## Women's Work and Pensions. Drawing Lessons from Central and Eastern Europe.

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#### Abstract

Economic transition in Central and Eastern Europe brought about many changes to employment and social outcomes. In the course of the past two and a half decades, employment patterns as well as social policies changed in the region. Moving away from centrally planned economy resulted in frequently divergent processes, which reflect differences in policy approaches in the countries. The paper is focused on analysing changes in labour market engagement of women that in turn affect future coverage and level of pension system protection. Pension reforms that were introduced after the economic transition led to closer link between labour market histories and pension levels, which frequently affects women. It shows that there a change between current gender pension gap and the one we can expect in the future, due to the changes in the labour market developments. Tackling the future gender gap in pensions requires most importantly good labour market policies and policies aiming to reconcile work and family balance.

### Key words

Gender pension gap, labour market, pension systems

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# Introduction

Ensuring adequate and sustainable pensions for all is one of the priorities of social policy in current times. Demographic and social processes, such as population ageing and migrations, transition from education to work, reconciliation of work and family life as well as transition to retirement affect the well-being of the elderly today, but also in the future.

Many of these processes have a gender dimension: women are facing difficulties reconciling work and family life, they also experience lower labour market participation and have lower wages. These phenomena are observed both in the developed economies, but also in Central and Eastern European countries. Many events in the life course have an impact on pension rights, which are usually linked to the length of employment and wage levels, but also reflect additional rights granted in many countries for the periods of maternity and child care related breaks in employment. Thus, looking at gender differences in pensions it is important to understand what are the factors that affect these differences. Demographic changes, such as population ageing and increased pressure to higher employment of people in working age, migrations, but also transitions from education to work as well as from work to retirement as well as possibilities to reconcile work and family life have an impact on individual employment histories in the life course perspective. All these events also affect the potential level of pensions as well as difference between pensions of men and women.

The aim of the paper is to analyse women's work and pensions in 10 Central and Eastern European countries, new member of the European Union. CEE countries face particular challenges – the economic transition led to deep restructuring of labour markets, including rising unemployment and dropping employment levels. Furthermore, their social policy systems, which based on the notion of full employment collapsed and support provided to women related to reconciliation of work and family live deteriorated (Balcerzak-Paradowska et al.). Last but not least, pension systems have also undergone significant reforms, going towards introducing closer link between contributions paid and pension rights.

As a result of these changes, the history of working and family lives of women currently working are significantly different compared to those who already retired. Furthermore, level of pensions of women retiring today and in the future is also different compared to the past. In order to understand better the current and future transitions between work and pensions, it is important to take into account the current developments and circumstances, both related to labour market and employment development as well as changes in pension systems.

The paper is organised as follows. The first section presents the labour market situation of women in the analysed countries. I take into account both the development of the employment rates as well as the stylised life course profiles of employment based on the age-specific employment rates and their changes between 2000 and 2013.

There is no comparable information that would allow for longitudinal comparison of working lives of women in the analysed countries. That is why for analysing the labour market participation of women I use historical data on cross-sectional employment rates of women by age, which can indicate directions of changes of labour market participation and resulting employment history of retiring women, compared to the "model assumptions" usually applied in projecting future pension levels (DG Employment & Social Protection Committee, 2012; OECD, 2011). I also look at the employment of women aged 55-64 as a part of the evidence on the changes in the area of employment-to-retirement transitions.

In the second section I look at the gender pension gap. In the analysis I take into account the situation of women who are currently retired, based on the comparison of levels pensioners income, as proposed by (Bettio, Tinios, Betti, Gagliardi, & Georgiadis, 2012). I also look at the forward-looking gender pension gap index, which takes into account current labour market situation of women as well as theoretical replacement rates as proposed by (Chłoń-Domińczak, 2013). Finally, I compare the current and future situation of women at retirement in the Central and Eastern European countries, compared to the rest of the EU.

