RETURNS ON EDUCATION AND OVERQUALIFICATION – CASE OF THE EU AND THE CZECH REPUBLIC

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Abstract

The aim of this paper is to analyse and evaluate the current state of overqualification and underqualification in the EU countries and in the Czech Republic. There are steadily increasing numbers of education system graduates and persistent demand for education in the population. This leads to fears that the mismatch between jobs requirements and workforce qualifications will increase. Public educational policy seems to support this controversy. While numbers of enrolled students at secondary schools and public universities and consequently numbers of graduates are rising, there could be shortage of skilled level jobs in the future. The paper discusses various methods used to measure the level of education required for the job and the relevant theories (searching and matching, human capital theory, assignment theory etc.) that can be used for interpretation of overqualification. The last chapter analyses and evaluates current state of ovequalification in the EU countries and in the Czech Republic and deals with the empirical results of the impact of overqualification on earnings.

Introduction

The paper is a follow-up to the previous study on overeducation and labour mismatch in the ACC Journal 2012/3 (see Urbánek, [27], p. 209 f.). The results of this previous article were substantially extended and only parts of it were used for better understanding of the methodology in this paper. New chapters were added – own research based on data from European Social Survey 5, year 2010, including statistics of education mismatch, impact of education mismatch on earnings and regression analysis of returns to education, over- and underqualification.

Steadily increasing numbers of education graduates and persistent demand for secondary and university education in the population in the last decades lead to concerns about the mismatch between jobs requirements and workforce qualifications. Enrolments to schools, vocational institutions and universities are growing, especially at tertiary education institutions. The chart (Figure 1) shows the increase of the numbers graduates from tertiary education institutions (mainly universities) between years 1995 and 2011. In the Czech Republic, number of graduates from tertiary education institutions type A (Master's Degree institutions) increased from 12.6% of age-specific group in the year 1995 to 40.62% in the year 2011. Similar trends can be seen in almost all developed countries; however, by contrast to growing numbers of type B graduates (Bachelor's Degree) in many OECD countries between 1995 and 2011, in the Czech Republic numbers of Bachelor's Degree graduates decreased. It seems that tertiary-type B programmes are recently being phased out and graduation rates from these programmes have fallen in favour of more academically oriented tertiary education. The consequence of this trend from tertiary education Type B towards Type A is growing job mismatch as will be analysed later in this article.
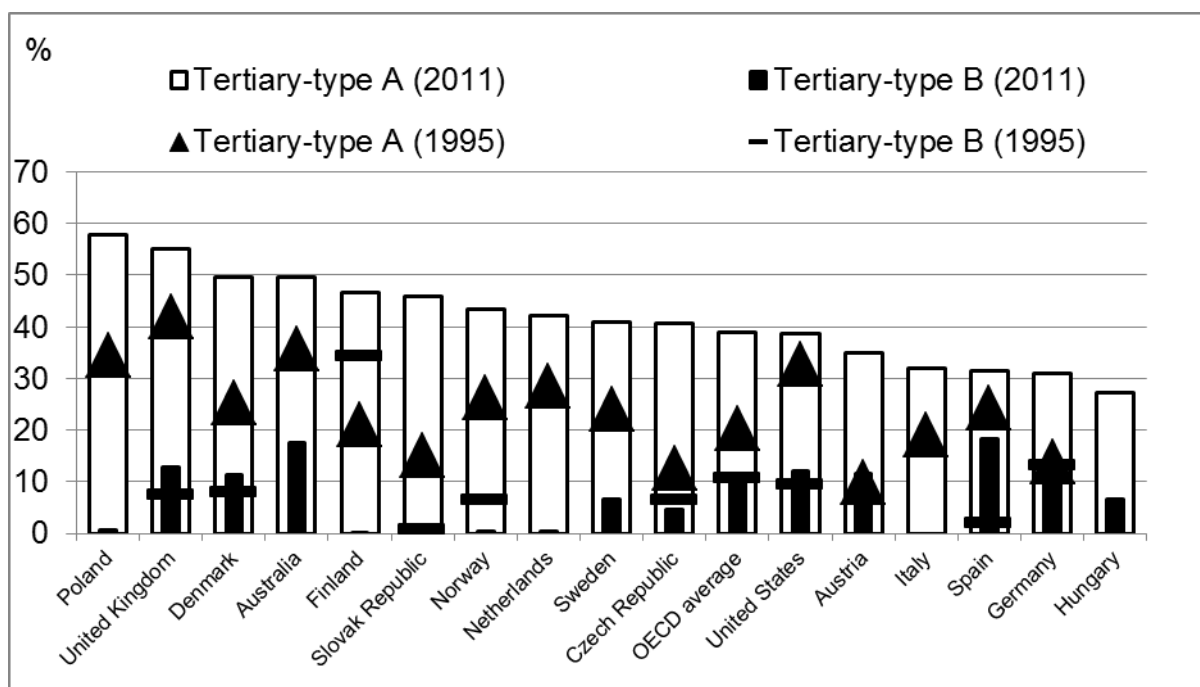
Source: [21], own calculations

