quote Büchel and Spieß (2002a, 2002b) who, for example, show that extensive childcare possibilities intensify the labour market participation rate of mothers, above all in the former West Germany. For the Netherlands, they refer to Euwals *et al.* (2007) who show that, between 1992 and 2004, the participation of women in the labour market became less reliant on the presence of children which the authors attribute to an increase in the affordability and availability of childcare.

**Chart 50: Net transfers to government (percentage of gross household earnings) and childcare fees, for couples with two children aged 2 and 3, in 2008 - Families where both parents earn 100% of the average worker earnings**



Source: OECD (2011), Chapter 4.

**Chart 51: Correlation between full-time gender pay gap and the employment rate of women**



Source: Eurostat Gender pay gap in unadjusted form by working time in% – NACE Rev. 2, B-S excluding O (Structure of Earnings Survey methodology) [earn\_gr\_gpgr2wt].

Note: No data was available for CZ, EE, SI, EL; Correlation coefficient: 0.65.

of service, more frequent career breaks, etc., much remains that cannot be explained in this way <sup>(113)</sup>. Some argue, moreover, that the pay gap can lead to inefficiency in as far as women's labour is misallocated because it is not valued the same as equivalent male labour, resulting in women being less likely to devote time to paid employment <sup>(114)</sup>.

Furthermore, lower relative wages of women create a vicious circle in which

<sup>(113)</sup> For example, part can be accounted for by the undervaluation of the jobs typically done by women, or by traditions and gender stereotypes that influence self-perception, educational and professional choices (and/or preferences) made by young and adult females. In practice, research studies suggest that, even with all characteristics being equal (same length of service, same age, working in the same sector, same occupation and same level of education, etc.), women generally earn less than men – the so-called unexplained part in the pay gap which does not result from identifiable differences in characteristics observed, see Andersons *et al.* (2001) and Belgian Presidency Report (2010).

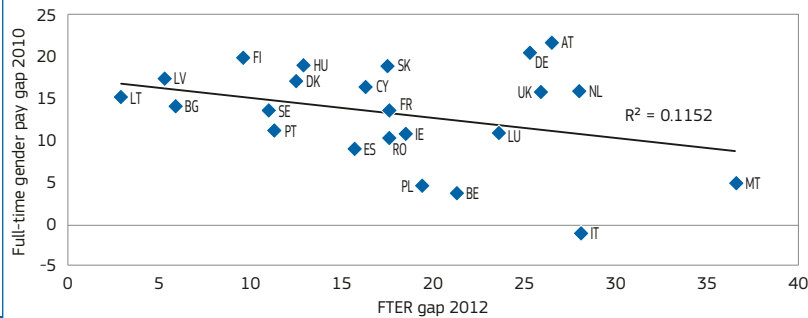
<sup>(114)</sup> See Anderson *et al.* (2001).

the wage gap encourages more women to perform unpaid work in a couple, resulting in more absences from the labour market, which lead, in turn, to lower pay <sup>(115)</sup> making the pay gap both a consequence and a cause of the lower hours worked by women.

The gender pay gap differs between the Member States and between full-time and part-time jobs. While the gap with respect to part-time work is highest in Spain, Portugal and Croatia, for

<sup>(115)</sup> See Belgian Presidency report (2010).

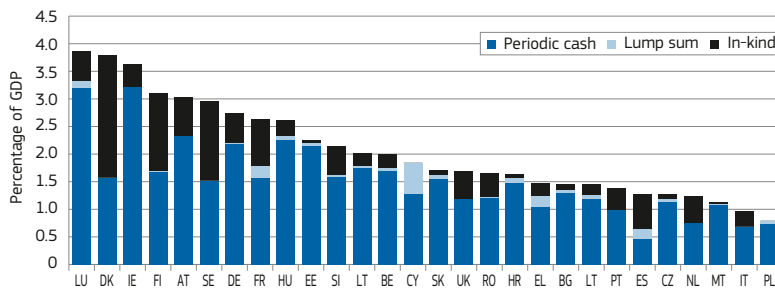
**Chart 52: Correlation between the full-time gender pay gap and FTER**



Source: Eurostat Gender pay gap in unadjusted form by working time in % – NACE Rev. 2, B-S excluding O (Structure of Earnings Survey methodology) [earn\_gr\_gpgr2wt].

Note: No data was available for CZ, EE, SI, EL; Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [lfsa\_ewhun2]; Employment rates by sex, age and nationality (%) [lfsa\_ergan]; Correlation coefficient:  $-0.34$ .

**Chart 53: Social protection expenditure in the Member States in 2010**



Source: Eurostat; Tables by benefits – family/children function [spr\_exp\_ffa].

Note: Periodic cash benefit = Income maintenance benefit in the event of childbirth + Periodic parental leave benefit + Family or child allowance + Other periodic cash benefits.  
Lump sum benefit = lump sum cash benefits.

In-kind benefit = Child day care + accommodation + home help + other benefits in kind.

most Member States the gender pay gap for full-time positions exceeds that for part-time, with the highest gaps found in Finland, Germany and Austria <sup>(116)</sup>.

No strong correlation can be seen between the part-time gap and the part-time/full-time share or between the full-time pay gap and part-time/full-time shares. However, the full-time pay gap correlates negatively with inactivity, and positively with the employment rate (see Chart 51), which may suggest a ‘selection effect’ whereby the low proportion of women working is made up mainly of more highly educated women with strong attachments to the labour market <sup>(117)</sup>.

<sup>(116)</sup> See Annex II, Chart A.16.

<sup>(117)</sup> See for instance: Smith (2010).

## 4.5. Appropriate childcare contributes to maternal employment

It is clear that various types of *public expenditure* related to families and children can influence female labour market activity. According to Jaumotte (2004), childcare subsidies and public spending on childcare can increase the female labour supply since they reduce the relative price of childcare and increase the relative return of paid work. Child benefits (lump-sum transfers) have a strong income effect, thereby decreasing family labour supply, although they may well have important positive social benefits. Paid parental leave also has a positive impact on female participation, though other researchers have found <sup>(118)</sup> that the marginal effect becomes negative after very long periods of parental leave.

<sup>(118)</sup> See OECD (2011) pp. 139–140.

The Member States maintain different systems and different levels and combinations of social spending with respect to family and child support. As the Chart 53 shows, for most Member States, periodic cash benefits constitute the bulk of spending, while some place more emphasis on benefits in kind such as child day-care (for instance Denmark, Finland or Sweden). Lump sum cash benefits are generally of less importance, except in a few Member States (Cyprus, France, Greece or Spain).

Lump-sum cash benefit expenditures correlate negatively with part-time employment <sup>(119)</sup> (suggesting the income effect might be stronger for part-time work) while there is almost no correlation with the employment rate of women with children. Periodic cash benefits (such as periodic parental leave benefit and family or child allowance) correlate positively, but weakly, with both the employment rate and the part-time employment rate <sup>(120)</sup>. However, in-kind benefits (mostly incorporating child day care) seem to show a *strong correlation with the employment rates of mothers* <sup>(121)</sup> (even stronger than with the share of part-time employment <sup>(122)</sup> adding to the view that appropriate child day care could contribute effectively to both work-life reconciliation and the transition to full-time work (see Chart 54).

According to OECD (2008 and 2010) <sup>(123)</sup>, it is not just the availability of childcare but its *quality and flexibility* that is likely to influence the employment participation decisions of parents, with widely available full day and after-school care making it easier for parents in the Nordic countries and France to work

<sup>(119)</sup> Correlation coefficient:  $-0.21$  Source: Eurostat, Tables by benefits - family/children function [spr\_exp\_ffa], Employment rate by sex, age groups, highest level of education attained and household composition (%) [lfst\_hheredy]; Percentage of part-time employment by sex, age groups and household composition [lfst\_hhptety]; Data is for 2010.

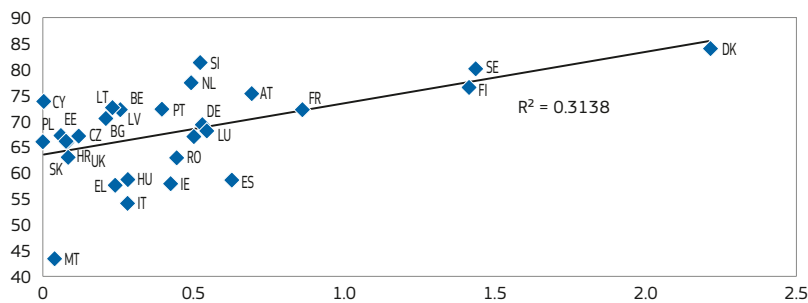
<sup>(120)</sup> Correlation coefficients are 0.1 and 0.18 respectively. Source as above.

<sup>(121)</sup> Correlation coefficient: 0.56. Source as above.

<sup>(122)</sup> Correlation coefficient: 0.24. Source as above.

<sup>(123)</sup> OECD (2008) and (2010) refer to several further empirical studies that underline this point. For example, they mention Del Boca and Vuri (2007) who show that rationing in the Italian market for child care is a more important limitation on women's labour force participation than cost, or Wrohlich (2009) who finds similar results for Germany and estimates that a reform to increase the availability of child care places at the existing price would increase the labour supply by more than one that reduced parents' child care fees for existing places.

**Chart 54: Correlation between spending on in-kind benefits (% of GDP) and the employment rate of adult women with children (2010)**



Source: Eurostat, Tables by benefits – family/children function [spr\_exp\_ffa], Employment rate by sex, age groups, highest level of education attained and household composition (%) [lfst\_hheredty].

Note: Correlation coefficient: 0.56.

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full-time, whereas in Austria, Germany or Luxembourg, kindergartens typically operate short days or have long breaks that may not be compatible with full-time work.

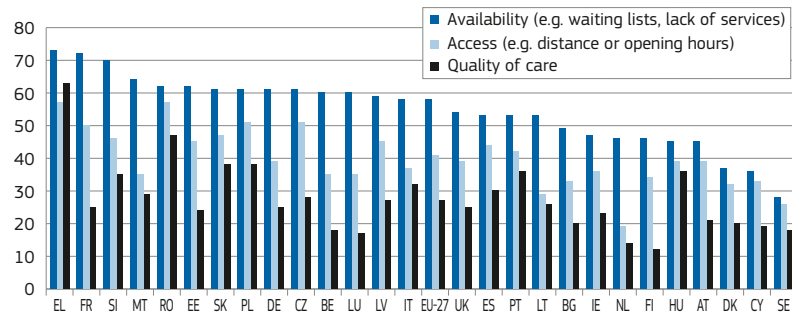
Availability and affordability is crucial according to EGGE (2009b) as well, which also quotes several national studies confirming the relation between childcare availability and maternal employment <sup>(124)</sup>.

Many users of childcare services report problems (see Chart 55). Based on EQLS 2012 data <sup>(125)</sup>, as the chart shows, availability problems were particularly widely reported in Greece, France and Slovenia, while issues of access or the quality of care are widely reported in Greece, Romania, Poland and the Czech Republic.

The availability, access and quality of childcare are all negatively correlated with the employment rate of females with small children <sup>(126)</sup> (and thus show a positive correlation with the FTER gap).

Enrolment rates into formal childcare vary greatly among the EU Member States. Children below 3 years of age tend not to be enrolled in formal care in several Member States (Malta, Lithuania,

**Chart 55: Reasons for difficulties concerning the usage of childcare (%)**



Source: EQLS 2012, Based on Q55: To what extent did each of the following factors make it difficult or not for you, or someone close to you, to use childcare services? The proportion of people reporting difficulties in accessing childcare services on various reasons.

Note: No data were available for HR.

