

# The relationship between education and labor market opportunities: the case of Ukraine.\*)

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*Abstract. This brief is based on a research project that analyses the extent to which the educational system in Ukraine contributes to better local employment opportunities, hence diminishing the outflows. According to the results, additional year of education increases the chance of finding a job by 2-3%. However, the effect of education on wages is small, especially when compared to other transition countries (1-5% wage premium for a year of education). In addition, while in 8 out of 10 countries education has zero or positive impact on the probability of starting a business, this impact is negative and significant in Ukraine.*

## Educational system and employment opportunities in Ukraine

To what extent can education help individuals to be successful in the Ukrainian labor market? This question has been part of a larger-scale research project “The relationship between education and migration in Ukraine” (Vakhitova and Coupe (2013)), which offers a comprehensive analysis of the relationship between education and migration in Ukraine while controlling for impact of other factors, and provides recommendations on migration and education policy.

To study the relationship between education and labor market opportunities, we consider effects of education on several measures of an individual’s ‘success’ in the labor market: wage, the chance to be unemployed, self-employment and innovation.

We perform an empirical analysis based on two datasets, the 2007 wave of the Ukrainian Longitudinal Monitoring Survey (ULMS) and the

*Table 1: General information on education in Ukraine*

- The main components are 11-year secondary education, 5–6-year higher education and post-graduate education.
- Ukraine officially joined the Bologna Process in 2005, although some elements of the Western educational system already were adopted in the 1990s by a few of its higher educational institutions.
- In 2009 the Ministry of Education officially introduced the European Credit Transfer and Accumulation System (ECTS)<sup>13</sup> and the Diploma Supplement template according to EU/EC/UNESCO standards. However, the transfer to a BA/MA/PhD degree system is still under way.
- Ukraine has 100 per cent adult literacy and nearly universal secondary school enrolment.
- In 2001 13% of Ukrainians had complete higher education, in 2010 this share has risen to 18.5%, and among people of 25–44 years old, 30% have a higher education degree.

2009 wave of the International Social Survey Program (ISSP) (see Table 2 for more information).

**Table 2: International Social Survey Program and Ukrainian Longitudinal Monitoring Survey.**

- *ISSP-2009, which started in 1985 and covers about 40 countries, is a cross-national collaboration on surveys covering topics important for social science research. The ninth wave focuses on social inequality. This survey. Beside all, provides subjective estimates of the importance of different factors to 'getting ahead'. It allows for an estimation of the relationships among education and the described three measures of success for Ukraine and several other transition countries (Ukraine, Russia, Poland, Slovenia, Slovakia, Hungary, Croatia, Bulgaria, Estonia, Latvia) and put the Ukrainian estimates in a comparative perspective.*
- *ULMS-2007 provides data for a statistically representative sample of the Ukrainian population, comprising 4,000 households and approximately 8,500 individuals. In addition to a household questionnaire there was an individual questionnaire, which tried to elicit detailed information about the labor market experience of Ukrainian workers. This survey also enables an estimate of the relationships among education and the three measures of success but it has a large number of respondents, allowing for more precise estimates. In 2001 13% of Ukrainians had complete higher education, in 2010 this share has risen to 18.5%, and among people of 25–44 years old, 30% have a higher education degree.*

We analyze *subjective* estimates of the importance of education for success in the labor market (based on ISSP data), and calculate the *objective* estimated impact of education on wage, unemployment, and self-employment (based on ISSP and ULMS).

### Subjective estimates

*What factors, in your opinion, are essential, important or fairly important to 'get ahead'?*

Being asked this question, 73% of Ukrainians respond that having a good education is at least fairly important. Hard work, having political connections, having ambition, having a wealthy family and knowing the right people are scoring better than education in Ukraine. In other countries in the sample, good education ranks only fifth, sixth or seventh as well.

*What factors, in your opinion, are essential to 'get ahead'?*

At the same time, education is a top-ranked factor, if the question is stated this way - more than 37% of Ukrainian respondents indicate they think good education is essential for getting ahead.

### Objective estimates

Regression analysis based on ULMS-2007 and ISSP-2009 provides objective estimates of returns to education in Ukraine.