Fig. 1: *First-time graduation rates in tertiary-type A and B education (1995 and 2011)*

Similarly, numbers of students enrolled into upper secondary education have increased substantially in almost all developed countries (see Figure 2).
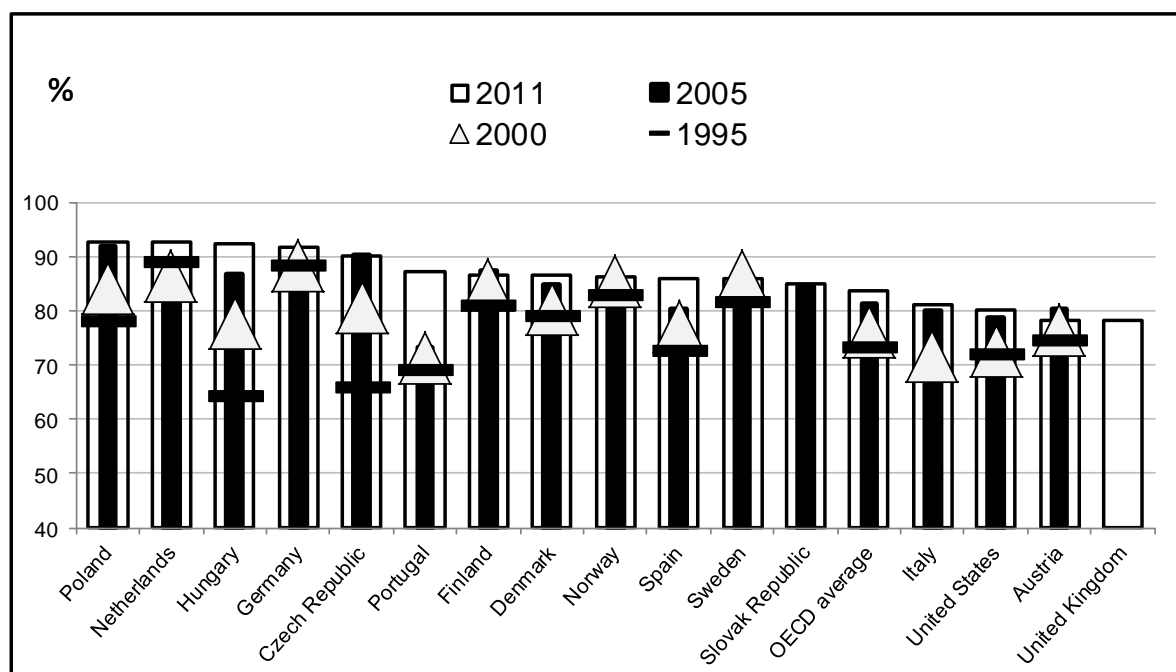
Source: [21]

Fig. 2: *Enrolment rates of 15-19 year-olds (1995, 2000, 2005 and 2011)*

Yet many various studies have indicated that these secondary and tertiary education graduates are entering labour force with more education than is actually required for their jobs – they are overeducated. Although the increase in all educational levels has been accompanied by growth of high skill jobs demand, the rate of this growth was arguably slower than supply of qualified, i.e. graduated workers. The result of this difference between higher supply of

graduates and demand for them at the labour market leads to overqualificatio and allocation of skills may be less than optimal. Overqualification is a problem broadly discussed in the economic and sociological literature for last two or three decades and it has serious consequences for labour market effectiveness and educational investment.

1 Human capital theory and problem of overqualification

From the point of view of human capital theory, overqualification is somewhat puzzling. People should not invest in their education which they cannot and will not fully utilize. When on the labour market, according to the neoclassical economic theory, they will earn wage fully corresponding to their education and demand for their skills will give them same return for their overqualification as for required qualification.