## 1. Women on the labour market

Over the recent years we observe changes in the female participation on the labour market. In the EU countries, the goal of raising female employment was visible in the Lisbon Strategy and then is also followed in the EU 2020 Strategy. Though CEE countries joined the EU in 2004 and later, the employment goals have been an important component of the accession preparations. Given these policy priorities, after 2000, the employment rate of women in working age, but also those in age group 55-64 has been rising in the region. As (Baran et al., 2014) underline this results both from long-term trends evident across developed countries, and from changes made to institutional frameworks in specific countries. Recent evidence from the global economic downturn has shown that the employment of women is more resilient to recessions than the employment of men, partially because of gender sectorial segregation (i.e. the masculinisation of the crisis-hit construction and manufacturing sectors, and the feminisation of the services sector, which was spared the worst effects of the crisis). The fact that since the 1990s the lion's share of employment improvements have been contributed to by women highlights the growing role of women in labour markets. These developments are shared both by the old EU as well as the new EU countries.

In the case of women in productive age (15-64) in 9 out of 10 analysed CEE countries (with exception of Romania), the employment rate increased, following the overall EU trend. In the case of 3 countries: Bulgaria, Estonia and Latvia, the increase (measured in percentage points) was higher than for the EU 15 countries. However, only in Baltic States (Estonia, Latvia and Lithuania), the employment rate of women was higher than EU-15 average. In remaining

countries female's employment levels remain below those of the western countries, in Hungary, Poland, Romania and Slovakia below the level of 55 per cent (Table 1).

Table 1. Employment rate of women in age group 15-64 in CEE countries and EU-15, 2000-2013

|                               | 2000 | 2005 | 2010 | 2013 | change in p.p.<br>2000-2013 |
|-------------------------------|------|------|------|------|-----------------------------|
| European Union (15 countries) | 53,9 | 57,6 | 59,5 | 60,0 | 6,1                         |
| Bulgaria                      | 47,2 | 51,7 | 56,4 | 56,8 | 9,6                         |
| Czech Republic                | 56,8 | 56,3 | 56,3 | 59,6 | 2,8                         |
| Estonia                       | 58,3 | 63,1 | 60,8 | 65,7 | 7,4                         |
| Latvia                        | 53,3 | 58,2 | 59,0 | 63,4 | 10,1                        |
| Lithuania                     | 58,2 | 59,6 | 58,5 | 62,8 | 4,6                         |
| Hungary                       | 49,4 | 51,0 | 50,6 | 52,8 | 3,4                         |
| Poland                        | 49,3 | 46,8 | 52,6 | 53,4 | 4,1                         |
| Romania                       | 59,0 | 51,5 | 52,0 | 52,6 | -6,4                        |
| Slovenia                      | 58,5 | 61,3 | 62,6 | 59,2 | 0,7                         |
| Slovakia                      | 51,1 | 50,9 | 52,3 | 53,4 | 2,3                         |

Source: Eurostat database, extracted on January 3, 2015.

When analysing women and pensions it is also important to see what happens to female employment at the end of working careers. In the case of many pension systems, prolonging working lives has an important impact on the level of received pension. Furthermore, many countries increased the retirement age of women (which is discussed in the following section), with the aim to increase also the women's involvement in the labour market. Between 2000 and 2013 the employment rate of women in age group 55 to 64 increased in the EU-15 countries by two thirds (Table 2). The change in the CEE region was, in some of the cases, even more pronounced. In Bulgaria and Slovakia the employment rate of women more than tripled, as a result getting close to the EU-15 average. In Latvia and Hungary it more than doubled. Overall, with exception of Romania, older women in the CEE countries are working more currently compared to the 2000 and, measured in percentage points, the increase of their employment has been higher compared to the EU-15 average in 6 out of 10 countries.