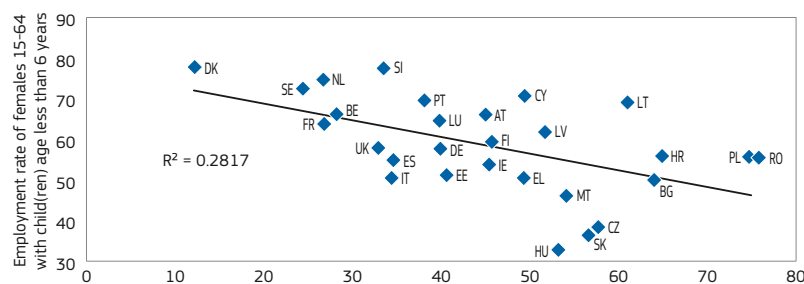
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<sup>(124)</sup> For Hungary, they refer to a study (Frey 2002) where 80% of the respondents mentioned the lack of available childcare services as a major explanatory factor for their inactivity. In the United Kingdom, an estimated half of all non-working parents said they would take up employment if they could obtain good-quality, affordable and reliable childcare (EGGE quoting Bryson *et al.*, 2006). Likewise, a study in Spain showed that increases in the price of paid care services reduced the likelihood of labour participation of the mother (EGGE quoting Borra, 2006). A Polish study shows that, among such variables as education, age structure, maternity leave, institutionalised childcare, public transport, level of urbanisation and socio-cultural traits, the most important factor affecting women's professional activity rates was the availability of childcare. (EGGE quoting Mickiewicz and Bell, (2000)).

<sup>(125)</sup> See 3<sup>rd</sup> European Quality of Life Survey (2012) p. 124.

<sup>(126)</sup> Correlation coefficients are -0.32 - 0.50 and -0.47 respectively. Source: EQLS 2012, Based on Q55: To what extent did each of the following factors make it difficult or not for you, or someone close to you, to use childcare services? The proportion of people reporting difficulties in accessing childcare services on various reasons. Eurostat, Employment rate of adults by sex, age groups, highest level of education attained, number of children and age of youngest child (%) [lfst\_hheredch]; Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) - hours [lfsa\_ewhun2], Employment rates by sex, age and nationality (%) [lfsa\_ergan], Note: No data were available for HR for childcare difficulties.

**Chart 56: Correlation between the non-enrolment rate of age group below 6 years and the employment rate of women with children less than 6 years old in 2011**

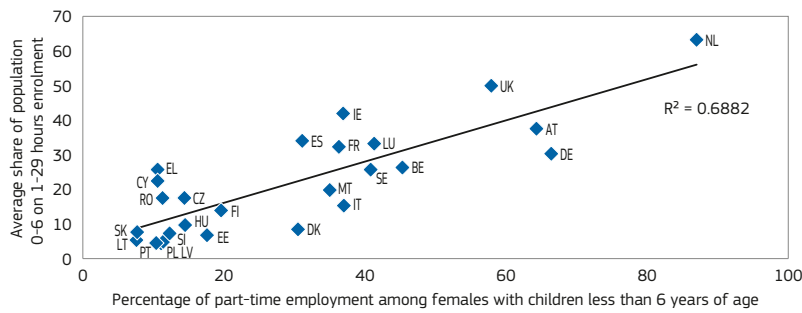


Source: DG EMPL calculation based on Eurostat, Formal childcare by age group and duration – % over the population of each age group (source: EU-SILC) [ilc\_caindformal]; Employment rate of adults by sex, age groups, highest level of education attained, number of children and age of youngest child (%) [lfst\_hheredch], Population on 1 January by age and sex [demo\_pjan].

Note: Enrolment rates were broken down for age groups 0–3 and 3–minimum compulsory education. We proxied the corresponding population with ages less than 1 year old – 6 years old. Correlation coefficient: - 0.53.

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**Chart 57: Correlation between the short-enrolment rate of age group below 6 years and the part-time employment rate of women with children less than 6 years old in 2011**



Source: DG EMPL calculation based on Eurostat, Formal childcare by age group and duration – % over the population of each age group (source: EU-SILC) [ilc\_caindformal]; Percentage of part-time employment of adults by sex, age groups, number of children and age of youngest child [lfst\_hhptechi], Population on 1 January by age and sex [demo\_pjan].

Note: Enrolment rates were broken down for age groups 0–3 and 3–minimum compulsory education. We proxied the corresponding population with ages of less than 1 year old – 6 years old. Correlation coefficient: 0.83. No data were available for HR and BG.

Hungary, Bulgaria, the Czech Republic, Slovakia, Poland, and Romania). However, children above 3 years of age are much more likely and thus the share of non-enrolment is very low in most Member States; (with the exceptions of Croatia, Poland and Romania, where non-enrolment is around 50%)<sup>(127)</sup>.

While it is not clear whether this evidence reflects a low preference for childcare and/or institutional constraints, there is a negative relationship between the average share of children aged 0–6 who are not enrolled in formal care, and the employment rate of women with children below 6 years old<sup>(128)</sup> (see Chart 56).

Enrolment hours can also have implications for female participation intensity. On the one hand, there is a positive correlation between the part-time employment of women with children aged less than 6 years old, and the average proportion of children less than 6 years old in formal care of 1–29 hours (see Chart 57). This indicates that, in those Member States where more women work shorter part-time hours, the offer of a formal care system is also lower, which may suggest that women end up working in jobs with fewer hours as a result of only shorter hours of formal care being available. Nevertheless, as enrolment can contribute to the achievement of a work-life balance and overcome the trade-off between

inactivity and part-time employment, it can still be seen as preferential to no enrolment at all from a labour market perspective.

Nonetheless, there is a negative correlation between the share of 1–29 hours formal care and the *full-time employment* to the population ratio of females with children (less than 6 years old)<sup>(129)</sup>. This compares with a positive correlation between 30 hours or more formal care enrolment and the full-time employment to population ratio for females with children<sup>(130)</sup>. This suggests that longer enrolment hours of care tend to be matched in practice with longer working hours of females. This is also reflected by the negative correlation between the share of children on more than 30 hours enrolment in formal care and the FTER gap<sup>(131)</sup>.

## 5. CONCLUSIONS

Women have generally worse labour market outcomes than men, which are reflected by the existence of gender gaps in most labour market variables. Though these gaps have shown certain narrowing tendencies during recent years, it has been mainly as a result of men being hit more by the crisis.

Even though there was a slight increase in the female activity rate during the crisis, the participation of women is still lower than that of men: the well-known

employment rate gap. Moreover, this gap becomes even wider if one calculates the employment rate for full-time equivalents, as even when they are in employment, women tend to work less hours. The gender full-time equivalent employment rate (FTER) gap saw some reduction during the crisis, but the major part persists.

Though it can arise from women's own choices and preferences, the FTER gap can still be associated with societal obstacles and labour market barriers (not to mention the risk of reverse causation in preference formation). Further to narrowing the gender gap in employment rates, gender equality implies that the gap in full-time equivalent employment rates should also be narrowed through dismantling these obstacles and barriers.

The main influencing factors seen as driving the FTER gap are part-time work, working-time regimes, the division of unpaid work, financial incentives and childcare. Some of these factors have a somewhat complex and even contradictory impact on female work. Part-time opportunities, for instance, are important in helping women onto the labour market, but in some cases they can lead to unfilled workforce potentials among women who do not face, or face less care obligations. Once in a job, longer female working hours can contribute to a smaller gender FTER gap; nevertheless a rigid, long working hours culture and the absence of flexible workplace opportunities can be barriers preventing women to enter the labour market.

A long working hours culture and the absence of flexible and/or reduced working hours opportunities however might also prevent fathers to engage in unpaid work and thus they inhibit a more equal share of unpaid activities within households. Financial disincentives stemming either from the tax-benefit systems or from the high cost of childcare still might act as a disincentive to increase working hours or enter work for the second earner in a couple (who are still women in most cases). Appropriate childcare seems to be very beneficial for maternal employment; nevertheless quality, access and availability seem

<sup>(127)</sup> See also European Commission (2013c). See Annex II, Charts A.17–A.18.

<sup>(128)</sup> We proxied the minimum compulsory school age with the age of 6.

<sup>(129)</sup> Correlation coefficient: –0.69.

<sup>(130)</sup> Correlation coefficient: 0.45.

<sup>(131)</sup> Correlation coefficient: –0.44.

still to be posing a challenge to most Member States <sup>(132)</sup>.

Some countries, typically the Nordics, generally perform better – at least compared to the rest of the EU – in most of the above fields (see the Annex I for details), and they correspondingly show better outcomes for the FTER gap and female employment rates.

This suggests that a more effective policy mix can be achieved that contributes to both a higher female employment rate and more total female hours worked; pointing to a gender equal labour market regime <sup>(133)</sup>. Such a policy mix includes relatively gender equal working time regimes with an availability of long part-time positions for

women; the presence of relatively flexible working arrangements; a labour market and/or legislative environment that makes the division of unpaid work possible within a couple, with more men on voluntary part-time positions and a less typical long work hours culture; and employment-friendly childcare with longer enrolment hours.

Nevertheless, some Member States can be associated with the combination of high female employment and low working hours, while some have shown strong patterns of low female employment combined with long working hours. Both outcomes can be associated with a particular policy mix. For example, the latter outcome reflects a relative long working hours culture,

a lack of part-time work, inflexible and rigid working time arrangements, and less employment friendly childcare, all of which may make it harder for women to enter the labour market (and thus they might contribute to higher female inactivity), though once entered, women seem to work longer hours. In the countries with high female employment but low working hours, more part-time work appears to be available, but it is biased towards short part-time work, with a high marginal financial burden of working increased hours and only short hours of formal childcare enrolment available. This suggests some further scope of analysis on the potential importance of the interactions of the influential factors overviewed in the chapter.

<sup>(132)</sup> It should be underlined that this analysis marks only the first step in understanding the influencing factors of the gender FTER gap. However, women as a group are not homogeneous, and analysing sub-group specific outcomes related to the various influential variables could be a scope for further analysis. As Steiber and Haas (2012) underline, for instance, recent literature suggests non-negligible effects of heterogeneity. They quote Del Boca *et al.* (2009), who show that 'employment decisions of less educated women are more strongly affected by parental leave provisions and family allowances, the availability of part-time work and public childcare than is the employment of highly educated women.' This means, as they indicate, that 'neither incentive/support structures for continuous female employment nor sets or constraints to female employment work in the same way for all women'.

<sup>(133)</sup> On the measurement of gender equality in general, the Gender Equality Index created by the EIGE (European Institute for Gender Equality) needs to be mentioned. The Gender Equality Index is a unique measurement tool that synthesises the complexity of gender equality as a multi-dimensional concept into a user-friendly and easily interpretable measure. It is formed by combining gender indicators, according to a conceptual framework, into a single summary measure. It consists of six core domains (work, money, knowledge, time, power and health) and two satellite domains (intersecting inequalities and violence). <http://eige.europa.eu/content/activities/gender-equality-index>.



## ANNEX I: IN-DEPTH PRESENTATION OF CROSS COUNTRY PERFORMANCE REGARDING THE GAP IN FULL-TIME EQUIVALENT EMPLOYMENT RATES

The following section provides a thorough cross-country comparison of the influencing factors of the FTER gap. It is based on the country groups identified in section 3.2.1., based on the outcomes of the gender gap in FTER and the female employment rate in 2012.

The section first presents a detailed overview of the Member States' performance in terms of the hours worked gap, the employment rate gap and the female employment rate based on age cohorts and education. It then identifies input variables for each of the five fields that have been covered above (part-time work, working-hours regimes, the division of unpaid work, financial incentives and childcare) and will systematically overview the different country groups' performances on these fields. The objective is to see whether or not similarly performing Member States have similar patterns and whether any effective policy mix emerges that leads to an effective combination of high female employment rate and low full-time equivalent employment rate gap.

### **Hours worked gap, employment rate gap and female employment rate based on age cohorts and education**

Table A.1 shows that, compared to the EU average, the Baltic States have had generally better outcomes for almost all age cohorts, with better than average outcomes also visible for the Nordic countries, apart from the below EU average hours worked by young women. The average performers in the *best performer group* perform better than the EU average for all categories for the prime age group. Nevertheless, for the older and young female cohorts, they show relative less favourable outcomes compared to other EU Member States.

The group of countries generally associated with *higher female employment and shorter working hours* have relatively favourable outcomes in terms of

employment rate gaps and the employment rates of women, especially for the young and prime age groups, but they do have above EU average working-hours gaps, especially for the prime age and older age cohorts.