There has appeared abundant literature on overqualification in recent decades, both in theoretical and in empirical fields (see for example meta-analysis of 25 studies on overqualification in an article by Groot et al ([13], p.153). Peter Sloane notes that this field of research is coming of age ([25], p. 11) and this is reflected – among others – in a special issue of the Economics of Education Review on Overschooling ([9]). Substantial literature is also summarized in Sloane's article ([25]) and there are 33 articles and papers reviewed in this text. Generally speaking, the economic analysis of overqualification was started by Richard B. Freeman in his The Overeducated American from a macroeconomic point of view in the year 1976 (see [3]). Freeman found that the rate of return to higher education had fallen in the seventies in the U.S.A. and attributed it to an excess supply of graduates. However, recent literature (as mentioned above) mainly focuses on the income effects of overqualification and on individual level.

All above mentioned studies (and many others) show that return to overqualification is higher than that of people having required qualification for this job but is lower compared to the return of people having correct job for this higher qualification. Being overqualified creates a premium relative to the job but penalty relative to the qualification ([3]).

There are several possible explanations for the existence of overqualification ([15]): First, it can be a compensation for the lack of other human capital endowments (e.g. ability, experience, on-the-job training), or in other words overeducated workers are substituting formal for informal human capital or are less capable than adequately educated individuals ([17], p. 521). Also in this human capital perspective, overqualification can stem from the deliberate choice of overqualified worker entering low-skill job as an opportunity for initial experience as an additional human capital investment. This part of human capital explanation was tested by Sicherman ([24]) with good results.

Second explanation of overqualification is connected with career mobility and in this sense, overqualification is a temporary situation ([15]). "Searching and matching" process is an effect of imperfect information in the labour market environment and as such, it can be temporary situation. It means that this explanation is not mutually exclusive with above mentioned additional human capital investment ([15]).

In extreme contrast to human capital theory explanation of overqualification is job competition model created in 1975 by Lester Thurow. In this model, it is assumed that marginal productivity is derived from the job rather than from the worker and the employers use personal qualities (incl. education) only for hiring. Wages are paid according to jobs and return to human capital over the level required for the job is zero. Workers that are more educated are hired on supposition that for their training will be necessary fewer costs.

Finally, job assignment model is a strand of literature based on the proposition that there is an allocation problem in assigning workers to various jobs. Labour supply and labour demand are complex entities and measuring match quality is in line with attention for the assignment of heterogeneous workers to heterogeneous jobs ([15]). Earnings in this model are a function of both worker and job characteristics.

According to human capital theory, returns to education are best measured using data on actual earnings of graduates during their lifetime (either longitudinal data, which is not easily obtained, or cross-sectional data). There are several sources of this data however, especially for the Czech Republic, the data is not comprehensive and covered time interval is not long enough for these calculations. This data then is used to estimate entire age-earning profile as can be seen in Fig. 3 and also return to investment can be calculated using the following equation (for full discussion see [22]):

$$\sum_{t=G}^{R}\left[E_1(t)-E_0(t)\right](1+r^*)^{-t}-\sum_{t=E}^{G}\left[E_0(t)+C(t)\right](1+r^*)^{-t}=0 \qquad (1)$$

where: $E_0(t)$ = pre-university education earnings function, $E_1(t)$ = university education earnings function, $C(t)$ = direct costs function, E = beginning of education age, G = graduation education age, R = retirement age, r* = rate of return of investment to education.

Due to the scarcity of good longitudinal data cross-sectional data have to be used in order to make longitudinal statements. There are some good estimates that control for differences between longitudinal and cross-sectional data.

There is another method for calculation approximate returns to education that is not very dependent of longitudinal data and therefore easy to apply. This is so called short-cut method ([23]):

$$r^* = \frac{AE_i - AE_j}{k \cdot S \cdot AE_j} \qquad (2)$$

where: r* = rate of return of investment to education, AE_i = mean earnings of an individual with university education, AE_j = mean earnings of an individual with university secondary education, S = number of years of university education, k = coefficient of direct costs.

