

5.3 GIRLS IN HUNGARIAN VOCATIONAL EDUCATION*

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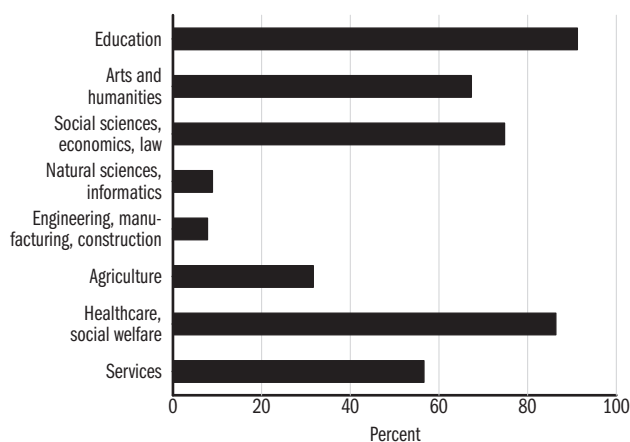
The most striking example of labour market differences between men and women is occupational gender segregation, i.e. men and women work in different fields and occupations. Vertical segregation covers gender differences in occupational hierarchies, while horizontal segregation reflects gender differences between occupations that can lead to exclusively male and female professions. In many cases ‘male professions’ result in higher prestige and higher wages. In this analysis we focus on the latter, the horizontal segregation.

Because occupational choice is strongly determined by educational attainment, we look first at gender differences in vocational education between different fields, then we examine their impact on later employment and wages.

Gender segregation in vocational secondary education

In this analysis we use data from the Hungarian Educational Authority, and we assess gender ratio by different vocational programmes in basic vocational schools (lasting 3 years, with typically no baccalaureate), and in vocational secondary schools (lasting 4–5 years, with a baccalaureate) among students passing the final exam in 2014.¹ Breaking down the data by a broader field of studies results in significant gender differences. Girls represent the overwhelming majority, more than 86% and 91% of students in the field of Health Care and Education, while less than 10% of students graduating from the fields of Mathematics, IT and Natural Sciences, as well as Technical Studies and Construction were girls (*Figure 5.3.1*).²

Figure 5.3.1: Share of girls in different vocational programmes (%)



Source: Authors' calculation, based on data from Educational Authority, *OH KIRSTAT*, 2014.

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1 In the academic year 2016/2017 a limited transformation of vocational education was conducted. Since then it has been possible to obtain a baccalaureate degree in both kinds of vocational schools. Although we use data from 2014, therefore, the transformation made no impact on our results.

2 If we focus on different vocational programmes (thus on narrowly defined fields of study) gender segregation becomes more pronounced. In our calculations we used the first two digits of the three digit official National Qualifications Register (OKJ) code to distinguish between different vocational programmes.

Consequences on the labour market

Employment rate

We analysed the impact of gender and vocational qualifications on labour market status using the data of the annual Labour Force Survey conducted by the Hungarian Central Statistical Office in 2014. We assessed 10,575 young Hungarian individuals aged 20 to 29, who had a vocational qualification with or without a baccalaureate.

We examined the explanatory power of gender and the field of vocational qualification for employment chances, while controlling for other demographic attributes (e.g. region, age).³ We assessed separately the group of young persons who have a basic vocational education and the ones who have a vocational secondary education.⁴ We found a significant gender gap in the group who have attained a basic vocational education: only 61.7% of young women were employed, while 76.4% of men had a job. In the group with a vocational secondary education gender differences were negligible: 83.3% of women and 86.5% of men were employed.