The group of countries associated with a *lower employment rate of females and longer hours* have smaller hours worked gaps for all age cohorts (Ireland and Spain are somewhat exceptions here), but almost all the countries perform worse than the EU average in terms of the employment rate of all female age cohorts (the Czech Republic shows similarities with this group). Moreover, the smaller than average employment rate gaps for prime age women employed in Ireland, Spain, Hungary and Croatia are partly explained by the relatively low male employment rates in these countries.

The *average outcomes* do better than the EU average employment rate for the prime age female group; but all of them perform below the EU average in terms of young and older female employment rates. Concerning the hours worked gap, Belgium shows relatively less favourable outcomes for all age groups, while Luxembourg also has a higher than average gap for older workers.

The *worst performer* group generally has lower female employment rates in all three age cohorts (with the exception of young females in Malta) and higher than average employment rate gaps (especially for prime age and older women). Hours worked gaps are generally lower than the EU average for older age women and for all three cohorts in Greece. However, Italy and Malta both show a larger than average hours worked gap in the prime age cohort, suggesting that, even when working, prime age women work less than prime age men in these countries.

Table A.2 shows that, in the *best performer* group, the Baltic States have lower gender gaps than the EU average in terms of hours worked, and lower gender gaps in the employment rates at all educational levels (only Latvia has a higher than average low education employment rate gap). Nevertheless, they show less favourable outcomes

for low and medium educated female employment rates compared to the EU average. The Nordic countries, meanwhile, perform better than average on all criteria.

The other countries in this group generally show more favourable outcomes regarding the gender gaps in hours worked and the gender gaps in employment rates (with the notable exception of Cyprus), although the situation is less positive in these Member States in terms of female employment rates, especially for those with the medium level education.

The group associated with *'high female participation, lower working hours'* performs better than the EU average in terms of female employment rates for all education levels, with generally higher than EU-average gender gaps in hours worked, and high gender gaps in employment rates, especially for the low and high education levels.

Meanwhile the group associated with *'low female participation, higher working hours'* shows the opposite outcome: the hours worked gaps are generally lower (with the exception of Ireland) but the female employment rates are also generally lower, in some cases coupled with higher than average employment rate gaps for the medium or high education levels. The Czech Republic again shows similarities with this group in terms of lower than average hours worked gender gaps.

The group with *average outcomes* shows a rather mixed picture, with Belgium and Luxembourg showing relatively larger than average gender gaps in hours worked, and all three countries having larger than average employment rate gaps, and lower than average female employment rates for some education levels.

The *worst outcome* Member States are associated with generally lower than average female employment rates (except in Malta, where highly educated women perform well) and higher than average employment rate gaps at all education levels. However, the hours worked gender gaps are generally lower than average in this group.

Table A.1: Overview table on the hours worked gap, the employment rate gap and the female employment rate for three age cohorts across Member States

| Grouping                               |                | gap_H_Y    | gap_H_P     | gap_H_O     | gap_ER_Y   | gap_ER_P    | gap_ER_O    | TOTAL GAP FTER | ER_Y_F      | ER_P_F      | ER_O_F      |
|--|----------------|------------|-------------|-------------|------------|-------------|-------------|----------------|-------------|-------------|-------------|
| Relative best outcomes                 | Baltics        | 3.4        | 2.3         | 2.8         | 3.3        | 7.6         | -1.4        | 9.4            | 31.3        | 75.5        | 61.2        |
|  |                | 1.3        | 1.7         | 1.6         | <b>6.5</b> | 2.7         | 0.6         | 5.3            | <b>25.4</b> | 75.1        | 52.5        |
|  | Lithuania      | 2.2        | 1.3         | 1.9         | 2.3        | -1.1        | 7.9         | 2.9            | <b>20.4</b> | 79.2        | 48.3        |
| Nordics                                | Denmark        | <b>5.9</b> | 4.1         | 4.4         | -0.8       | 5.5         | 10.1        | 12.5           | 55.4        | 79.1        | 55.8        |
|  | Finland        | <b>7.0</b> | 3.9         | 3.6         | -1.7       | 5           | -3.1        | 9.6            | 42.7        | 79.4        | 59.7        |
|  | Sweden         | <b>6.4</b> | 3.8         | 3.8         | -2.8       | 5.3         | 6.7         | 11.0           | 41.6        | 82.5        | 69.6        |
| Average performers                     | France         | 4.2        | 6.3         | 7.5         | <b>5</b>   | 9.8         | 5.7         | 17.6           | <b>26.3</b> | 76          | <b>41.7</b> |
|  | Cyprus         | 2.9        | 3.5         | 4.5         | <b>4.4</b> | 9.3         | <b>25.3</b> | 16.3           | <b>26.1</b> | 74          | <b>38.2</b> |
|  | Portugal       | 2.4        | 3.7         | 4.3         | 3.9        | 5.9         | 9.5         | 11.3           | <b>21.6</b> | 72.5        | 42          |
| High female employment - shorter hours | Slovenia       | <b>6.3</b> | 1.9         | 2.9         | <b>6.7</b> | 4.4         | <b>15.7</b> | 10.5           | <b>23.7</b> | 81          | <b>25</b>   |
|  | Germany        | 2.8        | <b>10.2</b> | <b>10.8</b> | 4          | 9.9         | 13.7        | <b>25.4</b>    | 44.6        | 78.2        | 54.8        |
|  | Netherlands    | 4.0        | <b>12.0</b> | <b>12.7</b> | -1.9       | 9.7         | <b>19</b>   | <b>28.0</b>    | 64.3        | 78.9        | 49.1        |
| Low female employment - longer hours   | Austria        | 4.1        | <b>10.1</b> | <b>10.8</b> | <b>8.3</b> | 8.5         | <b>18.4</b> | <b>26.5</b>    | 50.5        | 81.1        | <b>34.1</b> |
|  | United Kingdom | <b>5.4</b> | <b>10.3</b> | <b>10.5</b> | 0.5        | <b>12.1</b> | 14.5        | <b>25.9</b>    | 46.6        | 74.5        | 51          |
|  | Bulgaria       | 0.4        | 0.5         | 1.2         | <b>6.2</b> | 2.5         | 9.5         | 6.0            | <b>18.7</b> | 71.8        | <b>41.3</b> |
| Average outcomes                       | Ireland        | 3.3        | <b>7.8</b>  | <b>11.7</b> | -3.9       | 9.9         | 13.1        | 18.6           | <b>30.2</b> | <b>64.6</b> | 42.7        |
|  | Spain          | <b>5.0</b> | 6.1         | 6.5         | 0.4        | 9.8         | <b>16.4</b> | 17.5           | <b>18</b>   | <b>61.3</b> | <b>36</b>   |
|  | Hungary        | 1.8        | 1.6         | 2.3         | 2.8        | 11.5        | 10.4        | 12.8           | <b>17.2</b> | <b>68.9</b> | <b>32.2</b> |
| Relative worst outcomes                | Poland         | 3.6        | 4.2         | 5.0         | <b>9.3</b> | 11.4        | <b>20.1</b> | 19.5           | <b>19.9</b> | 71.5        | <b>29.2</b> |
|  | Romania        | 0.9        | 1.0         | 2.2         | <b>7.2</b> | <b>13.9</b> | <b>18.3</b> | 15.8           | <b>20.2</b> | <b>67.8</b> | <b>32.9</b> |
|  | Slovakia       | 2.1        | 2.1         | 2.6         | <b>8.2</b> | <b>13.4</b> | <b>20</b>   | 17.5           | <b>15.9</b> | <b>69.6</b> | <b>33.6</b> |
| EU-28 average                          | Croatia        | 2.0        | 1.3         | 2.0         | <b>6.1</b> | 6.3         | <b>18.9</b> | 10.8           | <b>13.6</b> | <b>65.5</b> | <b>27.8</b> |
|  | Belgium        | <b>5.4</b> | <b>7.7</b>  | <b>10.4</b> | <b>5.2</b> | 10.6        | 12.9        | <b>21.3</b>    | <b>22.6</b> | 73.9        | <b>33.1</b> |
|  | Czech Republic | 2.9        | 3.7         | 3.4         | <b>8.2</b> | <b>16.3</b> | <b>21.3</b> | <b>22.7</b>    | <b>21</b>   | 74.6        | <b>39</b>   |
| EU-28 average                          | Luxembourg     | 2.4        | 6.9         | <b>8.9</b>  | 3.3        | <b>16</b>   | 13.1        | <b>23.6</b>    | <b>20.1</b> | 75          | <b>34.3</b> |
|  | Greece         | 4.0        | 5.0         | 4.5         | <b>6.1</b> | <b>20.2</b> | <b>21.6</b> | <b>25.7</b>    | <b>10</b>   | <b>53.8</b> | <b>26</b>   |
|  | Italy          | <b>5.8</b> | <b>7.5</b>  | 7.1         | <b>6.9</b> | <b>22.5</b> | <b>19.5</b> | <b>28.0</b>    | <b>15</b>   | <b>59.1</b> | <b>30.9</b> |
| EU-28 average                          | Malta          | 3.1        | <b>7.1</b>  | 6.4         | <b>5</b>   | <b>34.3</b> | <b>35.9</b> | <b>36.6</b>    | 41.2        | <b>55.2</b> | <b>15.8</b> |
|  |                | 4.6        | 7.0         | 7.8         | 4          | 11.9        | 14.6        | 21.2           | 30.7        | 71.2        | 41.7        |

Source: DG EMPL calculation based on Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours (lfsa\_ewhun2); Employment rates by sex, age and nationality (%) [lfsa\_ergan];

Note: gap H: the gap between average usual weekly hours worked between males and females; Y stands for young people (aged 15–24); P and O stand for prime age (25–54) and older age (55–64) respectively; gap ER stands for the gap in employment rates between males and females; GAP FTER stands for the full-time equivalent employment rate gap between males and females on the total working age population (aged 15–64); F stands for Female. The figures in bold show a less favourable outcome compared to the EU average; all data are for 2012.

Table A.2: Overview table on the hours worked gap, the employment rate gap and the female employment rate for education levels across the Member States