It is important to note that human capital theory has also possibility to control its empirical results through regression analysis of demand for education as it has been pioneered by Gary Becker, Theodore Schultz and Jacob Mincer (see [1]). The most quoted and simple model is Mincer's earnings equation, which is empirical approximation of the human capital theoretical framework:

$$\ln w_i = X_i \beta + b s_i + \delta e x_i + \gamma e x_i^2 + u_i \qquad (3)$$

where w_i is an earning measure for an individual i such as earning per hour or week, s_i represents a measure of their schooling, ex_i is an experience measure, X_i is a set of other variables assumed to affect earnings and u_i is a disturbance term. In this context, b can be considered the private return of schooling (see [11]).
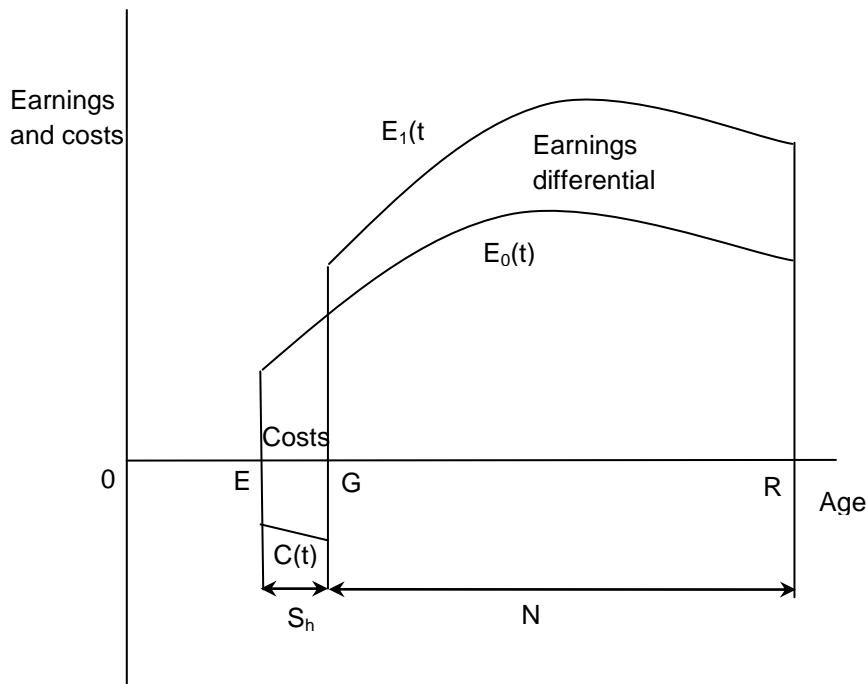
Source: [23], own adaptation
Fig. 3: *Age-earnings profile and full method of returns to education*

In estimating the rate of return from schooling, the coefficient of the schooling variable is often interpreted as the percentage increase in the hourly wage associated with one additional year of schooling and is, according to Psacharapoulos and Patrinos [23] not accurately referred to as the rate of return to schooling, regardless of what educational level this year refers to. Though convenient this method requiring fewer data might be, it is inferior to the direct method as it assumes flat age-earnings profiles for different levels of education. However, neither referring to wage effects as returns to schooling nor flat age-earnings profiles assumptions is "damaging or unrealistic". [23]

2 Methodology

Following human capital theory and Mincer's earnings equation (for details see also Urbánek, [27], p. 213) there is a possibility to create an equation adding together Mincer's (it means human capital theory model) and Thurow's job competition models. Sometimes this equation is referred to as the Duncan and Hoffman or the ORU model (ORU stands for **O**verqualification – **R**equired qualification – **U**nderqualification):

$$\ln w_i = \beta_0 + b_r S_r + b_o S_o + b_u S_u + \delta ex_i + \gamma ex_i^2 + u_i \tag{4}$$

where $\ln w_i$ is logarithm of earnings, β_0 is a constant; b_r; b_o; b_u are estimated coefficients of qualifications (or schooling) and q are qualification variables: S_r for years of qualifications required to do the job; S_o for years of overqualifications; S_u for years of underqualifications. The Mincer's human capital specifications implies that $b_r = b_o = -b_u$; Thurow's job competition specification implies that $b_o = b_u$ ([25], p. 14).

Since the basic version of the 'Mincerian' function does not distinguish between different levels of schooling, an extended earnings function was developed, which substitutes a series of 0–1 dummy variables for S, corresponding to discrete educational levels. The extended earnings function may be expressed as follows:

$$\ln w_i = X_i\beta + b_p D_p + b_s D_s + b_u D_u + \delta ex_i + \gamma ex_i^2 + u_i \tag{5}$$

w_i is an earning measure for an individual i such as earning per hour or week, $b_{(p,s,u)}$ represent coefficients of schooling at primary, secondary or university levels respectively and $D_{(p,s,u)}$ are dummy variables for primary, secondary or university levels respectively, ex_i is an experience measure, $\mathbf{X_i}$ is a set of other variables assumed to affect earnings and u_i is a disturbance term.

