

Gender Unemployment Gaps: Evidence from the New EU Member States

ALENA BIČÁKOVÁ

While gender differences in wages have been extensively studied and are well documented, much less is known about gender differences in unemployment rates. Female wages are on average lower than male wages in almost all countries ever analyzed, yet women do not always have higher unemployment rates than men. I contribute to the research on gender differences in labor market outcomes by analyzing the gender unemployment gaps (the difference between the female and male unemployment rate) in eight new EU member states, using the European Union Labor Force Survey data from 1996 to 2007. My sample includes four Central European countries (Czech Republic, Hungary, Poland, and Slovakia), the three Baltic countries (Estonia, Latvia and Lithuania), and one South European country (Slovenia).

The unemployment rate is defined in a standard way, as the ratio between the number of unemployed individuals and the number of individuals who participate in the labor force, which include both those who work and the unemployed. I use the International Labor Organization's definition of unemployment, which requires that an individual does not have a job, has been actively looking for a job in the past four weeks, and is available to start working within two weeks. As is apparent from the first

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series in Figure 1, there is a substantial variation in gender unemployment gaps across the eight countries in 2007. While the unemployment rate of prime age Czech and Slovak women exceeds the unemployment rate of prime age Czech and Slovak men by more than 3 percentage points, there are no statis-

tically significant gender differences in the unemployment rate in Baltic countries. The aim of my research is to find out what drives the observed variation in gender unemployment gaps across the eight new EU member states.

I find that very little of the observed gender unemployment gaps can be explained by differences in human capital, namely, education. The second series in Figure 1 show a hypothetical gender unemployment gap, i.e. the gap that we would observe if women and men had on average the same level of human capital. As women in the labor force are on average more educated than men in six of the eight countries, we would expect them to have a lower

Figure 1: Gender Unemployment Gaps in Population and Under Human Capital Equality (in p.p.)

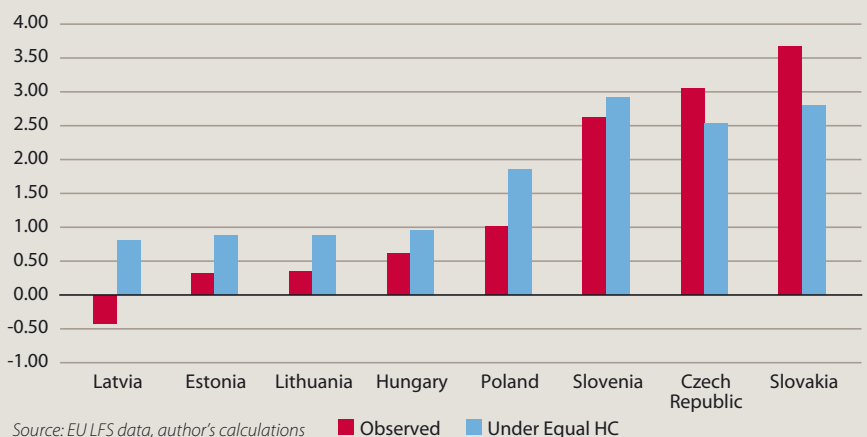
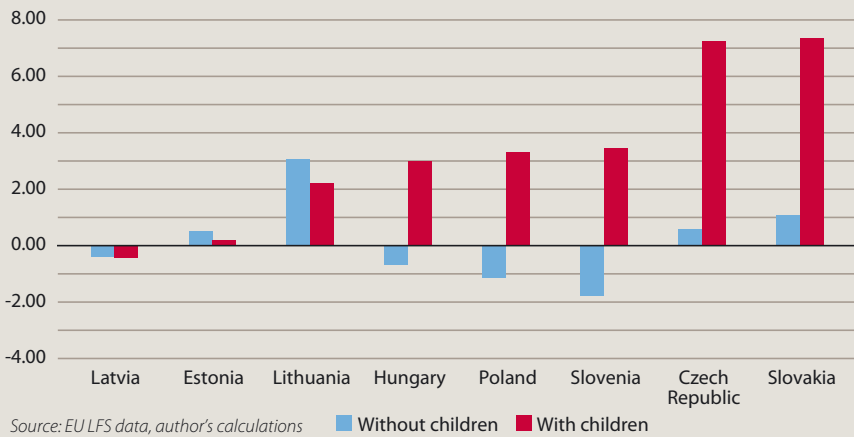