| Grouping                               |                | gap H L | gap H M | gap H H | gap_ER_L | gap_ER_M | gap_ER_H | ER_F_L | ER_F_M | ER_F_H | TOTAL GAP FTER |
|--|----------------|---------|---------|---------|----------|----------|----------|--------|--------|--------|----------------|
| Relative best outcomes                 | Estonia        | 4.0     | 2.5     | 2.4     | 11.3     | 10.6     | 6.6      | 25.5   | 64.3   | 78.9   | 9.4            |
|  | Latvia         | 1.2     | 1.9     | 1.2     | 16.5     | 8.9      | 2        | 22     | 58.3   | 84.7   | 5.3            |
|  | Lithuania      | 1.2     | 1.1     | 1.7     | 5.7      | 8        | -0.7     | 12.8   | 57.5   | 87.4   | 2.9            |
| Nordics                                | Denmark        | 5.6     | 5.6     | 3.4     | 6.8      | 6.1      | 4.6      | 51.9   | 73.4   | 84     | 12.5           |
|  | Finland        | 7.8     | 4.9     | 3.2     | 6.4      | 4.9      | 4.6      | 37.5   | 69.6   | 82.3   | 9.6            |
|  | Sweden         | 7.2     | 5.0     | 2.4     | 7.3      | 6.1      | 1.3      | 42.5   | 76.3   | 86.4   | 11.0           |
| Average performers                     | France         | 6.4     | 6.4     | 6.6     | 10.4     | 8.9      | 5.5      | 39.4   | 62.1   | 78.3   | 17.6           |
|  | Cyprus         | 1.1     | 3.4     | 4.6     | 10.8     | 13.8     | 10       | 38.6   | 59     | 74.4   | 16.3           |
|  | Portugal       | 4.4     | 2.6     | 3.2     | 10.6     | 4.4      | 0.7      | 51.1   | 61.2   | 78.2   | 11.3           |
| High female employment - shorter hours | Slovenia       | 2.1     | 2.6     | 1.8     | 10.8     | 9.3      | 3.6      | 29.2   | 60.6   | 82.7   | 10.5           |
|  | Germany        | 9.7     | 9.7     | 8.5     | 10.5     | 8.1      | 7.4      | 41.4   | 72.1   | 83.6   | 25.4           |
|  | Netherlands    | 13.7    | 12.2    | 8.3     | 16.6     | 6.9      | 4.2      | 51.5   | 74.9   | 84.9   | 28.0           |
| Low female employment - longer hours   | Austria        | 7.7     | 9.6     | 8.9     | 10.5     | 7.9      | 7.5      | 44.9   | 72.9   | 82.8   | 26.5           |
|  | United Kingdom | 11.9    | 11.3    | 7.6     | 16.1     | 9.2      | 8        | 45.5   | 66.7   | 79.2   | 25.9           |
|  | Bulgaria       | 0.8     | 0.5     | 0.5     | 7.6      | 7.7      | 2.9      | 23.6   | 59.2   | 80     | 6.0            |
| Average outcomes                       | Ireland        | 11.7    | 9.1     | 6.8     | 14.4     | 10.4     | 6.8      | 26     | 54.3   | 75.9   | 18.6           |
|  | Spain          | 7.8     | 6.0     | 4.8     | 14.1     | 9.4      | 7.1      | 36.7   | 51.9   | 71.5   | 17.5           |
|  | Hungary        | 1.9     | 1.8     | 1.5     | 7.8      | 10.8     | 11.2     | 23     | 56.8   | 74     | 12.8           |
| Relative worst outcomes                | Poland         | 4.8     | 3.8     | 4.0     | 11.3     | 18.9     | 8.2      | 17.5   | 51.8   | 78.8   | 19.5           |
|  | Romania        | 2.8     | 0.7     | 0.7     | 11.6     | 15.8     | 4.4      | 36.6   | 54.8   | 79.3   | 15.8           |
|  | Slovakia       | 2.0     | 2.1     | 2.0     | 1.2      | 16.6     | 10.4     | 14.4   | 57     | 70.3   | 17.5           |
| EU-28 average                          | Croatia        | 3.3     | 1.1     | 0.9     | 5.8      | 10.6     | 0.5      | 25.3   | 47.7   | 75.3   | 10.8           |
|  | Belgium        | 9.7     | 8.5     | 7.2     | 15.9     | 13.9     | 4.8      | 29.8   | 57.9   | 79.5   | 21.3           |
|  | Czech Republic | 3.2     | 3.4     | 4.0     | 0.1      | 17.3     | 14.9     | 21.1   | 62.7   | 73.8   | 22.7           |
| EU-28 average                          | Luxembourg     | 9.1     | 7.8     | 5.0     | 11       | 13.4     | 11.7     | 39.4   | 59.2   | 77.3   | 23.6           |
|  | Greece         | 5.1     | 4.3     | 4.5     | 23.4     | 20.6     | 10.7     | 28.6   | 39.6   | 65.1   | 25.7           |
|  | Italy          | 8.0     | 7.1     | 6.8     | 27.3     | 17.1     | 9.8      | 29.4   | 55.7   | 72.3   | 28.0           |
| EU-28 average                          | Malta          | 8.1     | 6.1     | 4.5     | 40.2     | 16.3     | 8.5      | 27.9   | 58.5   | 82.6   | 36.6           |
|  | EU-28 average  | 8.3     | 7.2     | 6.1     | 15       | 11.7     | 7.2      | 36.4   | 61.9   | 78.3   | 21.2           |

Source: DG EMPL calculation based on Eurostat. Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours (ifsa\_ewhun2); Employment rates by sex, age and highest level of education attained (%) (ifsa\_ergaed).

Note: Gap H: gap between average usual weekly hours between males and females; L stands for low education levels (ISCED 0-2); M stands for medium education (ISCED 3-4); H stands for high education (ISCED 5-6); gap ER stands for gap in employment rates between males and females; GAP FTER stands for full-time equivalent employment rate gap between males and females on the total working age population (aged 15-64); F stands for Female. The figures in bold show a less favourable outcome compared to the EU average; all data are for 2012.

## Part-time work

As seen in the sub-section covering part-time work, there is considerable complexity in the way part-time work relates to the full-time equivalent employment rate (FTER) gap and to the female employment rate (ER). To reflect this, *two groups of input variables* were identified and used to present the situation in the various Member States compared to the EU average (see Table A.3).

First, under the issue of *fulfilling the prime age female workforce potential*, we sought to capture those groups who could serve as untapped workforce potential among women in so far as they did not appear to face care and work-life reconciliation issues. This group was proxied by the share of part-time among prime age women (25–49) without children, and among women (25–54) with older children. In this context, if the share of these part-timers is less than EU average, it is seen to contribute to lowering the FTER gender gap.

To reflect the *role of part-time work in helping women onto the labour market*, we present the share of inactive women and the share of part-time women as the main variables as there is strong negative correlation between the two, and because part-time can be helpful in general in helping women move from inactivity into participation, and thereby raise the female employment rate. Part-time is considered as unfavourable if its share is lower than EU average as this might indicate that the scarcity of part-time is an obstacle to female participation. Lower than average inactivity of women is also considered to be favourable. Moreover, in order to reflect on the role of social barriers to women entering the labour market, we look also at the at-risk-of-poverty rate when working part-time, since this might tip the balance towards part-time instead of inactivity<sup>(134)</sup>.

Some similar *patterns* emerge across Member States concerning the dual role of part-time work if they are grouped based on the two output

variables identified above (FTE gap and female ER).

In the *best performing group*, part-time work does not seem to play an important role in helping women into the labour market in the Baltic States, with a part-time employment share below the EU average. However, the inactivity rate of females is also below the EU average, which suggests that other policy measures are helping women onto the labour market. A low share of part-time could also reflect financial pressures, since the in-work poverty risk for part-timers is higher than the EU average in both Lithuania and Latvia.

Among the Nordic countries, part-time work clearly seems to have a role in helping women into the labour market in Sweden and Denmark, as above average part-time employment is associated with lower than average inactivity in the female working age population generally, though untapped workforce potential remains in both Member States. In this region, part-time work is less associated with in-work at-risk-of-poverty than in the EU as a whole, although Finland is something of an outlier in this group, with part-time generally playing a less important role, and with female inactivity still below EU average.

Part-time work is less important in France, Cyprus, Portugal and Slovenia – all countries that perform better than average in terms of female inactivity and with a lower than average share of females on part-time. In this group, part-time working is also more associated with a risk of in-work poverty compared to the EU average (with the exception of Slovenia), reflecting potential financial barriers to take up part-time positions.

In the *'high female employment rate – lower hours' group* of Member States it is clear that part-time work contributes to helping women into the labour market (reflected by the higher than average share of part-time working females, the lower than average share of inactive females, and the low risk of

in-work poverty among part-timers). Nevertheless, the higher than average share of part-time work among childless females and/or among those with older children reflects some untapped and underutilised workforce potential among prime age females.

In the *'low female employment – longer hours' group* of Member States, a lack of part-time opportunities and/or social barriers is reflected in the generally higher share of inactive females in the population, combined with a lower share of part-time employment (except in Spain), and a high risk of in-work poverty among part-timers (except in Ireland). The low share of part-time among females in general also means limited part-time work among childless females and among those with older children. This suggests that, in these Member States, a lack of appropriately rewarded paid part-time opportunities could drive women into inactivity. In so far as they do enter the labour market though, it is likely that they will work full-time.

The *average outcomes* are characterised by higher than average rates of female inactivity. In the case of Belgium and Luxembourg this goes in parallel with a higher than average share of part-time work, suggesting that part-time work is failing to help women into the labour market, although on the positive side the in-work at-risk-of-poverty rates are lower than EU average. The Czech Republic is closer to the other Central Eastern European Member States that are in the *'low female employment – longer hours' group*, with a low share of part-time and a high share of female inactivity.

The relatively *worst performing* Member States mainly demonstrate lower shares of part-time female employment combined with higher shares of female inactivity and higher than average in-work at-risk-of-poverty, suggesting that the scarcity of part-time work and the financial barriers to doing it, is keeping women in inactivity.

<sup>(134)</sup> At-risk-of-poverty is presented for the total population, as breakdown was not available.

Table A.3: Part-time work – Member States' state of play compared to the EU average, with grouping based on output variables

| Grouping                               | Fulfilling prime age female workforce potential                                   |   |  | Helping women onto the labour market  |   |              |
|--|---|---|--|---|---|--------------|
|  | Percentage of part-time employment among females age 25-49 with no children, 2012 | Percentage of part-time employment among females age 25-54 with 1 child 12yrs or over, 2012 | Inactive population as a percentage of the total population, females 15-64, 2012 | Part-time employment as percentage of the total employment, females 15-64, 2012 | In-work at-risk-of-poverty rate for part-time work (both sexes) in 2011 |              |
| Relative best outcomes                 | Baltics   | Estonia<br>Latvia<br>Lithuania  | --<br>-<br>--  | -<br>-<br>-   | --<br>--<br>--  | -<br>++<br>+ |
|  | Nordics   | Denmark   | +  | --  | +   | -            |
|  |   | Finland<br>Sweden   | -<br>+   | --<br>-   | --<br>--  | -<br>+       |
| Average performers                     | France  | -   | -  | -   | -   | +            |
|  | Cyprus  | --  | -  | -   | --  | +            |
|  | Portugal  | -   | -  | -   | --  | ++           |
|  | Slovenia  | --  | --   | -   | --  | -            |
|  | Germany   | +   | ++   | -   | +   | -            |
| High female employment - shorter hours | Netherlands   | ++  | ++   | --  | ++  | -            |
|  | Austria   | +   | ++   | -   | +   | -            |
|  | United Kingdom  | -   | +  | -   | +   | -            |
|  | Bulgaria  | --  | --   | +   | --  | ++           |
|  | Ireland   | -   | +  | +   | +   | -            |
| Low female employment - longer hours   | Spain   | -   | -  | -   | -   | +            |
|  | Hungary   | --  | --   | +   | --  | +            |
|  | Poland  | --  | --   | +   | --  | +            |
|  | Romania   | --  | --   | ++  | --  | ++           |
|  | Slovakia  | --  | --   | +   | --  | +            |
|  | Croatia   | --  | --   | ++  | --  | ++           |
|  | Belgium   | +   | +  | +   | +   | -            |
| Average outcomes                       | Czech Republic  | --  | --   | +   | --  | -            |
|  | Luxembourg  | -   | +  | +   | +   | -            |
|  | Greece  | -   | -  | +   | --  | +            |
| Relative worst outcomes                | Italy   | +   | +  | ++  | -   | +            |
|  | Malta   | -   | -  | ++  | -   | +            |

Explanation: if the variable is above EU-28 average plus the standard deviation of the variable across the Member States: '++'; if the variable is above EU-28 average: '+'; if the variable is below EU-28 average minus the standard deviation: '--'; if the variable is below EU-28 average: '-'; Colour code: white cell refers to a relative more favourable outcome, blue cell refers to a relative less favourable outcome compared to EU average.

Source: Eurostat, Part-time employment as percentage of the total employment, by sex and age (%) (lfsa\_ippga), Inactive population as a percentage of the total population, by sex and age (%) (lfsa\_ipga), In-work at-risk-of-poverty rate by full-/part-time work (source: EU-SILC) [ilc\_iw07], Percentage of part-time employment of adults by sex, age groups, number of children and age of youngest child [lfst\_hhptechi].

## Working-time regimes

The policy variables for presenting the Member States' state of play regarding working time volume (see Table A.4) are built on the framework established by Plantenga *et al.* (1999) who quote Rubery *et al.* (1998) who identified aspects that are relatively favourable for *gender equal working-time regimes*, such as the following: *small gender gap in average full-time hours; low shares of both men and women on very long hours* (we proxy it with share of jobholders on more than 40 hours); *opportunities for women to work long part-time or short full-time jobs* (we proxy it with the share of women on 30–39 hours jobs); *low shares of women on short-hours jobs* (we proxy it with share of prime age women on 1–19 hours jobs, as in the case of young or older women, it can be beneficial in parallel with other activities) <sup>(135)</sup>.

The *'relative best performers'* mostly display relatively gender equal working-time regimes, especially the *Nordic*

Member States. Nevertheless, in some Member States, there is a relative large share of females working long (over 40) hours, while the share of females working 30–39 hours is relative lower than the EU average.