The private rate of return between levels of education can then be calculated from the extended earnings function by the following formulae:

$$r_p = \frac{b_p}{S_p} \; ; r_s = \frac{b_s - b_p}{S_s - S_p} \; ; r_s = \frac{b_u - b_s}{S_u - S_s} \tag{6; 7; 8}$$

where r_p is the rate of return to primary education, r_s is the rate of return to secondary education and r_u is the rate of return to university education and S is years of schooling.

The rationale for this procedure is that the rate of return is computed by means of the following formula that is educational level specific:

$$r_j = \frac{\ln w_j - \ln w_i}{\Delta S} \tag{9}$$

where j is index of higher level of education than i; ΔS is difference between years of schooling at individual school levels.

According to Cohn ([7]), another model gives good and comparable results:

$$\ln w_i = X_i\beta + \alpha_1 ADSCH_i + \alpha_2 OVERSCH_i + \alpha_3 UNDERSCH_i$$
$$+ \alpha_4 \left(ADSCH_i * EXP_i\right) + \alpha_5 \left(OVERSCH_i * EXP_i\right) \tag{10}$$
$$+ \alpha_6 \left(UNDERSCH * EXP_i\right) + u_i$$

where $\ln w_i$ is natural logarithm of gross earnings, δ and α are regression coefficients respectively, $ADSCH_i$ is number of years of adequate schooling, OVERSCH and UNDERSCH are numbers of years of overschooling and underschooling (OVERSCH = SCHOOL – ADSCH, where SCHOOL is number of years of actual education; similarly UNDERSCH = ADCH - SCHOOL), EXP are years of experience, $\mathbf{X_i}$ is a set of other variables assumed to affect earnings and u_i is a disturbance term (index i is for individual i).

As to measuring of required, over- and underqualification, three alternative measurement methods can be used to find the degree of overqualification or underqualification (for more details, see Urbánek [27], p. 211 f.):

1) Systematic job evaluation by professional job analysts who specify the required level of education (degree) for the job and occupational classification. Overeducation or undereducation is difference between required and actual education. This type of measurement is referred to as an objective measure.

2) Worker self-assessment – the workers themselves specify the qualification required for the job answering the question as e.g. "What kind of education does a person need in order to perform your job?" Difference between actual and assessed education is over- or

undereducation. This type of measurement is referred to as a subjective measure and it was used in this paper.

3) From realized matches, where required education is derived from actual level of workers' education as a mean (or sometimes mode) of their educational attainment. Overeducation then occurs when the level of education is more than one standard deviation above the mean; similarly, undereducation is one standard deviation below the mean. This method of measurement is called empirical method.

Job analysis by experts could bring best results ([13]). However, this data is rarely available and we can find subjective measure in most overqualification analyses ([13], [16]). From the meta-analysis of 25 studies of o overqualification ([13], p.153) were obtained 50 estimates on the incidence of overqualification and 36 estimates for the incidence of underqualification. The unweighted average of the incidence of overqualification is 23.3% (standard deviation 9.9%) and unweighted average of the incidence of underqualification is 14.4% (standard deviation 8.2%). In the study of U.K. graduate labour market ([9]), 38% of graduates were overeducated in their first job. This proportion fell to 30% after six years. Results for the Czech Republic can be found in the study of 25 European countries ([12]) and are as follows: 49.5% overeducated; 44.3 undereducated.

Returns to education are usually calculated using equations similar to above presented equations. Results of 25 studies included in meta-analysis of overqualification in the labour-market ([13], p.153) show that return to a year of education required was 7.9% in 1970s and 1980s; in 1990s rate of return to a year of education required increased to about 12%. For all these years, rate of return to a year of overqualification was 2.6%, while the rate of return to a year of underqualification was −4.9%. Detailed results of returns to overqualification and underqualification and also values of incidence of overqualification and underqualification are in Groot ([13]). The study of Galasi ([12]) shows for 25 European countries results similar to Table 1, however for the Czech Republic the returns to education for required year is equal to return to education for attained year − both returns are 7.1%. Pooled sample data shows the returns to education for required year equal 9.7% and return to education for attained year equal 7.2%.