Table 2. Employment rate of women in age group 55-64 in CEE countries and EU-15, 2000-2013

|                               | 2000 | 2005 | 2010 | 2013 | change in p.p.<br>2000-2013 |
|-------------------------------|------|------|------|------|-----------------------------|
| European Union (15 countries) | 27,8 | 35,5 | 41,0 | 45,9 | 18,1                        |
| Bulgaria                      | 11,2 | 25,5 | 37,7 | 43,4 | 32,2                        |
| Czech Republic                | 22,1 | 30,9 | 35,5 | 41,4 | 19,3                        |
| Estonia                       | 39,9 | 55,1 | 55,3 | 63,6 | 23,7                        |
| Latvia                        | 25,8 | 44,5 | 48,4 | 54,6 | 28,8                        |
| Lithuania                     | 33,5 | 41,9 | 45,5 | 51,2 | 17,7                        |
| Hungary                       | 13,0 | 26,7 | 30,1 | 32,3 | 19,3                        |
| Poland                        | 21,8 | 19,7 | 24,2 | 31,0 | 9,2                         |
| Romania                       | 47,3 | 33,1 | 33,0 | 32,7 | -14,6                       |
| Slovenia                      | 14,3 | 18,5 | 24,5 | 25,2 | 10,9                        |
| Slovakia                      | 10,2 | 15,6 | 28,7 | 35,7 | 25,5                        |

Source: Eurostat database, extracted on January 3, 2015.

When we compare the employment rates of women in the age groups 15-64 and 55-64 (Figure 1) in years 2000 and 2013 we can see that there is a relatively close relation between these two values, particularly in 2013. This shows, that the overall labour market situation determines overall employment rate of women and the employment rate at older age groups. As discussed earlier, Baltic countries in this area perform better than EU-15 countries, while the rest of the CEE countries have much worse situation, including most notably Poland, Romania, Hungary and Slovakia. Deterioration on the Romanian labour market led to the dramatic shift in the position of this country – from top to lowest performer. Finally, it is also worth to note the outlier - Slovenia - where relatively high overall employment rate of women is combined with the lowest employment rate of women in age group 55-64.

a. 2000 b. 2013 70 70 EE 60 60 **52-64 52-64** RO rate rate 40 40 ♠ FF EU-15 30 30 SI E 20 20 SI 10 10 v = 1.9298x - 80.122 y = 2,0281x - 76,398  $R^2 = 0,66845$  $R^2 = 0.47167$ 45 50 55 60 50 60 employment rate 15-64 employment rate 15-64

Figure 1. Employment rates of women in age groups 15-64 and 55-64, CEE and EU-15

Source: Author's calculations based on Eurostat LFS data

Given the observed labour market participation of women, we can use those to estimate hypothetical years in employment, which measure what is the actual number of years in work between ages 15 and 64, assuming current employment rate levels (Table 3).

Table 3. Hypothetical years in employment in CEE and EU-15 countries, 2000-2013

|                               | 2000 | 2005 | 2010 | 2013 | Change in years<br>2000-2013 |
|-------------------------------|------|------|------|------|------------------------------|
| European Union (15 countries) | 27,0 | 28,8 | 29,8 | 30,0 | 3,1                          |
| Estonia                       | 29,2 | 31,6 | 30,4 | 32,9 | 3,7                          |
| Latvia                        | 26,7 | 29,1 | 29,5 | 31,7 | 5,1                          |
| Lithuania                     | 29,1 | 29,8 | 29,3 | 31,4 | 2,3                          |
| Czech Republic                | 28,4 | 28,2 | 28,2 | 29,8 | 1,4                          |
| Slovenia                      | 29,3 | 30,7 | 31,3 | 29,6 | 0,4                          |
| Bulgaria                      | 23,6 | 25,9 | 28,2 | 28,4 | 4,8                          |
| Poland                        | 24,7 | 23,4 | 26,3 | 26,7 | 2,1                          |
| Slovakia                      | 25,6 | 25,5 | 26,2 | 26,7 | 1,2                          |
| Hungary                       | 24,7 | 25,5 | 25,3 | 26,4 | 1,7                          |
| Romania                       | 29,5 | 25,8 | 26,0 | 26,3 | -3,2                         |

Source: Author's calculations based on Eurostat LFS data

The hypothetical years in employment ranges from almost 33 years in Estonia to 26.3 years in Romania. Between 2000 and 2013 patterns of female employment changed, translating from a gain of more than 5 years in hypothetical years in employment in Estonia to a loss of more than 3 years in Romania. The change of the value of this indicator is a result of different underlying developments affecting various age groups, which is illustrated in Figure 2.