Figure 2: Gender Unemployment Gaps by Presence of Children < 15 years of age (in p.p.)



unemployment rate than men and not vice versa. Only in the Czech Republic and Slovakia do women have on average lower education than men (this is, however, not true for the younger generations, suggesting that women will soon overtake men in the level of schooling also in these two countries), which accounts for about 20 % of the gender unemployment gaps. As shown in Figure 1, if Czech or Slovak women and men had the same level of education, the difference between female and male unemployment rates

would have dropped from 3 p.p. to 2.5 p.p. and from 3.7 p.p. to 2.8 p.p., respectively. For the remaining eight countries, however, the same level of human capital between women and men would imply even greater gender unemployment gaps, in particular in Poland, where the 1.1 p.p. gap would almost double, to 1.9 p.p.

I next focus on family-related characteristics, and inspect gender unemployment gaps among individuals with and without children. Having children is

defined as the presence of at least one child younger than 15 years old in the household, implying that both childless individuals and individuals with grown-up children belong to the group without children. I expect that having children has a negative effect on female labor force participation, as well as on the duration of their work experience. While education captures the level of human capital before entering the labor market, work experience on top of education captures the current state of human capital.

It turns out (see Figure 2) that having children is the main factor that makes women in the labor force subject to a higher risk of unemployment when compared to men. Comparing the two series in Figure 2, we see that while there are substantial gender unemployment gaps in favor of men among individuals without children in all countries but Lithuania, ranging from 7.3 p.p. in Slovakia to 2.2 p.p. in Slovenia, there are no statistically significant gender unemployment gaps or there are gaps in favor of women among individuals without children in seven of the eight coun-