3   Data

Cross-section data come from European Social Survey, round 5, year 2010. Surveys were carried out in 26 countries and original number of respondents in all surveys together was 52 458. All country samples are representative of all persons aged 15 and over, regardless of their nationality, citizenship or language and individuals are selected by strict random probability methods. For this paper were used data for 21 EU countries (no data were available for Austria, Italy, Latvia, Luxembourg, Malta, Romania). From this sample of countries data were selected only for employees (omitted were self-employees and respondents without economic activity, such as pensioners etc.) and this reduced set contains 11 137 respondents (EU incl. Czech Republic). Separate set of data was created for the Czech Republic with 544 cases (representative sample consisted of 249 females and 295 males).

Respondents reported, among other things, their gross salary, education, required education for their position, years of experience and other variables. Required qualification for the position was obtained by the question "About how many years of education or vocational schooling beyond compulsory education would they (possible candidates for your position) need?" Other independent variables used in the regression included gender, country and age. Basic descriptives are in Tables 1 and 2.

Tab. 1: *Basic statistics for the sample of the EU – means, standard deviations in parentheses*

	Male	**Female**
S (years of education)	12.53 (2.430)	12.86 (2.431)
Age (years)	41.69 (11.874)	42.18 (11.445)
Experience (years)	20.77 (12.258)	19.52 (11.610)
Monthly salary (EUR)	2300.26 (1997.98)	1635.77 (1426.96)

Source: ESS5 [10], own calculations

Tab. 2: *Basic statistics for the sample of the CZ – means, standard deviations in parentheses*

	Male	**Female**
S (years of education)	11.99 (1.660)	12.25(1.723)
Age (years)	40.86 (10.992)	41.73 (10.278)
Experience (years)	19.76 (11.249)	18.95 (10.951)
Monthly salary (EUR)	904.57 (445.07)	692.47(254.31)

Source: ESS5 [10], own calculations

Overqualification and underqualification ratios were calculated using subjective measure, i.e. answer to the question "About how many years of education or vocational schooling beyond compulsory education would they (possible candidates for your position) need?" These answers created values of adequate education for the job and were compared with education of the respondents. Calculations based on these answers are in the Table 3. Results in this table are consistent with finding of Groot ([13]) and Galasi ([12]), however percentages of overqualification for the European females (over 50%) are quite high and it seems that it can be a result of high rates of unemployment in the EU (especially in the Eurozone countries), when people are – due to tight labour market – willing to take jobs bellow their qualifications. Results for the Czech Republic are higher in the part of underqualification – in the same vein as above, it can be result of better situation on the labour market where also candidates with lower than necessary qualification can obtain a job. At the same time, there can be also bias towards higher levels of adequate schooling, as people overstate requirements of their job to give more importance to their position. The result is higher percentage of underqualified workers. Results in Table 4. show average years of overschooling, underschooling, years of education necessary for the job, average age of respondents and years of experience, separately for EU countries and the Czech Republic. Values for the EU countries are generally higher, with the exception of higher overschooling of Czech females.

Tab. 3: *Percentage distribution of adequate qualification, under- and over-qualification*

EU Countries	**All**	**Male**	**Female**
Underqualified	29.34	32.40	26.43
Adequately qualified	22.43	21.36	23.42
Overqualified	48.24	46.24	50.14
Czech Republic			
Underqualified	41.85	41.03	42.86
Adequately qualified	19.10	16.92	21.74
Overqualified	39.04	42.05	35.40

Source: ESS5 [10], own calculations

Tab. 4: *Means of overschooling, underschooling, adequate schooling, education, age, years of experience.*

		Years of over schooling	Years of under schooling	Years of education necessary for job	Years of full-time education	Age of respondent	Years of experience
EU COUNTRIES							
All N=11137	Mean (Std. deviation)	2.86 (1.63)	1.95 (1.29)	12.51 (2.58)	12.70 (2.44)	41.94 (11.66)	20.12 (11.94)
Males N=5393	Mean (Std. deviation)	2.79 (1.58)	1.98 (1.38)	12.44 (2.61)	12.53 (2.43)	41.69 (11.87)	20.77 (12.26)
Females N=5744	Mean (Std. deviation)	2.93 (1.66)	1.92 (1.18)	12.58 (2.55)	12.86 (2.53)	42.18 (11.44)	19.52 (11.61)
CZECH REPUBLIC							
All N=544	Mean (Std. deviation)	2.76 (1.55)	1.37 (.81)	11.89 (2.44)	12.11 (1.69)	41.26 (10.67)	19.39 (11.11)
Males N=295	Mean (Std. deviation)	2.59 (1.46)	1.23 (.59)	11.59 (2.28)	11.99 (1.66)	40.86 (10.99)	19.76 (11.25)
Females N=249	Mean (Std. deviation)	3.01 (1.66)	1.54 (.99)	12.25 (2.58)	12.25 (1.72)	41.73 (10.29)	18.95 (10.95)