a. Bulgaria b. Romania 2001 - women 2011 - women 0,90 0.90 0,80 0,80 0,70 0,70 0,60 0,60 0,50 0,50 0,40 0,40 0,30 0,30 0,20 0,20 0,10 0,10 0,00 0,00 35-39 45-49 50-54 55-59 60-64 30-34 25-29 60-64 40-44 c. Poland d. Slovakia 0,90 0,90 0.80 0,80 0,70 0,70 0,60 0,60 0,50 0,50 0,40 0,40 0,30 0,30 0,20 0,20 0,10 0,10 0,00 0,00 50-64 25-29 30-34 35-39 45-49 55-59

Figure 2. Age profiles of employment rates of women in selected CEE countries, 2000 and 2011.

Source: Author's calculations based on Eurostat LFS data

For example, the increase in the hypothetical employment years in Bulgaria (Fig. 2.a) is driven mainly by increase of women's employment rate in age group 40 and over, including also postponement of the age of the labour market exit. In Poland (Fig. 2.c.) we also see an increase in hypothetical years of employment, but in this case employment rate increased in age groups 25-59 and the exit age from labour market remained unchanged. In Romania (Fig 2.b), decline in employment was observed in all age groups, but the largest one for women aged from 60 to 64 years. Even in the case of countries that have relatively small change in the number of hypothetical years in employment we can see changes in the age profiles of

employment, which are a result of combination of education, family, labour market and retirement policies. In Slovakia (Fig 2.d) the employment rate of women in younger age groups decreased, indicating later transition from education to labour market but also lower employment of women in childbearing aged. At the same time, employment rate of women older than 45 years increased, which led to overall slight increase in the hypothetical years of employment.

It should be noted that the estimated values of hypothetical years of employment in all CEE countries are below the number of years in employment taken into account when calculating theoretical replacement rates, both by the European Commission (DG Employment & Social Protection Committee, 2012) and the OECD (OECD, 2011), which equal to 40 and 45 years respectively.

Another important parameter important when analysing women's work and pensions is the level of wages. Also in this area, women are in general in worse situation than men. Gender wage gap also persists in some of the CEE countries. It exceeds 20% in Estonia and Czech Republic, while in Slovenia and Poland it is below 5%. As shown in Figure 3, there is no relationship between level of employment rate and gender pay gap – countries with similar levels of employment rate can have very different pay gap levels (for example Estonia and Slovenia). This means that despite similar length of potential working period, the expected level of pensions, compared to the theoretical replacement rates calculations for average wage earners, can be different due to differences in wage levels.

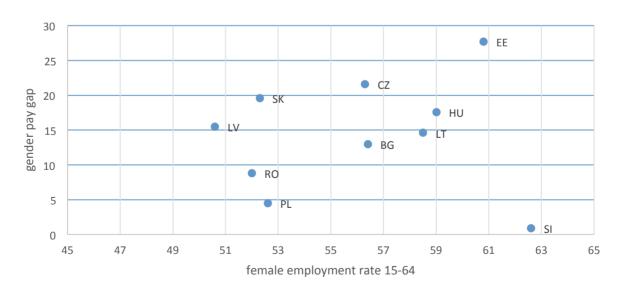


Figure 3. Gender pay gap vs. employment rate of women in CEE countries, 2010

Source: Author's calculations based on Eurostat LFS data

While we can compare the situation of women on labour markets between countries, there is little empirical evidence on the distribution of wages and employment rates within countries.

Available evidence from Poland (Chłoń-Domińczak & Strzelecki, 2013) indicates that shorter employment histories are combined with lower wages. As a result, women lose twice compared to men: because of both shorter employment and lower wages.

Reducing the gender gap on the labour market, both in work intensity and wage levels, requires focusing on the employment policies and their outcomes in the entire life course. In particular faster transition from school to work and good reconciliation of work and family are important factors contributing to extending working lives. (Baran et al., 2014) underline that there are several specific issues drive women's employment decisions – education, maternity, retirement, life-long learning, care choices and earning potential. The improvement in these areas each requires its own set of policies, yet several of these overlap. This means that the package of labour market policies, aimed at increase of employment rate of women at all ages requires also a good co-ordination across the entire labour market policy board.