Figure 3: Labor Force Participation Rates by Gender and Presence of Children

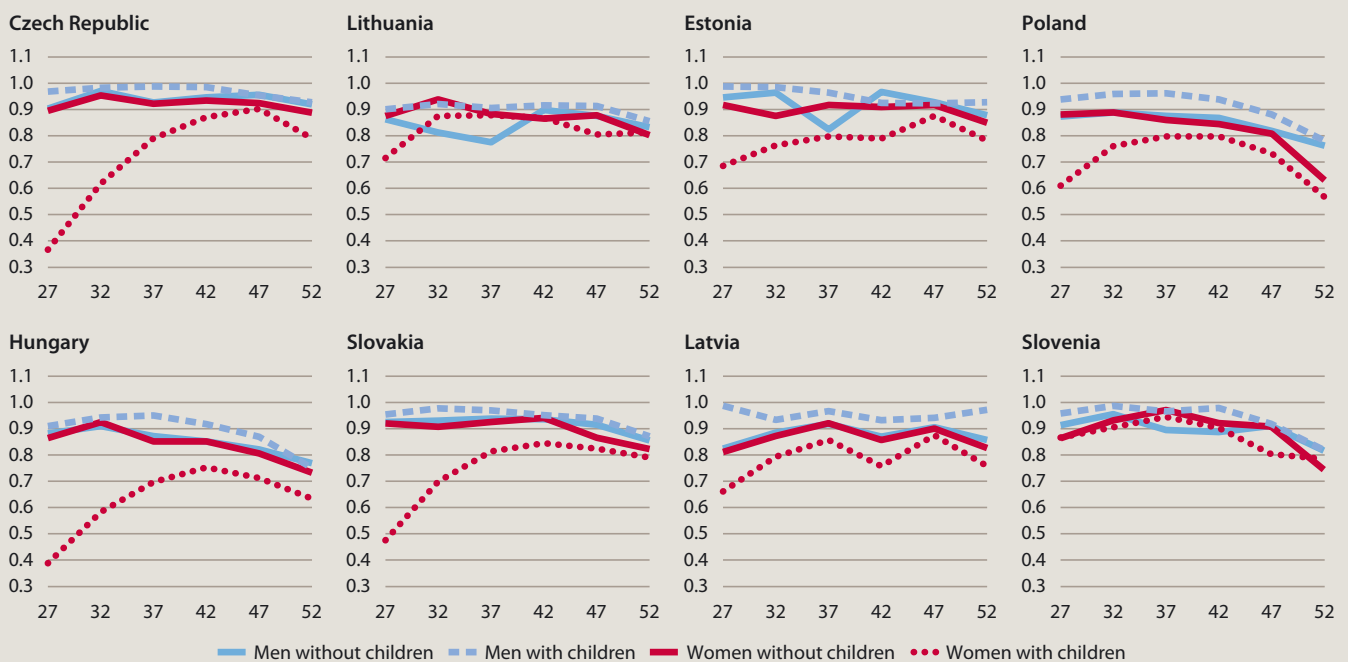


Table 1: Actual and Statutory Family Leaves (in Months) and the Usage of Childcare

	Actual Leave	Maximum Leave	% of Children (< 3 years) in Formal Childcare
Czech Republic	39	36	2
Estonia	22	36	18
Hungary	38	36	7
Latvia	19	20	18
Lithuania	14	24	11
Poland	21	24	2
Slovakia	33	36	5
Slovenia	8	12	29

Source: EU LFS, author's calculations; The Council of Europe Family Policy Database (Figures 13, 14, 18)

tries. (Only in Slovenia is the positive gap among individuals with no children actually greater than the gap for individuals with children. However, the existence of a gender unemployment gap is a very recent phenomenon there and affects only young individuals.)

Exploring why the presence of children makes such a difference for gender unemployment gaps, I first find that it is due to women with children having higher unemployment rates than women without children, who in turn have similar unemployment rates as men regardless of whether they have children or not.

I then show that the observed variation in gender unemployment gaps across the studied countries is closely related to the cross-country differences in labor force participation patterns of women at the early stages of their careers, i.e. the differences in the time they spend on maternity and parental leaves.

Figure 3 presents the labor force participation rates by gender and presence of children. While women with no children have more or less the same participation rates as men, women with children have a much lower labor force participation rate at the early period of prime age (child-bearing age) in some of the countries, namely, the Czech Republic, Slovakia, Hungary, Poland, and Estonia. In contrast with the high

overall female labor force participation in the Czech Republic and Slovakia, only about 40% of women aged 25–29 with children are in the labor force. As women with children return to the labor market after their labor force withdrawal following childbirth, their low initial participation rate converges gradually back to the participation rate of women without children and closer to male participation rates.

Having children is the main factor that makes women in the labor force subject to a higher risk of unemployment when compared to men.

These labor force participation patterns directly correspond to the family leave policies and the usage of formal child care across the eight countries. The average duration of family leaves women actually take, the statutory maximum paid family leaves, and the share of children younger than 3 years in formal childcare are summarized in Table 1. We see that the duration of actual leaves and of the statutory maximum are very similar, suggesting that women on average take breaks for as long as they are allowed. The only exceptions are Estonia and Lithuania, where women return to work about one year earlier than they could under

the statutory maximum. In line with the labor force participation patterns, there is a sharp contrast between the Czech Republic, Hungary, and Slovakia, where women stay home after childbirth for three years on average and less than 10 % of children younger than 3 years attend formal childcare, on the one hand, and Poland, the Baltic states, and in particular, Slovenia, where women take shorter leaves and use formal childcare before their children turn three substantially more often, on the other.