The *'high female employment-shorter hours'* group of Member States displays a different pattern in that, while the long hours culture is not typical, (except in the UK, where males tend to work longer than average hours), the part-time work structure is more *biased towards short part-time working hours* for women (1–19 hours), while longer part-time working hours are less typical than average (except in the UK). All of this could explain the relative higher FTER gap compared to the first group.

The *'low female employment-longer hours'* group clearly displays a *long working hour culture* pattern whereby larger share of both males and/or females tend to work more than 40 hours. This could be contributing to the relative lower

female employment, insofar as long hours are not reconcilable with care or other obligations, or long part-time work is not available for females, which is reflected by the low share of females on long part-time work in Spain, Hungary, Poland and Slovakia.

The *average performer* group is quite fragmented, with the Czech Republic again being more similar to the other CEE countries (long working hours being rather prevalent, together with very limited long part-time work for females). Belgium and Luxembourg, on the contrary, do not seem to have longer working hour cultures.

The *relative worst outcome* group displays the relative unavailability of longer part-time work for females in Greece and Italy (data for Malta are not available). This is coupled with the presence of a relatively long working hours culture in Greece, while in both Italy and Malta the full-time working time gender gap is higher than average.

<sup>(135)</sup> They also mention a low rate of unsocial hours, working for both men and women; a relatively equal use of men and women on unsocial hours work, and no particular tendency to use female part-time work to cover unsocial hours; these issues are not going to be covered here in the comparison.

Table A.4: Working time regimes – Member States' state of play compared to the EU average, with grouping based on outcome variables

| Grouping                               | Share of female employed (2011) age 25-54 on 1-19 usual weekly hours worked | Share of female employed (2011) age 15-74 on 30-39 usual weekly hours worked | Gap between males and females average number on full-time weekly work hours (2012) (males-females) | Share of males on more than 40 hours (2010) | Share of females on more than 40 hours (2010) |    |
|--|---|--|--|---|---|----|
| Relative best outcomes                 | Estonia   | --   | --   | --  | -   |    |
|  | Latvia  |  | --   | -   | +   |    |
|  | Lithuania   |  | --   | --  | +   |    |
|  | Denmark   | -  | ++   | -   | -   | -  |
|  | Finland   | --   | ++   | +   | --  | -  |
|  | Sweden  | --   | +  | --  | -   | -  |
| Average performers                     | France  | -  | ++   | +   | -   |    |
|  | Cyprus  |  |  | -   | -   |    |
|  | Portugal  | -  | -  | -   | -   | +  |
|  | Slovenia  | --   | --   | --  | +   | +  |
|  | Germany   | ++   | -  | -   | -   | -  |
|  | Netherlands   | ++   | -  | -   | -   | -- |
| High female employment - shorter hours | Austria   | +  | -  | -   | -   |    |
|  | United Kingdom  | +  | +  | ++  | +   |    |
|  | Bulgaria  |  |  | --  | +   | +  |
|  | Ireland   | +  | +  | ++  | +   | -  |
|  | Spain   | -  | -  | -   | -   | +  |
|  | Hungary   | --   | --   | --  | +   | -  |
| Low female employment -longer hours    | Poland  | --   | --   | +   | ++  |    |
|  | Romania   |  |  | --  | ++  | ++ |
|  | Slovakia  | --   | -  | -   | ++  | ++ |
|  | Croatia   |  |  | --  | +   | ++ |
|  | Belgium   | +  | ++   | +   | -   | -  |
|  | Czech Republic  | --   | -  | -   | ++  | ++ |
| Average outcomes                       | Luxembourg  | -  | -  | -   | -   |    |
|  | Greece  | --   | -  | +   | ++  | ++ |
|  | Italy   | -  | -  | ++  | -   | -  |
|  | Malta   |  |  | +   | -   | -  |
|  |   |  |  |   |   |    |
|  |   |  |  |   |   |    |
| Relative worst outcomes                |   |  |  |   |   |    |
|  |   |  |  |   |   |    |
|  |   |  |  |   |   |    |
|  |   |  |  |   |   |    |
|  |   |  |  |   |   |    |
|  |   |  |  |   |   |    |

Explanation: if the variable is above EU-28 average plus the standard deviation of the variable across the Member States: '++'; if the variable is above EU-28 average minus the standard deviation: '- -'; if the variable is below EU-28 average '-'; Colour code: white refers to a relatively more favourable outcome, blue refers to a relatively less favourable outcome compared to the EU average, gray cell: no data were available.

Sources: OECD. Incidence of employment by usual weekly hours worked; EWCS 2010: How many hours do you usually work per week in your main paid job? (q18); Eurostat: Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [lfsa\_ewhun2].

### Working time arrangements

To proxy the general *rigidity of working time regimes*, we present those variables that show how large a share of males and females have *entirely employer set* working schedules, with the gender gap between them also shown in order to see whether this type of rigidity is affecting men or women more (see Table A.5). Another form of rigidity that has been taken into consideration as a proxy variable is the rigidity of working time when *having family duties*, as with care duties flexibility becomes even more important. This is proxied by the share of no

possibility to stop/vary working time for family reasons for both genders.

The Nordic States generally exhibit very flexible working time arrangements (almost all variables chosen to proxy rigidity are well below the EU average <sup>(136)</sup>), together with the *'higher female employment rates and lower hours worked'* group. However, the rest of the countries in the best performing group generally have rather inflexible systems with generally unobtainable flexible working arrangements (with the exception of France).

The Member States generally associated with *lower female employment and longer hours worked* all seem to have rather rigid working time arrangements, with higher than average employer-set working time regimes, and more difficulties concerning flexibility for family reasons.

Meanwhile, while the *average outcomes* and *worst performing* Member States all have rather flexible working time arrangement systems (except Malta), these do not seem to translate into better outcomes in terms of the FTER gap and female employment rates, at least in the case of the worst performers.

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<sup>(136)</sup> '(--)'



Table A.5: Working time arrangements – Member States' state of play compared to the EU average, with grouping based on outcome variables

| Grouping                               | Share of men with working time arrangements entirely set by employer 2010 | Share of women with working time arrangements entirely set by employer 2010 | Gender gap in the possibility of some individual adaptability of working time arrangements (men-women) 2010 | Share of men with no possibility to vary start and/or stop of the working day for family reasons 2010 | Share of women with no possibility to vary start and/or stop of the working day for family reasons 2010 |
|--|---|---|---|---|---|
| Relative best outcomes                 | Estonia   | +   | +   | -   | -   |
|  | Latvia  | +   | ++  | ++  | ++  |
|  | Lithuania   | ++  | +   | +   | +   |
| Nordics                                | Denmark   | --  | --  | +   | -   |
|  | Finland   | --  | --  | +   | -   |
|  | Sweden  | --  | --  | --  | -   |
| Average performers                     | France  | +   | -   | -   | -   |
|  | Cyprus  | ++  | ++  | +   | -   |
|  | Portugal  | ++  | +   | --  | +   |
|  | Slovenia  | -   | +   | ++  | -   |
| High female employment - shorter hours | Germany   | -   | -   | +   | +   |
|  | Netherlands   | --  | --  | --  | --  |
|  | Austria   | -   | -   | +   | --  |
|  | United Kingdom  | -   | -   | -   | --  |
| Low female employment - longer hours   | Bulgaria  | ++  | ++  | +   | ++  |
|  | Ireland   | -   | +   | +   | -   |
|  | Spain   | ++  | +   | -   | -   |
|  | Hungary   | +   | ++  | ++  | +   |
|  | Poland  | -   | +   | ++  | +   |
|  | Romania   | +   | -   | -   | ++  |
|  | Slovakia  | +   | +   | -   | ++  |
|  | Croatia   | ++  | ++  | ++  | ++  |
| Average outcomes                       | Belgium   | -   | -   | -   | -   |
|  | Czech Republic  | -   | +   | ++  | -   |
|  | Luxembourg  | +   | -   | --  | -   |
| Relative worst outcomes                | Greece  | -   | -   | -   | -   |
|  | Italy   | -   | -   | -   | -   |
|  | Malta   | ++  | +   | +   | ++  |

Explanation: if the variable is above the EU-28 average plus the standard deviation of the variable across the Member States: '++'; if the variable is above the EU-28 average: '+'; if the variable is below the EU-28 average minus the standard deviation: '- -'; if the variable is below EU-28 average: '-'; Colour code: white refers to a relatively more favourable outcome, blue refers to a relatively less favourable outcome compared to the EU average.

Source: EWCS 2010, Q39 How are your working time arrangements set?; Eurostat, Ad Hoc module 2010: Reconciliation between work and family life (lfsa\_10); Employees by their perceived possibility to vary start and/or stop the working day for family reasons (lfsa\_10fposstet).

### Division of unpaid work

In order to be able to present the state of play in the EU Member States, proxies were chosen, designed to indicate whether there is an environment in which it was possible for men to engage in unpaid activities. To build on the link between long working hours and low engagement in unpaid activities (see Table A.6), the analysis looked at the proportion of men on *more than 40 hours* against the average usual weekly hours for men. As short periods of part-time work would be assumed to help men to engage in unpaid activities – especially once having a child – and thus help a more gender equal sharing of unpaid work, we present also the share of *voluntary part-time employment* among men (as a % of total employment for men) as an input variable. We also present the *gap* between male and female weekly unpaid working time

in order to have an overview of which countries succeed in involving men into unpaid activities.

In the *best performing group*, the Nordic Member States stand out compared to the EU average regarding the identified variables, with a relative lower share of males on long working hours, relatively more men on voluntary part-time work, and thus a *relatively more gender equal share* of unpaid work being carried out compared to the EU average. The same is true for the Baltic States, with the limitation of part-time employment being less common among men. However, the remaining Member States in this group appear in a less favourable light, with a gap greater than the EU average (except Slovenia).

The *'high female employment – shorter hours'* group generally promotes part-time work among males, but the gap

between male and female unpaid work is higher than average, probably due to the even higher share of female part-time work in this group. Moreover in Austria, and especially in the UK, male working hours can also be longer than the EU average, which might be preventing men from engaging more in unpaid work.

The situation in the *'low female employment – longer hours'*, *'average outcomes'* and *'relative worse outcomes'* groups is generally less favourable regarding the division of unpaid work. With some exceptions, relatively long hours prevail among men (the exceptions being Luxembourg and Italy), and voluntary part-time employment is limited, while the gender gap in unpaid work is higher than the EU average (except in Bulgaria and Poland), all of which show a *relatively less gender equal share* of unpaid work between men and women.



### Financial disincentives

To proxy the incentives or disincentives for women to work more, we present the *METR* for a two-earner married couple with 2 children, with the first spouse earning 100% of AW and the second moving from 50% to 100% of AW (see Table A.7). To proxy the disincentives related to entering work, we show the *AETR* for a two-earner married couple with 2 children, with the first spouse earning 100% of AW and the second earner moving from non-employment to 100% of AW.

To factor in the disincentive effects of *childcare costs* we used the OECD variable on childcare cost burden (for 2008 and available only to a limited set of countries) and, finally, we take note of the *unadjusted gender pay gap* <sup>(137)</sup>.

According to the proxy variables, the situation varies considerably across Member States. In terms of the group of *'high female employment – shorter hours'* some clear patterns emerge, with a rather high tax burden on both increasing working hours, and on entering work, and with above-average childcare costs. Moreover, even though the female employment rate is higher than the EU average in these Member States, it remains parallel with the above-average gender pay gaps.

The group of *'low female employment – longer hours'* Member States (together with the Czech Republic, which again shows more similarities with this group) displays rather low tax burdens (except in Hungary) and lower childcare costs (with the strong exception of Ireland). Still, the

female employment rate is lower than average in all these countries, with no clear patterns emerging in relation to the gender pay gap.

High tax burdens are visible in the *'average outcomes'* group (Belgium and Luxembourg), and in some of the *'best performing'* Member States as well (Denmark, Finland, Portugal, Slovenia), while in other Member States the relative tax burden is lower (Sweden, Estonia, Greece, Malta). The gender pay gap is higher than average in most *'best performing'* Member States (except Lithuania, Portugal, Slovenia), while in the *'average outcomes'* group and the *'worst performing group'* it is lower (albeit generally being accompanied by below-average female employment rates).

