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The Gender Wage Gap in Belarus: State vs. Private Sector

This brief is based on research that studies gender difference in wages in Belarus using survey data from 2017. According to the results, the unconditional gender wage differential equals 22.6%. The size of the wage gap is higher in the state sector than in the private sector. Additionally, it increases in the state sector throughout the wage distribution and accelerates at the top percentiles, indicating the presence of a strong glass ceiling effect.

Introduction

The causes and consequences of the gender wage gap in the labor market, that is the difference between the wages earned by women and men, continue to attract increasing attention in empirical studies worldwide.

Belarus' labor market is not an exception and faces the problem of wage inequality like other neighboring and transition countries. According to the National Statistical Committee of the Republic of Belarus (Belstat), the average gender wage gap in terms of monthly wages was 19% in 2000, it increased up to 23.8% in 2015, and reached 25.4% in 2017.

In this regard, this brief updates the estimates of the gender wage gap in Belarus and summarizes the results of the study on what the role of the state and private sectors are in the distribution of gender wage differences in Belarus (Akulava and Mazol, 2018).

Data and methodology

The data used in the research is from the Generations and Gender Survey (GGS) conducted in Belarus in 2017. This survey is a nationally representative dataset that is based on interviews of about 10,000 permanent residents of Belarus, aged 18–79, covering the whole country disaggregated by regions. The GGS contains information on a range of individual (age, gender, marital status, educational attainment, employment status, hours worked, wages earned etc.) and household-level characteristics (household size and composition, land holding, location, asset ownership etc.).

The analysis is based on the typical Mincer model of earnings that estimates individual wage income as a function of various influencing factors using the OLS approach (Mincer, 1974). Specifically, the Mincerian wage equation is defined where the log of the hourly wage rate is regressed on a set of male and female workers' personal and job characteristics (educational level, working experience, occupational type, organization type, family characteristics, and region).

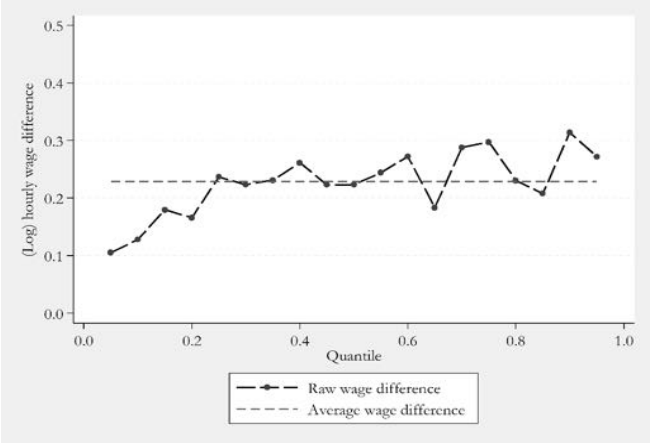
Next, we use the Oaxaca-Blinder (OB) methodology (Oaxaca, 1973; Blinder, 1973) to identify and quantify the contribution of personal characteristics and the unexplained component (which is referred to as differences in returns) to the wage difference between males and females.

Finally, we apply the Machado-Mata (MM) technique (Machado and Mata, 2005) to look into the nature of the wage gap at various points of the income distribution and also to test the difference for individuals employed in the state or private sectors. For the Machado-Mata procedure, we estimate our specifications at the 10th, 25th, median, 75th and 90th percentiles of the wage distribution.

Results

The analysis shows that women's wages are lower than men's wages all over the wage distribution. The average raw gender wage gap equals 22.6% and it increased substantially compared with 9.0% in 1996 and 17.8% in 2006, the numbers obtained in the study conducted by Pastore and Verashchagina (2011).

Figure 1. Gender differential by quantile of wage distribution



Source: Authors' estimates based on GGS.

The level of female earnings is lower than the male regardless of the occupational type, educational background, work experience and organizational

Table 1. Oaxaca-Blinder decomposition results

Differential of the mean value of (log) earnings/hour	Coef.	Std. Err.	z-stat	P>z	Earnings/hour	% of the wage gap
Males	1.080***	0.017	62.79	0	2.946	
Females	0.877***	0.017	50.13	0	2.403	
Difference	0.204***	0.025	8.3	0	1.226	
Explained (characteristics)	-0.011	0.022	-0.45	0.62		-5.25%
Regional characteristics	*0.001*	*0.006*	*0.17*	*0.866*	*-0.82%*	
Family characteristics	*-0.008*	*0.005*	*-1.32*	*0.187*	*0.77%*	
Educational level	*-0.026***	*0.008*	*-3.21*	*0.001*	*-12.75%*	
Work experience	*-0.021***	*0.01*	*-2.07*	*0.038*	*-10.29%*	
Type of occupation	*0.043***	*0.017*	*2.51*	*0.21*	*21.08%*	
Unexplained	0.214***	0.029	7.38	0		105.25%

Source: Authors' estimates based on GGS.

type. Moreover, the underpayment of women is lower for low earning workers, but increases up to the end of the wage distribution (see Figure 1).