# 2. Women and pensions

Currently, retired women in Central and Eastern European countries on average don't have significantly different pensions compared to men, which is shown by the assessment of gender pension gap (Bettio et al., 2012). While the average Gender Pension Gap in the EU equals to 39%, it the case of CEE countries it ranges from 33% in Bulgaria to 4% in Estonia – showing the North-South gradient in pension levels. It should be noted, that this assessment is calculated for women, who are retired today, which means that they most of their working live was spent before the economic transition, in different labour market and social policy circumstances.

Women's pensions in the future depend also on the design of pension systems. This includes, most importantly, the level of benefits, according to the systems' rules as well as retirement ages, which affect the length of working lives. Additionally, in the case of women, it is important how pension systems recognize periods of maternity and childcare in the form of pension rights.

Before economic transition in many CEE countries women's retirement age was lower compared to men's. Following the trend in the EU, in recent years many countries increased and equalised retirement ages. This is a process, which is still being implemented gradually (Figure 4). In 2011 in 8 out of 10 analysed countries women could retire earlier than men, while in the rest of the EU countries, only in four cases retirement age was different. By 2040 still Bulgaria, Romania and Slovenia will have different retirement ages. In many countries retirement ages will be increased. However, if we compare CEE countries to the rest of the EU, we see that retirement age is lower in these countries. By 2040 only Czech Republic and Poland expect to increase the retirement age above the threshold of 65 years, while in 5 countries retirement age of women will remain below the level of 65 (according to the current

legislation). This means that the expected working time of women in the CEE countries will be on average shorter due to lower age of retirement.

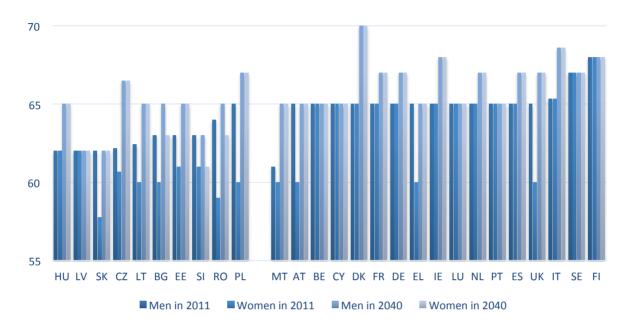


Figure 4. Retirement age for men and women in the CEE and the rest of the EU countries, 2011 and 2040

Source: analysis of the Ministry of Finance in Poland, based on the OECD, AWG and country information

Change in legal retirement age leads to the change of actual age of claiming old-age pension by women. This can be illustrated by examples of Poland and Hungary (Figure 5).

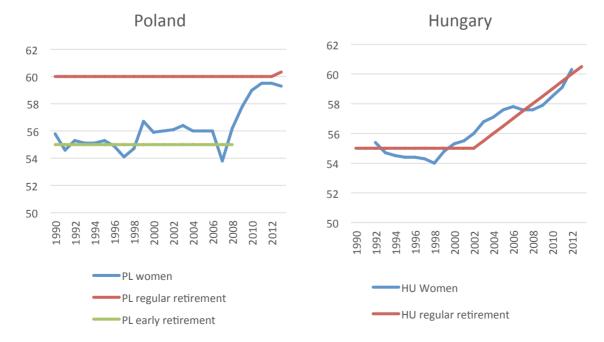


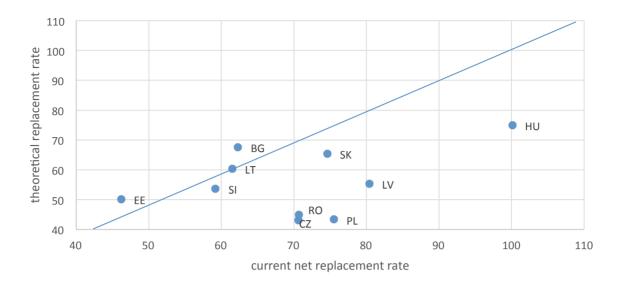
Figure 5. Actual and legal retirement age in Poland and Hungary, 1990-2012