Source: ESS5 [10], own calculations

Effects of overqualification and of underqualification on earnings (i.e. on returns to adequate schooling, over- and underschooling) were estimated using augmented Mincer's earnings equation proposed by Cohn ([7]) and presented in this paper as an Equation (10). Results of regression analysis using this model are in the Tables 5, 6, and 7.

Tab. 5: *Model summary*

Model Eq. (10)	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
	0.544a	0.296	0.294	0.88903	0.708
a. Predictors: (Constant), Years necessary for job calculated for full time education (ADSCH), Years of overschooling = SCHOOL-ADSCH, Years of underschooling=ADSCHOOL-SCHOOL, Adschool*Experience, Overschooling*Experience, Underschooling*Experience					
b. Dependent Variable: LN w					

Source: ESS5 [10], own calculations

Tab. 6: *ANOVA*

Model Eq. (10)	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.842.232	6	307.039	781.480	0.000a
Residual	4372.909	11130	0.393		
Total	6215.141	11136			

Source: ESS5 [10], own calculations

Tab. 7: *Regression coefficients and t-ratios for Model Eq. 10*

Model Eq. (10)	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	6.090	0.063		96.660	0.000		
Years necessary for job calculated for full time education	0.073	0.005	0.169	15.202	0.000	0.696	1.436
Years of overschooling = SCHOOL – ADSCH	0.010	0.012	0.010	0.800	0.004	0.560	1.787
Years of underschooling = ADSCHOOL – SCHOOL	-0.059	0.026	-0.037	-2.235	0.025	0.308	3.243
Adschool * Experience	0.000	0.000	0.038	2.600	0.009	0.409	2.444
Overschooling * Experience	0.001	0.000	0.019	1.382	0.167	0.452	2.214
Underschooling * Experience	0.004	0.001	0.100	5.471	0.000	0.257	3.896
a. Dependent Variable: LNw							

Source: ESS5 [10], own calculations

Results of regression carried out on the data from European Social Survey, Round 5 (year 2010) [10] show that results are similar to that found by other researchers (see e.g. [13]). Rate of return to adequate schooling is high at 16.9%, on the other hand, rate of return to overqualification (overschooling) is positive but at much lower level of 1%. We could expect negative rate of return to underschooling at –3.7%, what means that missing year of education for the job lowers wage by 3.7%. All these values are statistically significant. Interaction variables for schooling and experience also show positive values and it means that experience can increase wages for all cases of schooling; however, coefficient for interaction between experience and overschooling is not statistically significant. Moreover, these results are counterintuitive since more experienced and therefore older workers should have lower rate of return to adequate schooling or overschooling, i.e. coefficients Adschool * Experience and Overschooling * Experience should be negative.

Conclusions

Overqualification is a very important issue in all developed countries and it is a great challenge to the relevance of more investment in the education. If many workers have more than required education or qualifications then continuing the expansion of secondary and higher education is inefficient. Research carried out in this paper firstly addressed questions connected with education and earnings, or with returns on investment to education, based on human capital theory. In methodological part various possibilities how to calculate consequences of overeducation/undereducation for earnings and returns to education were analysed. The equation used by Cohn and Ying Chu Ng in their article on incidence and wage effects of overschooling ([7]) was used for the research presented in this paper. The paper also dealt with measurement problems of overqualification and underqualification. Final parts of the paper firstly analysed incidence of overqualification and underqualification in the EU countries and in the Czech Republic. Several studies show that overeducation is not as serious as presented and its incidence is overestimated when the heterogeneity of workers is not taken into account. Similarly, negative effect of overeducation on earnings is not so big when endogeneity of overeducation is controlled. Overeducation also can be temporary situation

when worker is beginning the career on labour market. However, statistical analysis carried out on the cross-section data from European Social Survey Round 5 (2010) found that incidence of overschooling is high, with values near 50% for the EU countries and around 40% for the Czech Republic. Secondly, regression analysis of the data from ESS5 was carried out to find wage effects of overschooling and underschooling. As to effects on returns to education, the results show that the rate of return to overschooling is positive and lower than the rate to adequate (required) schooling, while rate to underschooling is negative. I am fully aware that the results are limited by many factors, e.g. omitted variables, model specifications etc. However, it can be concluded that education and job mismatch is not minor problem and should be taken into account. All these questions deserve further research because efficient educational policy will be one of the main factors supporting economic growth in the future.