The OB decomposition shows that female educational attainment and job-related experience help to decrease the level of the wage gap slightly (see Table 1).

However, occupational choice is leading to an expansion of the difference in earnings. However, its effect is also small, indicating that occupational segregation plays a minor role in explaining the gender wage gap. The major share of the gender wage gap is formed by the unexplained part, which is likely to be attributed to discrimination.

Next, the level of remuneration is higher among private companies. However, contrary to other countries in transition, the average gender wage gap in Belarus in the private sector is lower than in the public sector.

Moreover, the MM decomposition estimates presented in Table 2 demonstrate that the gender wage gap in the state sector shows evidence of the glass ceiling effect (the size of the total wage gap expands at the top of the wage distribution), while no evidence of either glass ceiling or sticky floor (the size of the total wage gap increases at the bottom of the wage distribution) in the private sector.

Table 2. Machado-Mata decomposition of the observed gender wage gap by organization type

Decomposition	Total	Characteristics (%)	Unexplained (%)
	All data		
p10	0.16	-0.047 (-29.38%)	0.207 (129.38%)
p25	0.211	-0.003 (-1.90%)	0.215 (101.90%)
p50	0.243	0.013 (94.24%)	0.229 (94.24%)
p75	0.266	0.032 (87.97%)	0.234 (87.97%)
p90	0.269	0.044 (83.27%)	0.224 (83.27%)
Private sector			
p10	0.110	-0.041 (-37.27%)	0.151 (137.27%)
p25	0.220	-0.028 (-12.73%)	0.248 (112.73%)
p50	0.230	-0.036 (-15.65%)	0.27 (115.65%)
p75	0.180	-0.078 (-43.33%)	0.258 (143.33%)
p90	0.155	-0.089 (-57.42%)	0.244 (157.42%)
State sector			
p10	0.146	-0.05 (-34.25%)	0.196 (13.25%)
p25	0.198	0.003 (1.01%)	0.196 (98.99%)
p50	0.233	0.017 (7.30%)	0.213 (92.70%)
p75	0.264	0.042 (15.91%)	0.222 (84.09%)
p90	0.265	0.067 (25.66%)	0.197 (74.34%)

Source: Authors' estimates based on GGS.

The negative coefficient near the characteristics part in the private sector shows that female endowments outweighs their male counterparts. Thus, controlling for personal characteristics, if the labor market rewards males and females equally, the wages of females in the private sector should be substantially higher (see Table 2).

Finally, the results also suggest that female workers are better off being in the private sector at the lowest and the highest percentiles (i.e. the size of the gender wage gap is lower there compared to the 25th and 50th percentile).

A possible explanation for all above is that institutional differences seem to play a crucial role here. First, Belarusian private firms work under stronger regulation than in other transition economies which makes it harder for them to set low wages. Second, they also operate under stronger competition (compared to state companies), which force them to identify individual productivity more correctly, narrowing the gender difference in pay. In contrast, the paternalistic attitude to women left as a legacy from the Soviet Union further increases the gender wage gap in the public sector.

Conclusion

In this brief we present new evidence on the existence of a gender wage gap in the Belarusian labor market and analyze the differences in its distribution between the state and private sectors.

Our results show that the unconditional gender wage gap in terms of hourly wages equals 22.6%. Thus, jointly with a previous study (see Pastore and Verashchagina, 2011) and recent official indicators, all these indicate that the pace towards gender equality in Belarus seems to be sluggish. For the moment, all institutional changes accomplished by the Belarusian government to reduce gender discrimination are not enough and require additional efforts to cope with that problem.

However, the gender wage gap is shown to be much wider in the public sector than in the private sector. At the same time the private sector appears to be more attractive than the public sector in the country in terms of the level of remuneration. Therefore, additional structural shifts of the economy accompanied by the growth of competition are needed to induce further reduction of the gender wage gap.

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