1 WOMEN IN THE LABOUR MARKET 1.1 THE PROBLEM AND ITS BACKGROUND AND LITERATURE REVIEW

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The most remarkable labour market development in the developed countries in recent decades has been the increasing convergence of the labour market roles of men and women. The gender gap in labour market participation, employment, number of hours of paid and unpaid work, wages and qualification levels has significantly decreased but there are still considerable differences in the situation of the genders. A lower proportion of women participate in the labour force, they are overrepresented in part-time and temporary employment, in low paid industries and occupations, are less likely to be self-employed and more likely to be employees, are less likely to run their own businesses or work in senior positions, and differences between the wages of men and women still pertain.

Investigating the reasons for the gender gap in the labour market and looking for policy options which support the reduction of the differences are not only relevant for gender equality but also because these differences may have an impact on the economic growth prospects of countries. *Christiansen et al.* (2016) argue that aging European societies, where fertility growth is slowing down, narrowing the gender gap in the labour market may influence growth in two ways: on the one hand, by increasing labour supply, on the other, by improving the financial performance of businesses. The second assertion is based on the findings of an increasing number of recent studies on the impact of the presence of women in the boards or senior management on companies' performance. Research, carried out predominantly in the United States, shows that companies with women in the management have better financial performance (*Adler* 2001, *Carter et al.* 2003, 2010, *Erhardt et al.* 2003).

Eliminating the gender gap in the labour force participation rates would increase the European pool of labour by 6 per cent, according to the findings of *Christiansen et al.* (2016), but if the gender gap in work hours also disappeared, this growth would reach 15 per cent. According to *OECD* (2012) calculations, closing the gap in participation would enable a 12 percent higher GDP in Europe over the next 15 years than the level achievable with the current participation rate. Other studies also reported a comparable impact on growth. *Cuberes–Teignier* (2014) and (2016) claim that as a result of a lower participation of women in the labour market and business, per capita income is 10 per cent lower than it would be in the case of equal participation. Increases in female participation and employment rates would not only bring

immediate economic benefits, but may also accelerate GDP growth in the medium and long term. According to findings of the OECD, a quarter of the economic growth achieved since 1995 has been due to reductions in the gender gap in employment rates (*OECD*, 2008, 2012).

In the majority of European countries the participation rate of women has been increasing since the 1970s, although at a different pace and starting from different levels. This continuous increase did not halt during the global economic crisis, which started in 2008–2009. As the average participation rate of men in the EU28 and EU15 did not change or only slightly changed during this period, the gender participation gap decreased. In Hungary, similarly to other transitional countries, the female participation rate showed a different trajectory. In the communist era, female participation was higher than in more developed countries, then it suddenly plummeted at the beginning of the transition (from 76 per cent to 50 per cent between 1990 and 1995). After 2001 it started to grow again with some fluctuation but since the participation rate of men increased faster than that of women after 2012, the gender gap then started to widen after that date.²

At an individual level, age and educational attainment are the principal factors determining female labour market participation (see for example Anderson–Levine, 1999, Attanasio et al. 2008, Thévenon, 2009, Jaumotte, 2004, Fortin, 2005 and Azmat et al. 2006). Giving birth influences the labour market participation of women to different degrees over time and across countries and the differences are attributable to changes in family policy, attitudes and the labour market opportunities of women (Del Boca et al. 2009, Connolly et al. 2006 and Vlasblom–Schippers, 2006). Previously, marital status also used to have a major impact on the probability of employment of women but recent research shows that this effect has disappeared (Cipollone et al. 2013). However, the labour market status of partners does have an impact on female participation in most European countries: women with an unemployed partner are more likely to be active in the labour market (Thévenon, 2009), although the impact varies across countries and unemployment benefit systems (Bredtmann et al. 2014).

Family policy, subsidised child care and paid parental leave have a significant effect on the decisions of women with children concerning labour market participation (*Paull–Taylor*, 2002, *Jaumotte*, 2003, 2004, *Sánchez-Mangas–Sánchez-Marcos*, 2008, *Cipollone et al.* 2013 and *Del Boca et al.* 2009). Child care opportunities primarily influence the decisions of less qualified women, while part-time employment opportunities have more effect on the decisions of more qualified women.

There is extensive literature on the reasons for the increase in female participation. In addition to improving educational attainment and increasing wages, other factors also supported the labour market participation of women. Increasingly easy access to market substitutes for housework and the de-

¹ The average participation rate of men aged 20–64 increased in the EU28 from 83.1 per cent to 83.5 per cent, and decreased in the EU15 from 84.2 per cent to 84 per cent between 2008 and 2017.

² In 2017 the gender participation gap in the 20–64 age group was 15.3 percentage points in Hungary, while it was 11.5 percentage points in both the EU28 and the EU15 according to Eurostat data.

velopment and spread of household appliances (Greenwood et al. 2005) and contraceptive pills also contributed to the increase in the female labour supply (Goldin-Katz, 2002, Bailey, 2006, Bailey et al. 2012). Additionally, as a result of changes in the occupational composition of labour demand, the demand for office jobs, where women work in a higher proportion, has risen (Goldin, 1990, Oppenheimer, 1976). However, studies trying to explain the increase of female participation over time by changes in the usual variables (including wages, household incomes, educational attainment and other demographic variables) of traditional economic models, found that a large part of the change in participation cannot be explained in periods where the female participation rate grew more rapidly. This implies that changes in preferences and other unobserved factors may have an important role in the improving female participation (see *Blau–Kahn*, 2017).