<sup>(137)</sup> The female employment rate has been accounted for: if the female employment rate is below average in a Member State, then the below average gender pay gap cannot be deemed by itself as a favourable outcome as it might stem from the self-selection effect.



## Childcare

To provide an overview on the multifaceted issue of childcare, we considered the proportion of all children (between 0–6 years old) with *zero hours of formal care enrolment* in terms of whether constraints/preferences or a lack of enrolment seemed to contribute to lower female employment (recognising that there might well be an unknown amount of informal care being provided in some cases) (see Table A.8).

In practice, the share of children between 0–6 years old with *above 30 hours of formal care enrolment* appears to help full-time female employment, making it another policy variable in this context. *In-kind benefits* correlate positively with female employment, while *childcare-related difficulties*, such as problems flagged concerning availability, accessibility and quality, could proxy obstacles to child enrolment and thus female participation.

Based on the variables presented above, the situation is varied across Member States, and not very favourable in most cases. The notable exceptions are the *Nordic States* with generally better

than EU-average outcomes in terms of the variables identified, indicating the presence of relatively *employment friendly childcare systems*, with higher than EU-average spending on in-kind benefits, a relatively higher share of children enrolled in childcare for longer hours, and a lower share not enrolled in formal care institutions (except in Finland). The share of parents facing availability, access or quality problems is also lower than the EU-average.

The situation is somewhat less positive in the *Baltic States*, where spending on in-kind benefits is less than in the rest of the EU, which is consistent with the evidence that a larger proportion of children are not enrolled in formal care and more problems in terms of availability and access to childcare, suggesting somewhat less employment-friendly institutional arrangements. Nevertheless, once enrolled in these countries, children tend to be enrolled for longer hours, which may explain the smaller FTER gap.

The *rest of the best performing* group shows mixed outcomes. In France and Slovenia the in-kind benefit spending is higher than the EU-average and the share of enrolment is higher than

average; there are availability and accessibility issues in these Member States. In Cyprus, however, while fewer difficulties with childcare are reported, enrolment rates are lower than the EU average.

The *'high female employment-shorter hours'* group generally displays fewer difficulties with childcare (apart from availability problems in Germany), with more spending on in-kind benefits and higher enrolment rates into formal care (except in Austria) suggesting relatively employment-friendly childcare arrangements. Nevertheless, in all four Member States, the share of longer hours enrolment is lower than average, which matches the shorter working hours of women (and thus a higher FTER gap) and which may indicate the effects of constraints as well as preferences.

The *'low female employment-longer hours'*, *'average outcomes'* and *'worst performers'* groups have with a few exceptions (such as Belgium or Italy) with generally lower spending on in-kind benefits with higher non-enrolment rates (except in Spain). Difficulties with childcare are widely reported in Poland, Romania, Slovakia, the Czech Republic and Greece.

Table A.8: Childcare – Member States' state of play compared to the EU average, with grouping based on outcome variables

| Grouping                               | Share of children age 0-6 with 0 hours formal enrolment in 2011 | Share of children age 0-6 with 30 hours or more formal enrolment in 2011 | Spending on benefits in kind as a percentage of GDP 2010 | Availability problems (e.g. waiting lists, lack of services) 2012 | Access problems (e.g. distance or opening hours) 2012 | Quality problems 2012 |    |
|--|---|--|--|---|---|-----------------------|----|
| Relative best outcomes                 | Estonia   | +  | ++   | -   | +   | -                     |    |
|  | Latvia  | +  | +  | -   | +   | -                     |    |
|  | Lithuania   | ++   | +  | -   | --  | -                     |    |
| Nordics                                | Denmark   | --   | ++   | ++  | -   | -                     |    |
|  | Finland   | +  | +  | ++  | -   | --                    |    |
|  | Sweden  | --   | ++   | ++  | --  | -                     |    |
| Average performers                     | France  | -  | +  | +   | ++  | -                     |    |
|  | Cyprus  | +  | -  | -   | --  | -                     |    |
|  | Portugal  | -  | ++   | -   | -   | +                     |    |
|  | Slovenia  | -  | ++   | +   | ++  | +                     |    |
|  | Germany   | -  | -  | +   | +   | -                     | -  |
| High female employment - shorter hours | Netherlands   | -  | --   | +   | --  | --                    |    |
|  | Austria   | +  | -  | +   | -   | -                     |    |
|  | United Kingdom  | -  | -  | +   | -   | -                     |    |
|  | Bulgaria  | ++   | +  | -   | -   | -                     |    |
|  | Ireland   | +  | --   | -   | --  | -                     |    |
| Low female employment - longer hours   | Spain   | -  | -  | +   | -   | +                     |    |
|  | Hungary   | ++   | -  | -   | -   | -                     |    |
|  | Poland  | +  | +  | -   | --  | +                     |    |
|  | Romania   | ++   | -  | -   | +   | ++                    |    |
|  | Slovakia  | ++   | --   | -   | +   | ++                    |    |
|  | Croatia   | ++   | +  | -   | +   | +                     | ++ |
|  | Belgium   | -  | +  | -   | +   | -                     | -  |
| Average outcomes                       | Czech Republic  | ++   | -  | -   | ++  | +                     |    |
|  | Luxembourg  | -  | -  | +   | -   | -                     |    |
|  | Greece  | +  | -  | -   | ++  | ++                    |    |
| Relative worst outcomes                | Italy   | -  | ++   | -   | -   | +                     |    |
|  | Malta   | +  | -  | -   | +   | +                     |    |

Explanation: if the variable is above the EU-28 average plus the standard deviation of the variable across the Member States: '++'; if the variable is above the EU-28 average: '+'; if the variable is below the EU-28 average minus the standard deviation: '--'; if the variable is below the EU-28 average: '-'; Colour code: a white cell refers to a relatively more favourable outcome, a blue cell refers to a relatively less favourable outcome compared to EU average, a gray cell: no data were available.

Source: DG EMPL calculations based on Eurostat, Formal childcare by age group and duration – % over the population of each age group (source: EU-SILC [ilc\_caindformal]); EQLS 2012, Q55: To what extent did each of the following factors make it difficult or not for you, or someone close to you, to use childcare services? The proportion of people reporting difficulties in accessing childcare services on various reasons; Eurostat; Tables by benefits – family/children function [spr\_exp\_ffa].

Table A.9: Overview table based on age cohorts and education levels <sup>(1)</sup>

| Grouping                               |                    | Age cohort  | Education level   |
|--|--------------------|---|---|
| Relative best outcomes                 | Baltics            | Female employment rates and gender gaps in hours worked are generally above but employment rate of young females are in some cases beyond EU average  | Gender gaps in hours worked are smaller than EU average for all education levels; females with low and medium level education have generally lower employment rates compared to EU average              |
|  | Nordics            | Female employment rates and gender gaps in hours worked are generally more favourable than EU average; however gender gap in hours worked at young age is higher than EU average  | Gender gaps in hours worked are smaller and female employment rates are higher than EU average for all three education levels   |
|  | Average performers | Female employment rate and gender gap in hours worked are more favourable than EU average for prime age women; young and senior female employment rates are in some cases beyond EU average with above and have face average gender employment gaps | Gender gaps in hours worked are generally smaller than EU average for all education levels; females with medium and high level education have some cases lower employment rates compared to EU average  |
| High female employment - shorter hours |                    | Female employment rates are generally higher than EU average but at the same time gender gaps in hours worked at prime age and senior age are wider than EU average   | For all three education levels female employment rates are above EU average but meanwhile gender gaps in hours worked are generally wider than EU average.  |
| Low female employment -longer hours*   |                    | Gender gaps in hours worked are generally narrower but female employment rates are generally lower than EU average in all three cohorts   | For all three education levels gender gaps in hours worked are beyond EU average*** but female employment rates are also generally lower compared to the EU average                                     |
| Average outcomes**                     |                    | Young and senior female employment rates are lower than EU average, gender gap in hours worked for senior cohort is above EU average  | Gender gaps in hours worked are higher than EU average for low and medium education levels, female employment rate is lower than EU average for medium education level                                  |
| Relative worst outcomes                |                    | Female employment rates are generally lower and gender employment gaps are higher than EU average for all three cohorts   | Gender gaps in hours worked are generally narrower than EU average, with female employment rates being generally lower and gender employment gaps being higher than EU average for all education levels |

\* together with the Czech Republic

\*\* only Belgium and Luxembourg

\*\*\* except Ireland

<sup>(1)</sup> As the Czech Republic showed more similarities with the 'low female employment – longer hours' group, for the overview tables we considered it as part of this group.



Table A.10: Overview table based on policy fields and identified proxy variables

| Grouping                               | Part-time   | Working time regimes  | Working hours flexibility   | Division of paid-unpaid work   | Financial incentives   | Childcare   |
|--|---|---|---|--|--|---|
| Relative best outcomes                 | Baltics   | Some cases long hours prevailing among females  | Relative inflexible; flexible arrangements generally not available                              | Relative gender equal division of paid and unpaid work with lower share of men on voluntary part-time  | Relative lower financial burdens, some cases higher than average gender pay gap. | Relative less employment friendly childcare with less spending on in-kind benefits, higher share of non-enrolment but with longer hours enrolment also more typical   |
|  | Nordics   | Relative gender equal working time regimes  | Relative flexible working time arrangements with some cases flexibility more available for men. | Relative gender equal division of paid and unpaid work   | Relative higher financial burdens****, higher than average gender pay gap.       | Relative employment friendly childcare  |
|  | Average performers  | Some cases long hours prevailing among females with relative low share of long part-time work   | Relative inflexible; flexible arrangements generally not available                              | Relative unequal division of paid and unpaid work with long male work-hours  | Relative higher financial burdens  | Relative employment friendly with generally higher enrolment rates but difficulties indicated with childcare  |
| High female employment - shorter hours | Part-time relative important in helping women onto labour market  | Short part-time prevailing among females, long part-time relative atypical; long working hours generally not widespread among females | Relative flexible working time arrangements   | Relative unequal division of paid and unpaid work while there is higher share of men on voluntary part-time and/or there is lower male working hours | Relative higher financial burdens, higher than average gender pay gap.           | Relative employment friendly with no widely indicated problems and higher than average spending on in-kind benefits but shorter hours enrolment is prevailing   |
| Low female employment -longer hours*   | Unavailability of part-time might contribute to female inactivity                                       | Long working hours culture for both sexes with long part-time relative atypical for females; low gender gap in full-time work         | Relative inflexible; flexible arrangements generally not available                              | Relative unequal division of paid and unpaid work with low share of males on voluntary part-time work  | Relative lower financial burdens, some cases higher than average gender pay gap. | Relative less employment friendly with higher share of non-enrolment and lower share of long-hours enrolment to formal care; lower spending on in-kind benefits and some problems indicated with childcare institutions |
| Average outcomes**                     | Higher than average female inactivity with higher share of part-time, some unfulfilled female potential | Long working hours culture not prevailing   | Relative flexible working time arrangements   | Relative unequal division of paid and unpaid work while there is higher share of men on voluntary part-time and/or there is lower male working hours | Relative higher financial burdens, lower than average gender pay gap.            | Availability problems indicated with childcare but non-enrolment into formal care is lower than average   |
| Relative worst outcomes                | Unavailability of part-time might contribute to female inactivity                                       | Large gender gap in full-time work, long part-time relative atypical for females  | Relative flexible working time arrangements***  | Relative unequal division of paid and unpaid work with low share of males on voluntary part-time work  | Relative lower financial burdens****, lower than average gender pay gap.         | Relative less employment friendly with less spending on in-kind benefits and some problems indicated with childcare institutions  |