Using multiple regression analysis, we see that the effect of gender on employment probability is largely reduced if we included the field of vocational qualification in the model among those with a basic vocational education.⁵ By contrast, among young people with a vocational secondary education no such result can be observed. More specifically women without a baccalaureate had by 11 percentage points a lower chance to be employed than men with the same education, but the difference becomes significantly smaller (5.74 pp) if we include the effect of field of vocational qualification in the model. There was no significant gender gap in the group of people with a baccalaureate, although women were slightly less likely to be employed than men (*Table 5.3.1*). The results suggest that half of the gender gap among young people with a basic vocational education can be explained by the unfavourable field of study choice of young women, which is most likely due to the fact that girls tend to choose occupations with less favourable labour market outcomes.

3 In our calculations we used a logit model. In our final model the following variables were involved: gender, the dummy variable of different occupations (with data from about at least 50 people). We controlled the model for age, the region of residence and the wave of the survey.

4 In our analysis participants of public work schemes and people on maternity or parental leave were not included.

5 Age has a significant impact on employment both among people with a basic vocational education and vocational secondary education. The level of employment increases with age. The region of residence also correlates with the employment, the correlation is especially strong among people with a basic vocational education. People living in the central and western parts of Hungary have significantly greater chances to be employed than people living in Eastern-Hungary. This correlation is likely to be true for groups with a different level of education as well.

Table 5.3.1: Employment chances of women compared to men

	Basic vocational education		Vocational secondary education	
	gender only	whole model	gender only	whole model
Marginal effect	-0.11	-0.06	-0.03	-0.03
Confidence interval	[-0.17, 0.06]	[-0.12, 0.01]	[-0.07, 0.00]	[-0.07, 0.02]
p-value	0.000	0.087	0.064	0.230

Source: Authors' calculation based on data from the national *Labour Force Survey* in 2014.

We also found that employment correlates strongly with occupational choice among young adults with a basic vocational education. Several fields (e.g. textile industry, trade) chosen by mainly women offer worse labour market out-

comes than others (e.g. electrical industry) chosen predominantly by men. Conversely, the impact of occupational choice was smaller among young people with a vocational secondary education.

Gender pay gap

The gender differences in field of study choices have a strong impact on the future wages as well. The share of women is systematically higher in fields which lead to occupations where the relative average wages are lower.

If everyone worked in the same occupation or field in which they graduated, men would earn 18% more than women among young adults with a basic vocational education (using data from 2014 on graduations and wages).⁶ After controlling for other factors determining wages young men still earn more by 16.5% than women due to their more favourable occupational choices. Among young people with a vocational secondary education the gender pay gap caused by the gender differences in the field of vocational education is negligible, reaching only 1.9% in the case of average wages, and amounting to 1.7% if we control for the other factors.

We found five programmes in basic vocational education that are mainly responsible for the significant expected early career gender pay gap. These five programmes in total widened the gender gap by 15.4% in favour of men. Three of these were primarily chosen by men and led to relatively high earnings (machinery, energetics and construction programmes). The other two programmes were in the fields of trade and tourism and attracted mainly women; and given that these two programmes led to lower (relative) wages they decreased the average expected wages of women.

Summary

We found on the basis of the 2014 data that girls and boys were characterized by a different pattern of fields of study choices in secondary vocational education. This fact strongly affects the futures chances of men and women on the labour market, especially among those with no baccalaureate. Women with a basic vocational education have a significantly less chance to be employed than men with the same education and half of the gender gap can be explained by gender differences in field of study choices. The different occupational choices can also lead to a future gender pay gap: if everyone worked in the same occupation or field from which they graduated, men with a basic vocational education would earn more by 16.5% than women with the same level of education, while the gender pay gap is only 1.7% among young persons with a vocational secondary education.

⁶ We used individual wage data (Bértarifa) for 2014 and estimated the relative wages and wage premiums of different occupations (3 digits code of Hungarian Standard Classification of Occupation [FEOR]). The wage premiums were calculated by controlling for age and region of workplace. We must add that only declared wages are in the data, which can bias the calculation of relative wage premiums. We connected the wage premiums to data received from the Hungarian Educational Authority for 2014 and we assumed that every young person takes a job related to her/his field of education.