Similarly to the narrowing gender gap in participation, the gap has also decreased between female and male employment rates over the past decades. Nevertheless, there are considerable differences in the forms of employment. In 2017, an average of 31.3 per cent of women and only 8.2 per cent of men aged 20–64 worked in part-time jobs in the EU-28.3 In Hungary, part-time employment of both genders was negligible: 2.6 per cent of men and 6.3 per cent of women aged 20–64 had a part-time job in 2017.

Occupational segregation has remained significant. An average of 30 per cent of women in the EU28 worked in sectors with a majority of female workers (education, healthcare, welfare) in 2014. Occupational segregation has increased since 2008, which has increasingly contributed to the continuing gender pay gap.

The gender pay gap is a popular subject of studies investigating the labour market opportunities of men and women because pay rates often indicate how individuals are valued economically and socially. Pay is also a composite indicator for an individual's educational attainment, qualifications, work experience and expected future participation. Most studies differentiate between the explained and unexplained elements of the pay gap. The first is due to the differences between the measurable characteristics of the genders, while the second is usually identified as labour market discrimination. However, when measuring the gender wage gap and interpreting results, controlling for the selection effects is an important and complex consideration (see *Lovász–Telegdy*, 2010, in Hungarian). When wage differences cannot be explained by productivity differences, discrimination seems plausible as an explanation (Becker, 1971, Phelps, 1972). Becker and other authors (for example Arrow, 1973) hypothesized that competition would reduce employers' discrimination, as the least discriminating firms, employing more women, would have lower production costs and thus push more discriminating firms out of the market. Several studies examined what impact increased competition has on 3 Eurostat.

the gender pay gap. *Black–Strahan* (2001) reported that following the deregulation of the financial sector (which they regarded as increased competition), the gender wage gap decreased in the banking sector. *Black–Brainerd* (2004) found that more exposure to international trade, that is increased competition, reduced the visible wage gap. *Lovász* (2010) relied on Hungarian data from the period between 1986 and 2003 to assess what proportion of the reduction in the wage gap is attributable to the impact of increased competition that diminishes discrimination. The results showed that increases in competition reduced employers' discrimination against women.

Studies on the gender wage gap applied various methods and diverse data sources, nevertheless some general trends are seen in their findings. One of the most important is that the gender wage gap has significantly narrowed in the developed countries over recent decades. A meta-analysis by *Weichselbaumer–Winter Ebmer* (2005) reviewed 263 studies on the gender wage gap from the period between the 1960s and the 1990s. The raw wage gap decreased from 65 per cent to 30 per cent between 1960 and 1990, primarily because female educational attainment and labour market experience improved. Although the studies applied varying methods and data, some of the findings were similar because the unexplained element of the wage gap did not decrease over time.

Blau–Kahn (2017) and Goldin (2014) presented similar results from the United States: in spite of a closing wage gap, the proportion of the unexplained element of the gap has not changed or even increased since the 1980s.

Reductions in the differences in educational attainment and the duration of work experience between the genders have contributed to the narrowing wage gap but the gender segregation according to occupations, industries and sectors has remained to be a determining factor. At present, occupational and sectoral segregation explains half of the wage gap in the United States (*Blau–Kahn*, 2017) and this is also the main reason for the gender wage gap in Europe (*Boll et al.* 2017). The importance of occupational – and in many cases sectoral – segregation was already researched by early studies on the gender wage gap (*Fuchs*, 1971, *Blinder*, 1973, *Oaxaca*, 1973, *Sawhill*, 1973, *Sorensen*, 1990, *Macpherson–Hirsch*, 1995). Women and men not only work in different occupations but at different levels of the hierarchy within an occupation.

In transitional countries, including Hungary, the gender wage gap significantly decreased after the political changeover (see for example Kertesi–Köllő, 1998, Galasi, 2000, Brainerd, 2000, Newell–Reilly, 2001). At that time it was primarily because low-qualified and less productive women were forced out of the labour market (Hunt, 2000) but also because competition curbed the discrimination of employers against women (Lovász, 2010). However, as for the start of the transitional period, Csillag (2007) reported that while in late communism gender segregation significantly contributed to the continuing pay gap, following the post-communist transition the line between female and

male occupations was more blurred and the overrepresentation of women in an occupation did not entail low wages.

In addition to studies on the average wages of men and women, more and more studies assessing the differences at the various points of wage distribution have been published in the past decade. Blau–Kahn (2017) presented that in the United States the wage gap is wider at the higher end of the wage distribution and decreases more slowly than at the lower end of the distribution. These findings are consistent with the results of other studies concerning the United States and other countries (Kassenboehmer–Sinning, 2014, Arulampalam et al. 2007). Lovász (2013), relying on Hungarian data, found that women lag behind more at the upper end of the wage distribution both in the public and the private sector, which supports the notion of the glass ceiling. Several studies report that women are less likely to be promoted than men of the same characteristics (Blau–DeVaro, 2007, Cobb-Clark, 2001, McCue, 1996, Addison et al. 2014). Whatever the reason for women to be less likely to work as senior managers, this fact also contributes to the continuing gender pay gap.

Some of the most recent studies have investigated the effects of gender differences in psychological characteristics and non-cognitive skills (*Heckman–Kautz*, 2012, *Nyhus–Pons*, 2011, *Cattan* 2014, *Fortin*, 2008, *Mueller–Plug*, 2006, *Semykina–Linz*, 2007). Findings showed that women are less likely than men to initiate wage bargaining or be willing to compete and they are more risk-averse, which may also contribute to the continuing gender wage gap or the choosing of a different discipline or occupation (for the summary of the relevant findings see for example *Bertrand*, 2011 and *Croson–Gneezy*, 2009). However, *Blau–Kahn* (2017) points out that, based on research results so far, psychological characteristics only explain a small proportion of the unexplained wage gap and that since these differences are based on experimental research, more evidence is needed to confirm that these differences also exist outside the research situation.

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