\* together with the Czech Republic

\*\*only Belgium and Luxembourg

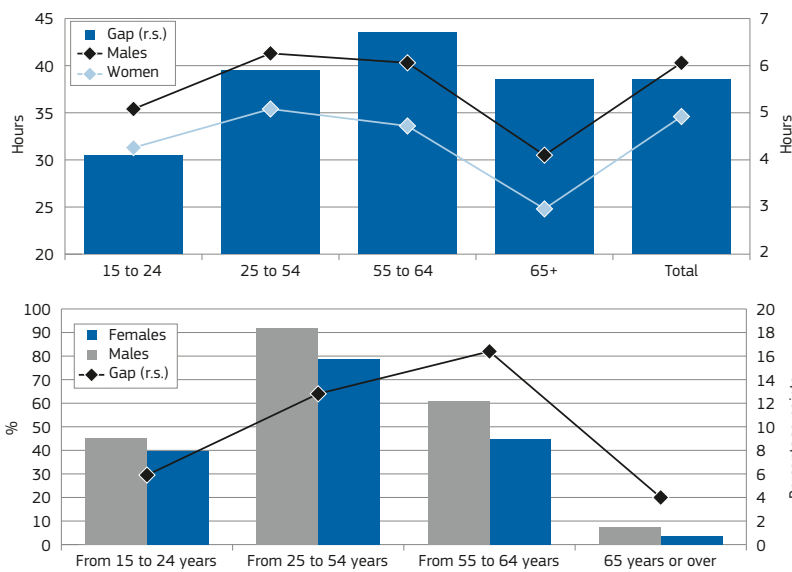
\*\*\*\*except Malta

\*\*\*\*\*except Italy

\*\*\*\*\*except Sweden

## ANNEX II

**Chart A.1: Average usual weekly hours worked for total employment by age (EU-21) and activity rates by age (EU-28)**



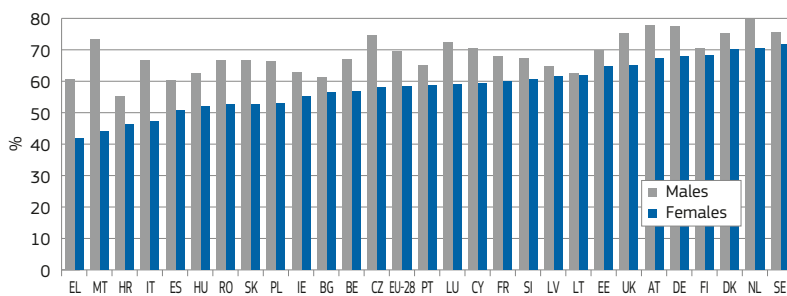
Source: OECD.Stat, Dataset: Average usual weekly hours worked on the main job; Eurostat, Activity rates by sex, age and nationality (%) [lfsa\_argan].

Note: OECD data refers to EU-21 (BG, CY, HR, LT, LV, MT, RO not available) and refers to 2011. Activity rates refer to 2012.

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**Chart A.2: Employment rates of males and females in 2012**



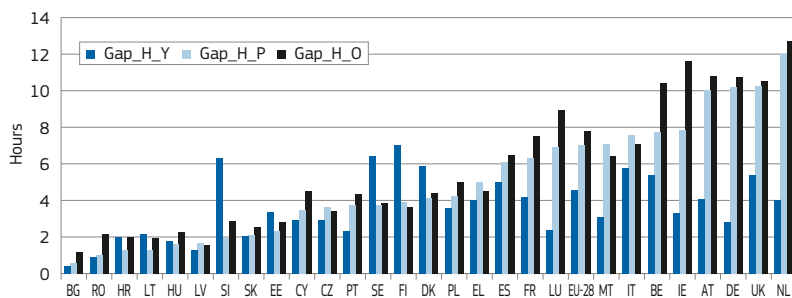
Source: Eurostat, Employment rates by sex, age and nationality (%) [lfsa\_argan].

Note: Age group 15–64.

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**Chart A.3: Gap between average number of usual weekly hours of work for males and females in different age cohorts in 2012**



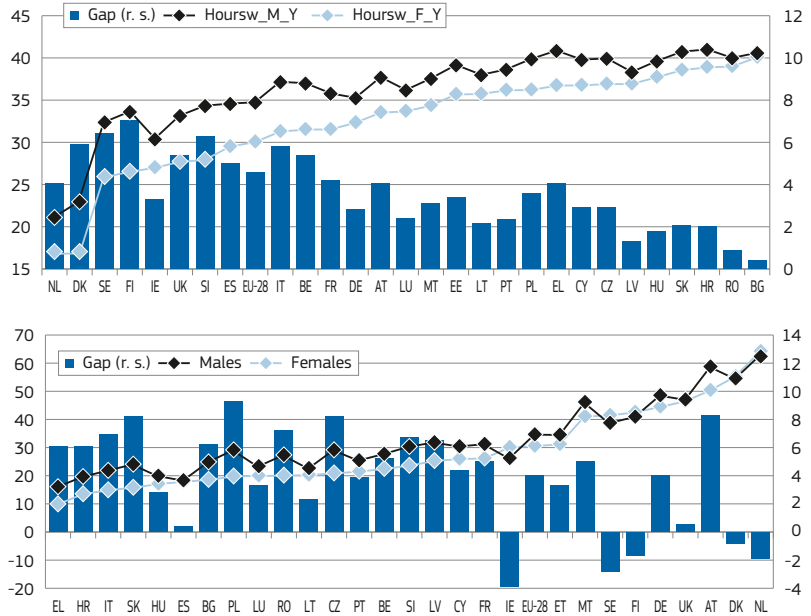
Source: DG EMPL calculation based on Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours (lfsa\_ewhun2).

Note: Gap\_H\_Y stands for the average number of usual weekly hours worked gap for the young (age 15–24); Gap\_H\_P stands for the gap for the prime-age workers (age 25–54); Gap\_H\_O stands for the gap for the older workers (age 55–64). Gap=corresponding figure for males – corresponding figure for females.

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**Chart A.4: Average number of usual weekly hours of work for young men and women (age 15–24) and gap (top chart), and corresponding employment rates (%) of men and women and gap (bottom chart) in the EU Member States in 2012**



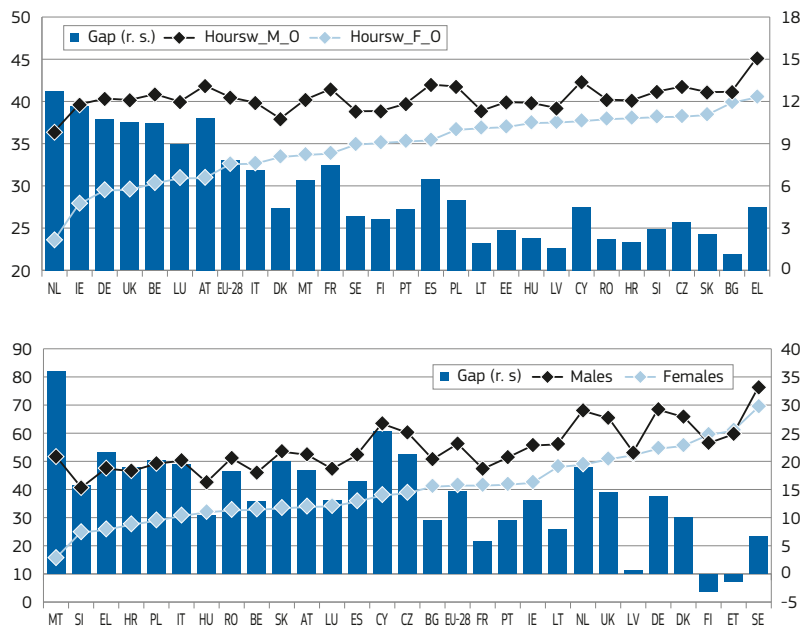
Source: DG EMPL calculations based on Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours (lfsa\_ewhun2); Eurostat: Employment rates by sex, age and nationality (%) [lfsa\_ergan].

Note: HOURS\_M\_Y stands for usual average weekly hours worked for young males; HOURS\_F\_Y stands for usual average weekly hours worked for young females.

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**Chart A.5: Average number of usual weekly hours of work for the older age male and female (age 55–64) cohort and gap (top chart), and corresponding employment rates of males and females and gap (bottom chart) in the EU Member States in 2012**



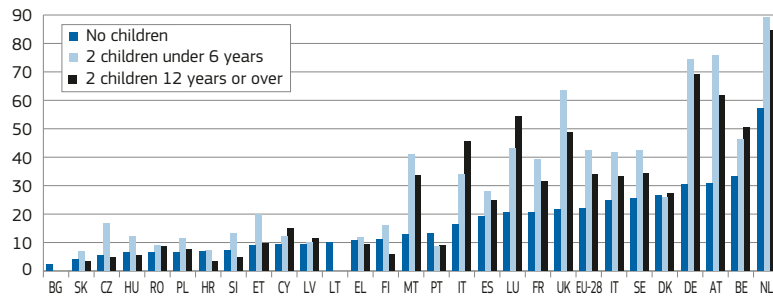
Source: DG EMPL calculations based on Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours (lfsa\_ewhun2); Eurostat: Employment rates by sex, age and nationality (%) [lfsa\_ergan].

Note: HOURS\_M\_O stands for usual average weekly hours worked for older-age males; HOURS\_F\_O stands for usual average weekly hours worked for older-age females.

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**Chart A.6: Share of part-time employment among prime-age women (25–54) with children/without children**

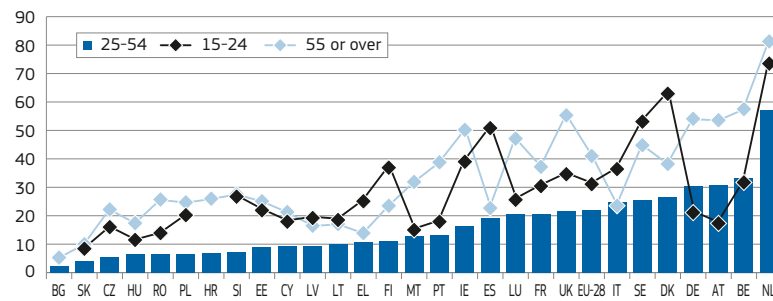


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Source: Eurostat, Percentage of part-time employment of adults by sex, age groups, number of children and age of youngest child [lfst\_hhptech].

**Chart A.7: Share of part-time employment for selected childless women age cohorts**

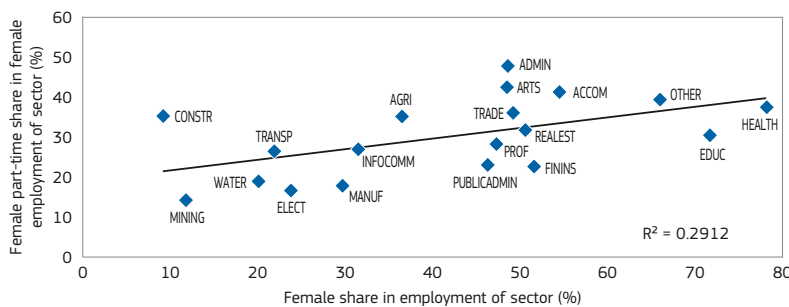


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Source: Eurostat, Percentage of part-time employment of adults by sex, age groups, number of children and age of youngest child [lfst\_hhptech].

**Chart A.8: Correlation between female share in sector and female part-time share in total sector female employment across all sectors for the EU-28 average (age 15–64)**



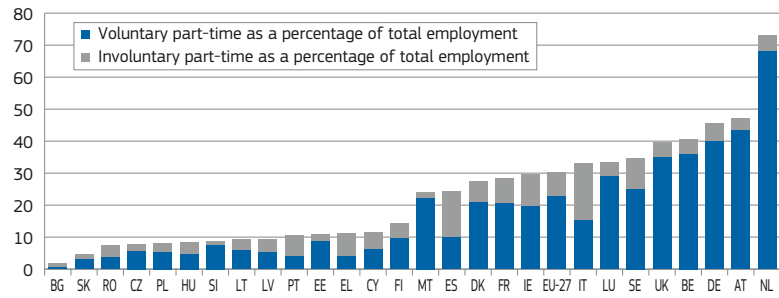
Source: Eurostat, Employment by sex, age and economic activity (from 2008 onwards, NACE Rev. 2) – 1 000 [lfsa\_egan2], Full-time and part-time employment by sex and economic activity (from 2008 onwards, NACE Rev. 2) – 1 000 [lfsa\_epgan2] (1), Correlation: 0.54.