Source: ZUS (actual age Poland), (Gál, 2013) (actual age Hungary) OECD statistics (legal age)

In Hungary, the legal retirement age of women started to be gradually increased (by 6 months every year) from 2003. As a result, the actual retirement age of women in between 2003 and 2012 Hungary increased from around 55 to around 60, following the trend set by the legal changes. Poland adopted another strategy in retirement age changes. While the legal retirement age of women was set at the level of 60, women had a possibility to retire earlier, at the age of 55, if they had a work experience exceeding 30 years. As most of women actually worked for more than 30 years, the actual age of retirement was close to 55. Starting from 2009 the possibility of early retirement due to long work experience was eliminated. As a result, the actual retirement age of women increased sharply from 54 in 2008 to almost 60 in 2010. The experiences of Poland and Hungary suggest that the minimum retirement age in the legislation is the main driver of retirement behaviour, which influences individual decisions to claim an old-age pension.

The level of pension promise is a second important factor that influences pensions of both men and women. Given the economic, demographic and social changes, most importantly population ageing, CEE countries reformed their pension systems, including also changes in the way pension levels are determined. These changes took form of going towards strengthening the links between wages and pensions, including shift towards defined-contribution schemes (Latvia, Poland, Estonia and Slovakia in the funded component), point systems (Romania, Slovakia) or parametric reforms of the DB schemes (Estonia, Bulgaria, Czech Republic, Hungary, Lithuania). The result of the implemented reform is the reduction of the level of pension promise measured by the replacement rate levels (Figure 6). Compared to the current net replacement rate, the future theoretical replacement rates are declined in majority of the countries, with most pronounce declines in Poland, Romania, Czech Republic, Latvia and Hungary. In the first three of these countries, the replacement rate in the future is expected to be on the level below 50 per cent of average wage. These changes will also affect the future situation of women at retirement, increasing the risk of the relative poverty.

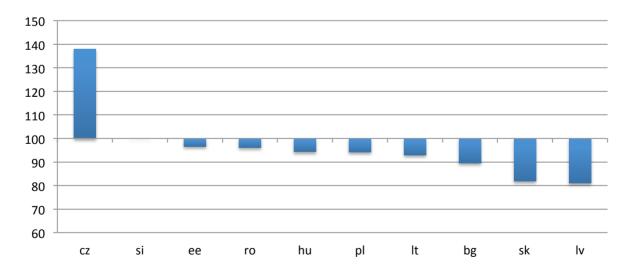
Figure 6. Current net replacement rate and future theoretical replacement rate for average wage earners in CEE countries



Source: (DG Employment & Social Protection Committee, 2012)

An important factor that can decrease or increase the expected pension level for women is compensation of child-break periods. Based on the analysis in Pension Adequacy Report (DG Employment & Social Protection Committee, 2012), presented in Figure 7, only Czech Republic and Slovenia manage to preserve (or even increase) pension rights of women deciding to break their careers to care for children. In other analysed countries, a three year break translates into reduced level of expected pension. A loss exceeding 10% of potential pension level is projected in Bulgaria, Slovakia and Latvia.

Figure 7. Ratio between theoretical replacement rate of female worker with 3-year child care break and full career of average wage earner



Source: Author's calculation based on (DG Employment & Social Protection Committee, 2012)

Concluding, the pension systems in the CEE countries still create conditions for earlier retirement of women compared to men, which leads to a gap in pension level between men and women. The legal retirement age also remains lower than in the rest of the EU countries, causing shorter overall working histories of retiring people. Furthermore, the reduction of the relative level of pension resulting from implemented pension reforms helps to maintain sustainability of pension systems, but may contribute to increased poverty levels among elderly women. Last but not least, low recognition of pension rights for childcare periods adds to gender pension gap.

# 3. Gender pension gap currently and in the future

Both labour market and pension system developments affect future potential gender pension gap, compared to the current one that reflects past labour market and pension system developments. In this section, I compare the current gender pension gap calculated based on current pensions level (Bettio et al., 2012) and the potential future pension gap, based on the proposed index of Gender Pension Rights Gap presented in (Chłoń-Domińczak, 2013).