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Návratnost investice do vzdělání a nadměrná kvalifikace – případ EU a ČR

Cílem této práce je analyzovat a zhodnotit současný stav překvalifikovanosti a podkvalifikovanosti v zemích Evropské unie a v České republice. Trvale roste počet absolventů vzdělávacího systému a přetrvává poptávka po vzdělání v populaci. To vede k obavám, že nesoulad mezi požadavky na kvalifikaci pracovních sil a pracovních míst se zvýší. Veřejná vzdělávací politika spíše podporuje tuto kontroverzi. Zatímco počty zapsaných studentů na středních školách a veřejných vysokých škol a tudíž počty absolventů rostou, počet kvalifikovaných pracovních míst roste pomalu. Příspěvek se zabývá různými metodami používanými pro měření požadované úrovně vzdělání pro práci a příslušnou teorií (vyhledávání a porovnávání pracovních míst, teorie lidského kapitálu, teorie přiřazení atd.) které mohou být použity pro interpretaci překvalifikovanosti. Poslední kapitola analyzuje a hodnotí aktuální stav překvalifikovanosti v zemích EU a v České republice a zabývá se empirickými výsledky vlivu překvalifikovanosti na výdělky.

Return on Investment in der Bildung und Überqualifikation – im Falle der EU und der Tschechischen Republik

Das Ziel dieser Arbeit ist es den gegenwärtigen Stand der Überqualifikation und Unterqualifizierung in den EU-Ländern und in der Tschechischen Republik zu analysieren und zu bewerten. Es gibt eine ständig wachsende Zahl von Absolventen des Bildungssystems und eine anhaltende Nachfrage nach Bildung in der Bevölkerung. Es führt zu Befürchtungen, dass sich das Missverhältnis zwischen der Zahl der Arbeitsplätze und den Anforderungen an die Qualifikationen in der Belegschaft in nicht allzu ferner Zukunft erhöhen wird. Die öffentliche Bildungspolitik scheint diese Kontroverse zu unterstützen. Die Arbeit beschäftigt sich mit verschiedenen Methoden, die verwendet werden, um die erforderliche Ausbildung für bestimmte Jobs zu messen, und mit den damit verbundenen Theorien (Such-und Matching, Humankapitaltheorie Zuordnung Theorie etc.), die für die Interpretation der Überqualifikation verwendet werden können. Das letzte Kapitel analysiert und bewertet aktuelle ovequalification in den EU-Ländern und in der Tschechischen Republik und beschäftigt sich mit den empirischen Ergebnissen der Auswirkungen von Überqualifikation auf den Verdienst.

Zwrot z inwestycji w edukację a nadmierne kwalifikacje – przypadek Unii Europejskiej i Republiki Czeskiej

Celem niniejszego opracowania jest analiza i ocena aktualnego stanu nadmiernych kwalifikacji i niedostatecznych kwalifikacji w krajach Unii Europejskiej oraz w Republice Czeskiej. Stale wzrasta liczba absolwentów systemu oświaty a w populacji utrzymuje się popyt na kształcenie. Rodzi to obawy, że rozbieżność między wymaganiami dotyczącymi kwalifikacji siły roboczej a miejscami pracy ulegnie zwiększeniu. Prowadzona publiczna polityka edukacyjna bardziej wspomaga tę kontrowersję. W artykule przedstawiono różne metody stosowane do pomiaru wymaganego poziomu wykształcenia niezbędnego do pracy oraz podstawy teoretyczne (poszukiwanie i porównywanie miejsc pracy, teoria kapitału ludzkiego, teoria przyporządkowania itp.), które mogą być wykorzystane do interpretacji nadmiernych kwalifikacji. Ostatni rozdział Analizuje i ocenia obecny stan ovequalification w krajach EU i w Republice Czeskiej i poświęcono wynikom badań empirycznych dotyczących wpływu nadmiernych kwalifikacji na zarobki.