EARNINGS BENEFIT OF THE INDIVIDUALS WITH TERTIARY EDUCATIONAL LEVEL VERSUS THE EXPANSION OF HIGHER EDUCATION

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Abstract: The number of students of higher education rose significantly in Hungary in the nineties. Many people forecast the decrease of the income benefit of the higher qualification and the decline of the rates of return for investment in higher education. We analyse the time course of the difference between earnings of the graduates and the secondary school graduates between 1990 and 2008, we show that the value of the diploma decreased only slightly despite of the expansion of higher education.

Introduction

According to human capital theory, education can be seen as an investment in individual human capital. The rates of return for investment in human capital can be calculated in the same way as investments in physical capital (Schultz, 1983; Becker, 1993). The earnings are a very important factor in indirect costs and benefits, contained in rates of return calculations. The failed earnings belong to the indirect costs since the individual learns at school and stays away from labour market, i.e. he or she does not realize any benefit from working. The income surplus of the individual who has \( j \)-th educational level is compared to the individual who has \( (j-1) \)-th educational level appears on the benefit side in rates of return calculations. In this paper, we look for an answer to the question whether the income benefit of graduates decreased in a larger extent in consequence of the expansion of the higher education.

The time course of number of pupils/students in full-time and part-time education together

We review briefly the time course of participation in education of pupils/students from the early 1990s until our time, without consideration of the demographic changes. Nevertheless, the number of pupils/students in full-time and part-time education together changed a lot before the 1990s; our analysis covers the aforementioned period (from 1990 to 2009). The number of primary school pupils in full-time and part-time education together decreased by 32.85% (partly due to demographic decline), the number of grammar-school students and vocational secondary school students increased by 70.7% and by 24.6%, the number of students in tertiary education increased by 251.6% between 1990/91 and 2008/09 school year (Figure 1). The substantial rise of the number of students in the higher education ensued in the nineties mainly, the number of students rose by 291.4% entirely until 2005 continuously, and following this the numbers decreased (by 10.17%) to the end of the examined period (Figure 1).

The reason of the decrease of the number of students of higher education is that, while the number of full-time student increases continuously, students’ number in part-time tertiary education decreases gradually from 2005.

While the part-time education students’ number rose by 516.86% between 1990/1991 and 2004/2005 school year, after this period it decreased by 29.54% to the 2008/2009 school years gradually. The number of full-time students more than tripled, exactly increased by 217.13% between 1990/91 and 2008/09 school year, while the number of the higher educational institutions decreased (Figure 1). The number of students passed final examination at secondary level increased by 19.6% between 1990 and 2008, however the number of pupils who made a maturity exam became stable between 81000 and 92000, all this indicates that the ratio of the pupils who continue their studies after secondary school has risen (Hungarian Statistical Yearbook of Education, 2008/2009).

Changes of gross earnings by educational level

Many people forecast the depreciation of the higher qualification and the decay of the relative situation of the secondary school graduated due to the expansion of higher education, the latter case is the result of the process that the graduates of higher education, who enter in large numbers to the labour market, can elbow the secondary school graduates out of their job, as a result of their relative position deteriorating. At first we compare the gross earnings of agents with college/university degree to agents with secondary school qualification. Data of gross earnings by educational level and age was provided by the Ministry of Social Affairs and Labour.

We turn our attention to the gross earnings data, considering that the gap between net earnings of different educational level decreases significantly, following the deduction of personal income tax and other dues (pension contribution, employees’ health insurance contribution, employees’ contribution to unemployment funds). Our aim is primarily to gain insight into how the market values the knowledge of agents with given educational qualification; we do not wish to examine the state’s influence practised for earnings. We want to examine how income differences between individuals with tertiary educational level and ones with next lower educational level changed following the change of the political system, between 1995 and 2008.
Figure 1. Number of pupils/students in full-time and part-time education


Figure 2. Gross earnings by educational level and age group in 2000

Figure 3. Gross earnings by educational level and age group in 2008
In consequence 1995 is the base year in our examination, considering that if the individual started his higher education studies in early 1990s, the graduate appeared on the labour market after 1995 in order to realize earnings, and namely the higher education massing does not yet have an effect on the labour market before 1995, only from the mid of 1990s.

We compare the earnings gap between 2000 and 2008, too. It is true that the expansion of higher education begun in the early 1990s, but if students started their studies in this period, they turned into active actor of the labour market in the early 2000s, and since we would like to compare the earnings of younger age group to earnings of older age group, therefore it is more expedient to make examinations for the early 2000s too.

Despite the fact that the income benefit of individuals with a higher degree rose significantly between 1995 and 2008 the question arises, whether the income difference rose continuously since 1995 entirely, or as many people forecast it, whether increase of the income benefits of the higher qualification compared to the ones with secondary school come to a standstill in 2000 or after 2000.

The earnings benefit of the agents with university degree or with college degree comparing to the agents with final school qualification moderated only to a lower extent, the surplus of earnings of individuals with secondary-school leaving examination, and this earnings differential can be found in 41-45 age group in 1995, in this age group the earnings of employees with university degree are larger by 93.3% than the earnings of agents with secondary school-leaving examination, and this earnings benefit is larger by 147.4% in 2008. It lies behind the rise of the income gap that the nominal gross earnings of university-educated ones decreased but with altogether by 2-3 percentage point until 2007. Similarly the gross private rates of return to college rose to 2003 and then it began to decrease (T. Kiss, 2008).

On the basis of the rates of return to education for university graduates we may not talk about decrease with a considerable measure to the value of the university qualification, since the calculated gross private rates of return to tertiary education rose until 2004 entirely, after it decreased by 2-3 percentage point until 2007. Similarly the gross private rates of return to college rose to 2003 and then it began to decrease (T. Kiss, 2008).

Conclusion

On the above basis, we can note a vigorous increase of participation in the higher education, which did not entail the decrease of the earnings benefit of the individuals with college/university degree in a considerable measure. Galasi (2005) does not consider these processes of the education being depreciated; he thinks that there is not any qualification inflation in Hungary that is why we may not talk about the higher qualification being depreciated. The demand for the more educated employees increased significantly in the second half of the 1990s which did not go together with the immediate increasing of the number of graduates of the higher education, that is why the university or college-educated ones (and individual with additional knowledge, than for example: the knowledge of more languages with a communications level, expertise in a computer treatment, ability to travelling abroad) were rewarded larger earnings by the labour market. The continuous increase of the proportion of more educated young employees and the number of individuals with competitive new skills was due to the multitudinous participation in the higher education. The proportion of individuals with university degree working in higher occupations grows by leaps and bounds, while the number of students in higher education increases too, which must be due to their labour supply turned into elastic while the wage premium decreased slightly, and the employers rather redefined the workplace requirements continually and today employ professional employees too (Galasi, 2005).

References