(1) Sectors included: AGRI: Agriculture, forestry and fishing; MINING: Mining and quarrying; MANUF: Manufacturing; ELECT: Electricity, gas, steam and air conditioning supply; WATER: Water supply, sewerage, waste management and remediation activities; CONSTR: Construction; TRADE: Wholesale and retail trade, repair of motor vehicles and motorcycles; TRANSP: Transportation and storage; ACCOM: Accommodation and food service activities; INFOCOMM: Information and communication; FININS: Financial and insurance activities; REALEST: Real estate activities; PROF: Professional, scientific and technical activities; ADMIN: Administrative and support service activities; PUBLICADMIN: Public administration and defence, and compulsory social security; EDUC: Education, human health and social work activities; ARTS: Arts, entertainment and recreation; OTHER: Other service activities.

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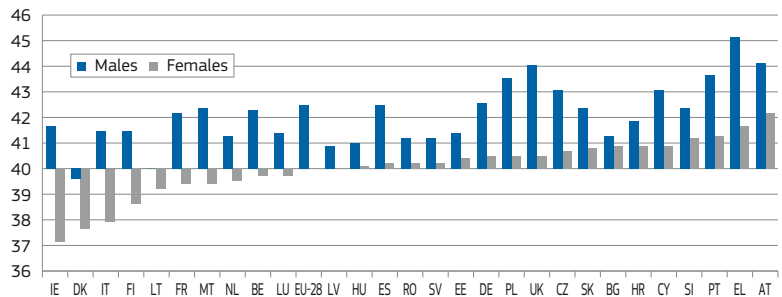
**Chart A.9: Share of part-time as a percentage of total employment among women aged 25–49 broken down to shares of voluntary and involuntary part-time (2012)**



Source: Eurostat; Involuntary part-time employment as a percentage of the total part-time employment, by sex and age (%) [lfsa\_eppgai], Part-time employment as a percentage of the total employment, by sex and age (%) [lfsa\_eppga].

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**Chart A.10: Average numbers of usual weekly hours in full-time work in 2012**

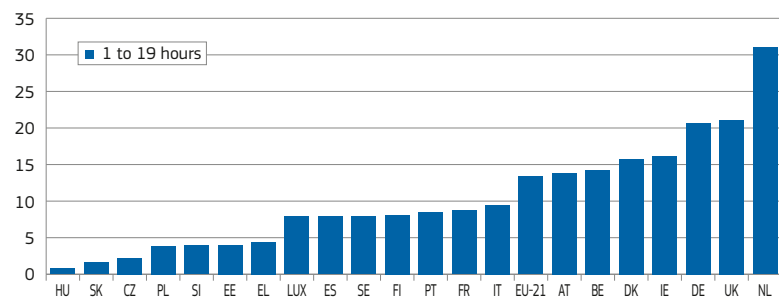
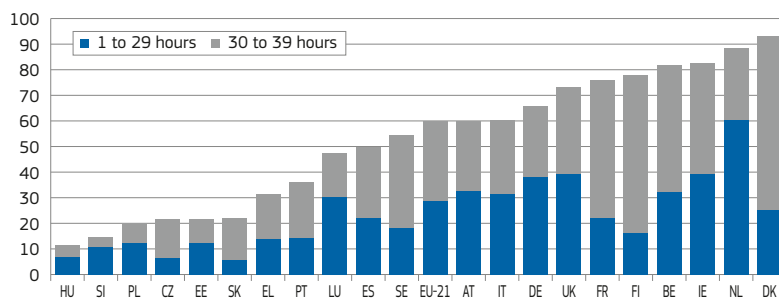


Source: Eurostat: Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours [lfsa\_ewhun2].

Note: Data for Netherlands were available only for 2011.

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**Chart A.11: Share of women (%) on selected usual weekly hour bands**

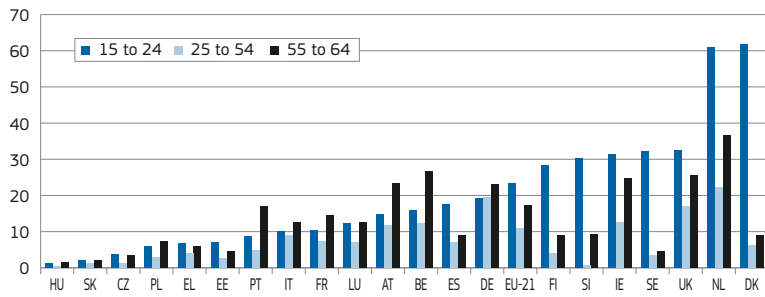


Source: OECD, Incidence of employment by usual weekly hours worked.

Note: Total female population; data for EU-21.

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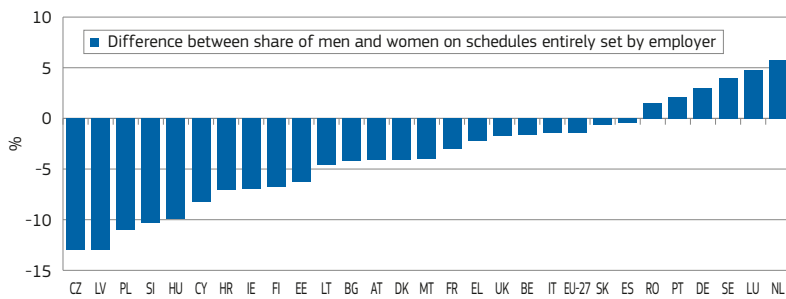
**Chart A.12: 1–19 weekly hours based on selected age groups among females**



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Source: OECD, Incidence of employment by usual weekly hours worked.  
Note: Data for EU-21.

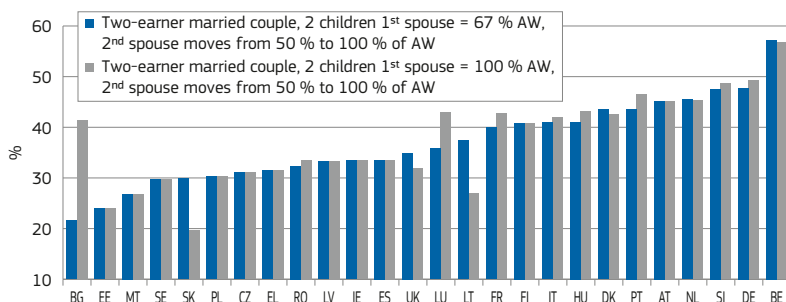
**Chart A.13: Difference between share of men and women on work schedules entirely set by the employer**



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Source: EWCS 2010 Q39 How are your working time arrangements set?  
Note: Difference in percentage points.

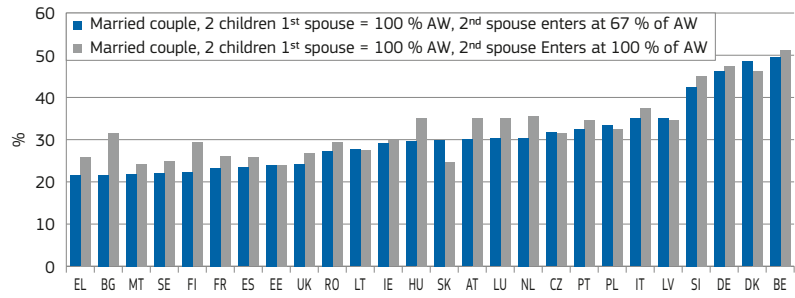
**Chart A.14: Marginal effective tax rate for a two-earner married couple with 2 children, where the first earner earns 67% or 100% of the average wage and the second earner increases his/her working hours (moves from 50% to 100% of the average wage) in 2011**



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Source: OECD tax-benefit model.  
Note: No data was available for HR and CY. Marginal Effective Tax Rate (METR) is the fraction of any additional earnings that is taxed away by the combined effect of taxes and benefit withdrawals. METR = 1 - (change in NET income / change in GROSS income). METRs are computed for an earnings change of 1% of the Average wage.

**Chart A.15: Average effective tax rate for a two-earner married couple with 2 children, when the first earner earns 100% of AW and the second earner enters at 67% and 100% of AW in 2011**

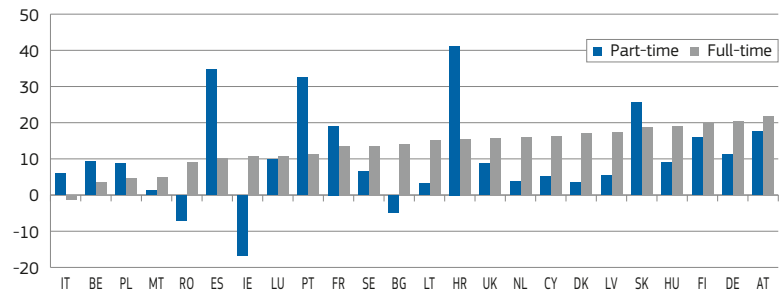


Source: OECD tax-benefit model.

Note: No data was available for CY and HR. Average Effective Tax Rates (AETR) are calculated for transitions from full-time unemployment to full-time employment; persons are not entitled to unemployment benefit but are entitled to social assistance if applicable;  $AETR = 1 - (\text{change in net income} / \text{change in gross income})$ .  $AETR \times \%$  is that part of additional gross earnings that is 'taxed away' when moving from unemployment (full-time with previous earnings of  $x\%$  AW) to full-time employment (with current earnings of  $x\%$  AW). AETRs are measured at the household level and take into account increasing taxes and contributions as well as reduced benefits. For two-earner couples, the first spouse's earnings are held fixed. The ' $x\%$ ' therefore relates to the second spouse only.

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**Chart A.16: Full-time and part-time gender pay gaps, 2010**

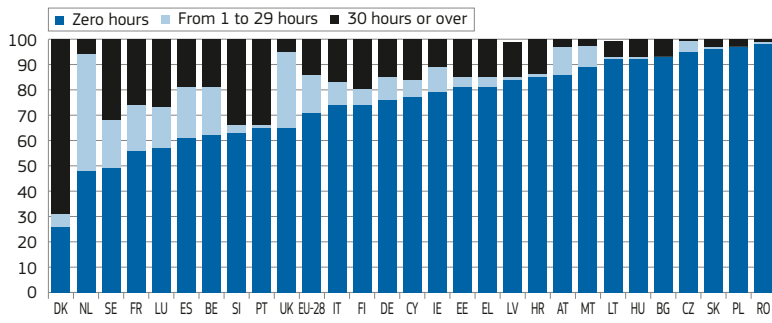


Source: Eurostat Gender pay gap in unadjusted form by working time in % – NACE Rev. 2, B-S excluding O (Structure of Earnings Survey methodology) [earn\_gr\_gpgr2wt].

Note: No data were available for CZ, EE, SI and EL.

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**Chart A.17: Enrolment in formal childcare for children less than 3 years old in 2011**

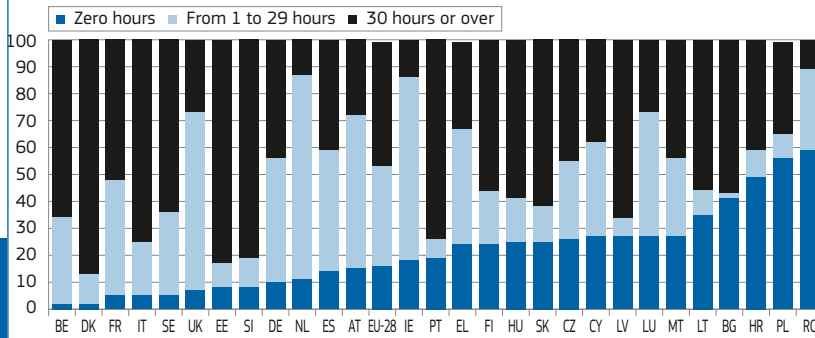


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Source: Eurostat, Formal childcare by age group and duration – % over the population of each age group (source: EU-SILC) [ilc\_caindformal].

**Chart A.18: Enrolment in formal childcare for children aged between 3 and the minimum compulsory school age in 2011**



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Source: Eurostat, Formal childcare by age group and duration – % over the population of each age group (source: EU-SILC) [ilc\_caindformal].



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