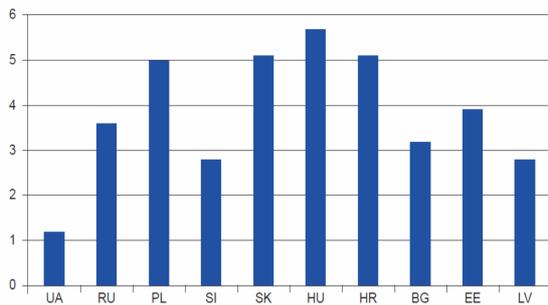
## Results

### Effect of year of education on wages.

Our analysis estimates the return to a year of schooling in Ukraine, after controlling for potential experience and gender, living in urban or rural areas, marital status, controls for occupation particularities and controls for current family, as the lowest in the group of 8 countries considered (see Fig.1).

Furthermore, Ukraine is the only country where the data do not allow rejecting the hypothesis that there are no returns to education in terms of salary.

*Figure 1. Effect of a year of education on wages (in percentages) in Ukraine and various transition countries*

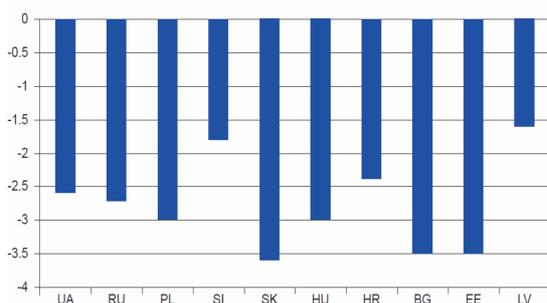


Analysis, based on ULMS data, allows concluding that returns to education are about 3.4% in terms of salary with returns for men (1.6%) being about a third of the returns for women (5.2%). Nevertheless, men do earn substantially more than women (the difference in wages is about 35%). What counts are the years of academic education, while vocational education or secondary education does not seem to be associated with any return.

### The effect of education on the chance to be unemployed

Extra year of education reduces the chance to be unemployed by 2.6 percentage points when ISSP dataset is used, and 0.5 percentage points when ULMS is used. The difference can be partially explained by the fact that the unemployment rate in the pre-crisis 2007 was substantially lower than the unemployment rate in the post crisis 2009 (5% versus 14%). Here again, the effect of education is similar for males and females, and academic and professional education are more

*Figure 2. Effect of a year of education on the chance to be unemployed (in percentages) in Ukraine and various transition countries*



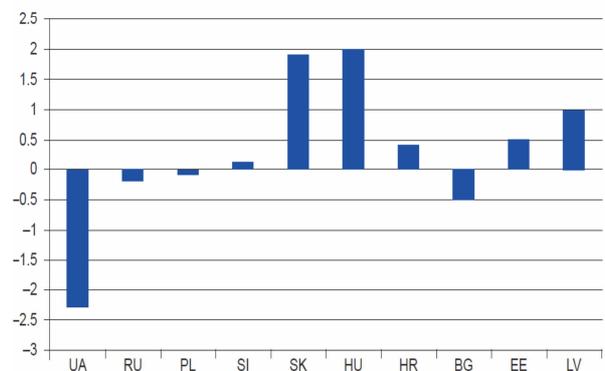
effective in reducing the chance to be unemployed than other kinds of education. Six out of ten countries—Russia, Poland, Slovakia, Hungary, Bulgaria and Estonia—demonstrate higher (negative) impact of education on probability of being unemployed than Ukraine.

### Effect of a year of education on the chance to be self-employed

While in eight out of ten countries, education has no significant or a positive effect on the chance of being an entrepreneur, in Ukraine this effect is negative and sizeable (–2 percentage point for each year of education).

The negative effect of education on self-employment suggests that in Ukraine, self-employment is more due to push factors than to pull factors.

*Figure 3. Effect of a year of education on the chance to be self-employed (in percentages) in Ukraine and various transition countries*



## Conclusions and recommendations

Overall, the results suggest that education is a less powerful tool to improve one's labor market prospect in Ukraine, as compared to other countries in the sample.

Educational reforms, particularly, targeted at ensuring greater autonomy of educational institutions, their better cooperation with enterprises and the introduction of an effective

“lifetime learning” system (i.e. provision of short-term upgrading courses for professionals by post-secondary educational institutions) would all improve the quality of the Ukrainian labor force, make the Ukrainian economy more competitive internationally and hence make it easier and more attractive to find a job in Ukraine.

## References

Vakhitova, Ganna; Coupe, Tom. “The relations between education and migration in Ukraine / Ganna Vakhitova, Tom Coupe; International Labour Organization, ILO Decent Work Technical Support Team and Country Office for Central and Eastern Europe (DWT/CO-Budapest). – Budapest: ILO, 2013

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