The effect of long family leaves on the high unemployment rates of women with children, significantly exceeding those of childless women and men and resulting in the observed gender unemployment gaps, proceeds by two main channels. First, if women who choose to take long family leaves are on average less likely to be unemployed compared to those who stay in the labor force, then the observed unemployment rate among women in the labor force will increase: while the numerator, i.e. the number of unemployed women, stays the same, the denominator, i.e. the number of women in the labor force, shrinks. It is typically the low-skilled who face high unemployment risk. We would expect high-skilled women with high wages and low probability of unemployment to take shorter leaves due to the high opportunity costs of staying at home, and women with low productivity, low wages, and high unemployment risk to take longer leaves due to the low opportunity cost of staying home. At the same time, women with low productivity, low wages, and high unemployment risk may be forced to an earlier return to work after childbirth because of a shortage of family resources, due to either lower savings or lower partner's income (as low-skilled women typically marry low-skilled men and high-skilled women marry high skilled men). We would therefore expect women in the middle of the productivity distribution to take the longest family leaves,

as they are likely to have a sufficient amount of other resources, enabling them to stay at home longer, yet lacking wages high enough to provide incentives for an earlier return to work. If it is the middle productivity women who take the longest leaves and who, at the same time, face a relatively low risk of unemployment compared to the low-skilled, then the unemployment rate of women with very young children will be higher because of the middle productivity women's labor force withdrawal, despite the fact that the number of the unemployed stays the same. This is the so-called selection effect.

Second, family leaves of about 2 years or more represent a substantial break in human capital accumulation in women's careers. First, these women have less working experience than men who started their career at the same time. Second, during the leave women are likely to lose some of the skills they acquired prior to childbirth and need to learn them again. When these women return to the labor force after the end of their family leaves, their productivity and therefore also the probability of finding and keeping a job is affected.

Moreover, if some women prolong their actual leaves even beyond the country-specific statutory maximum, as for example seems to be the case in the Czech Republic, employers are no longer obliged to take these women back to their previous jobs. The data provide evidence that some women become unemployed directly or soon after their family leaves. In all countries except Slovenia and Lithuania, more than 50% of currently unemployed women with young children were out of the labor force to care for family members immediately before they became unemployed.

In my research, I explore the effect of having children on women's probability of being unemployed. I therefore focus on women who are already in the labor force, after their family leaves. I estimate the country specific cost of children younger than 5 years old, between 5–10 years old, and between 10–15 years old in terms of their impact on women's probability of being unemployed, using data for the period 2002–2007. The effect of children between the age of 5 and 10 is the highest in most of the countries, suggesting that it is soon after the long

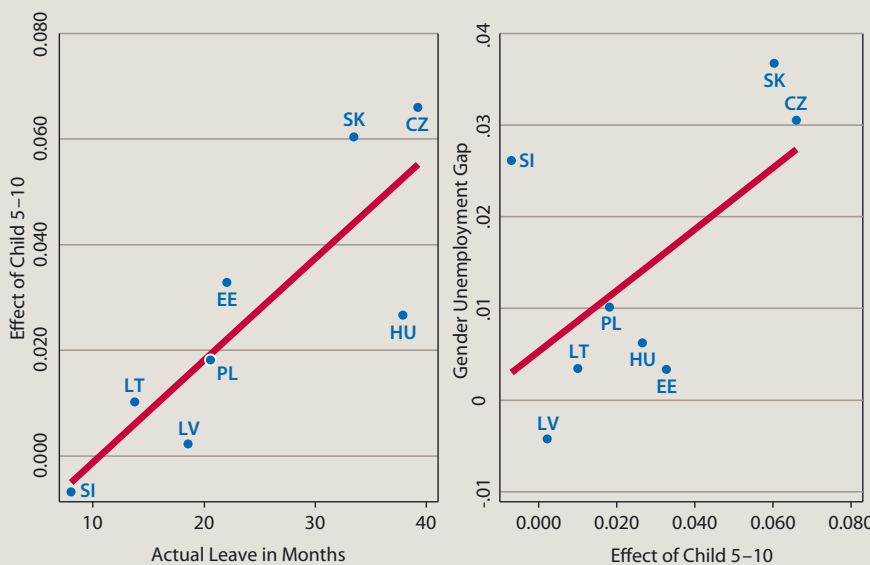
parental leaves that children increase female unemployment the most. The size of the cost of 5–10 years old ranges from a 6.6 percentage point increase in unemployment probability in the Czech Republic to no effect in Lithuania and Slovenia. The size of the cost of children that mothers bear in terms of the higher risk of unemployment again corresponds closely to the duration of the actual leaves taken by women in these countries, as shown in the left panel of Figure 4.