The forward-looking Gender Pension Rights Gap index is based on the set of indicators that includes those linked to the labour market developments as well as pensions systems' ones. It includes indicators which are calculated in the harmonised way for all EU countries in regular time intervals (Figure 8).

Gender pension rights gap

Labour market Pension system

Employment years gap

Career brak gap

Low wage redistribution

Pension indexation

Gender retierement age differential

Figure 8. Composition of gender pension rights gap index

Source: (Chłoń-Domińczak, 2013)

#### The labour market indicators include:

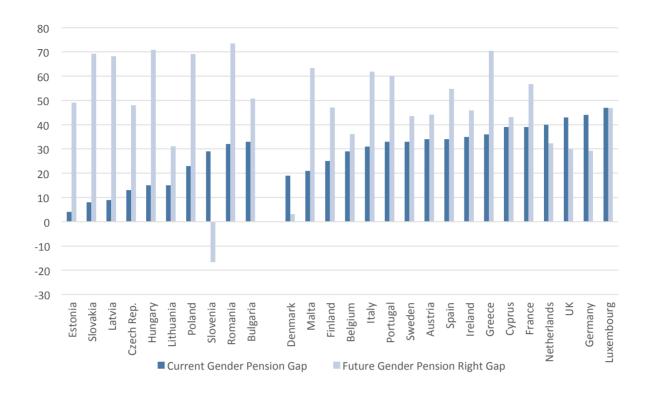
- an employment years gap measured as a number of expected average years in employment for women divided by 40 years (i.e. career length assumed in the calculation of prospective theoretical replacement rates;
- a wage gap.

### The pension systems indicators include:

- a career break gap calculated as a ratio of TRR of women with 3-year career break to TRR of male 100% wage earner
- a low wage earner pension factor calculated as a ratio of TRR of low wage to TRR of male 100% wage earner (given that women have lower wages compared to men)
- a pension indexation factor calculated as a ratio of replacement rate after 10 years to current replacement rate of male 100% wage earner (given that women receive pensions longer due to lower retirement age and longer life expectancy);
- a retirement age gap factor calculated as a ratio of TRR of woman at different pensionable age to the TRR of male 100% wage earner (for countries that maintain difference in retirement age between men and women).

The comparison of the current and future gender pension gap is shown in Figure 9. While the current gender pension gap for the CEE countries is relatively low, in the future, if current situation remains not changed, the gap will increase, particularly in the case of Slovakia, Latvia, Hungary, Poland and Romania, where the future pension gap is above average. In the case of Lithuania the gap will remain relatively low, while in Slovenia the gender differences should be negligible, which is related both to low differences between men and women on the labour market, as well as the design of pension system. Contrary to the changes in the CEE countries, in the rest of Europe the future gender pension gap can be reduced, in particular in Denmark, the Netherlands, the UK and Germany.

Figure 9. Current and future pension gap in the CEE countries and the rest of the EU



Source: (Bettio et al., 2012) and (Chłoń-Domińczak, 2013)

## Conclusions

The analysis presented in the paper shows that the developments on the labour markets and pension systems in Central and Eastern European countries can lead to increasing of gender pension gap in the future. The labour market participation of women still remains low in many countries, including the prime age as well as ages 50 and more. This means that women are expected to have shorter working lives, compared to the "stylised" working careers taken into account when projecting future pension levels. The gender wage gap is also persistent in many of the countries. Pension systems reforms strengthen links between labour market histories and the level of pensions. This will also affect the future pensions of women.

Reducing the differences between pensions of men and women as well as ensuring the adequate income for women during the working and retirement periods requires an integrated policy developments. Pension levels mirror differentials on the labour market. Longer working lives of women can be achieved by supporting smooth school-to-work transition, good reconciliation of work and family lives, prolonging employment at the end of the working career. As a result, the levels of pensions will also be higher, reducing the risk of poverty at the old age. Additionally, the retirement age should be monitored and adjusted, following the demographic developments, which should ensure maintaining adequate income at retirement.

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