The differences in the unemployment cost of children across countries account for much of the cross-country variation in the observed gender unemployment gaps among women with children and the rest of the prime age population. This, in turn, is the major source of cross-country differences in aggregate gender unemployment gaps. The right panel of Figure 4 shows the relationship between the estimated effects of children of ages 5–10 on women's probability to be unemployed and the observed gender unemployment gaps in 2007.

The only exception is Slovenia, which stands out as a country with a gender unemployment gap which is greater among the childless than among individuals with children, and which cannot be explained by the family leave policies. At the same time, the positive gap there is a very recent phenomenon and affects only young individuals. Further investigation is needed to determine what the source of the gender unemployment gap there is and whether it is a permanent or a transitory phenomenon.

As the last point, I explore the gender differences in transitions between employment and unemployment and analyze whether the observed gender unemployment gaps are driven mostly by employed women's higher probability to lose a job or unemployed women's lower probability of finding a job, when compared to employed and unemployed

Figure 4: The Estimated Effects of Children, Actual Leaves and Gender Unemployment Gaps in 2007



Source: EU LFS data, author's calculations

men. I find that while there is no or very small difference between the flow rates of women and men from employment to unemployment in any of the countries, the flow from unemployment to employment is significantly smaller for women in all the countries except for Estonia, Latvia and Slovenia, ranging from a 7 percentage point difference in Poland to approximately a 3 percentage point difference in Hungary. Focusing again on the impact of the presence of children, it turns out that the main channel which gives rise to the documented gender unemployment gaps is the fact that unemployed women with children have a lower probability of moving from unemployment to employment, when compared to unemployed childless women and unemployed men.

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I conclude that it is not gender per se that creates the gender inequalities in unemployment rates but rather the substantial breaks in women's careers due to the long family leaves women in some countries take. If the aim of policy makers is to combat gen-

der differences in unemployment, my findings suggest that they should mainly focus on the employability of women with young children.

It remains a question whether this should be achieved by less generous family leave policies; increase in the availability of formal childcare; encouragement of part-time jobs for mothers with very young children, in order to shorten women's breaks in labor market-related human capital accumulation after childbirth; or by providing incentives to women on family leave to maintain their professional skills or offering training schemes for women returning to work after childbirth. ■

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Alena Bičáková has been an Assistant Professor at CERGE-EI since 2007. After obtaining her PhD at Johns Hopkins University, she worked as a Research Fellow at the Finance and Consumption Programme of the European University Institute in Florence. Her research primarily focuses on labor markets and selected topics in consumer credit markets.

Center for Economic Research and Graduate Education – Economics Institute (CERGE-EI) was founded in 1991 and is located in Prague, Czech Republic. A joint workplace of Charles University and the Economics Institute of the Academy of Sciences of the Czech Republic, CERGE-EI offers merit-based PhD and Masters programs in economics, taught in English, to students primarily from Central and Eastern Europe, the former Soviet Union, and other emerging-market economies. In addition to training the next generation of economic leadership, its scholars engage in research in both theoretical and empirical economics, especially in public-policy issues, experimental and behavioral economics, development, transition, and macroeconomics. CERGE-EI has been recognized as a Center of Excellence by both the European Union and the US government.



Politických vězňů 7, P. O. Box 882, 111 21 Prague 1, Czech Republic
phone (+420) 224 005 123, fax (+420) 224 005 333 • www.cerge-ei.cz • office@cerge-ei.cz