

Benefits of Higher Education: A Literature Review

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Abstract

In this paper our aim is to categorize several types of higher education benefits. Literature review is chosen as a tool to demonstrate a systematic categorisation and conceptualisation of the research phenomenon. We distinguished five types of higher education benefits: private economic and private non-economic benefits, social benefits, external benefits (i.e. externalities) and contribution to economic growth that gives us a total list of higher education benefits.

Keywords: Benefits, higher education, public, private, externalities

INTRODUCTION

Based on economic theory, the value of higher education is justified by its economic and non-economic benefits for the individual and the society as a whole, whereby education is considered as an investment, similar to investments into physical capital (Becker, 1994, pp. 17–21). Investing time and money in education can be therefore considered as human capital investment (Education at a glance 2019, p. 98).

In a modern society knowledge is "capital", and higher education is a tool to obtain the "knowledge capital". Empirical results demonstrated that many public and private benefits occur of higher education attainment which leads to social and economic benefits. (Santiago et al., 2008, p. 17). Empirical research on benefits of higher education emphasizes overall benefits created by higher education on both microeconomic and macroeconomic level (Santiago et al., 2008, p. 17).

Private and public funding of higher education is closely related to the benefits and value higher education has for individual, society and economy. In OECD countries the cost for attaining a tertiary education degree for a man is USD 45 100 and for a woman USD 34 800. This includes the direct costs (tuition fees and living expenses) and foregone earnings. However, the foregone earnings make a considerable larger part of the total costs. The benefits over their career is estimated to be higher for men (USD 341 000) than for women (USD 262 400). (Education at a glance 2019, p. 83).

In this paper our aim is to categorize several types of higher education benefits. Literature review is chosen as a tool to demonstrate a systematic categorisation and conceptualisation of the research phenomenon.

Methodology

This study uses a literature review approach to present the systematic categorisation of economic and non-economic benefits of higher education at micro and macro level. The literature review is based on several relevant papers published in Journals with impact factor.

Results

Any classification and distinction of broader social benefits of higher education is difficult and incomplete since the private benefits are reflected in the social or interplay of both economic and non-economic effects. According to the beneficiary or the person to whom the benefits relate, we distinguish (IHEP 1998, page 13) i) **micro benefits** – economic and non-economic and **macro benefits** – economic and non-economic. The dotted lines in table 1 suggest that benefits are highly interconnected when we distinguishes between social micro and macro benefits and non-economic micro and macro benefits.

Table 1: Distinguishing between benefits of higher education

Economic		Non-ekonomik
Mikro	Private	Private
	Social	
Makro	Economic growth	Externalities

Private economic benefits

Providing formal education is regarded as a productive investment in human capital (Olaniyan and Okemakinde 2008, p. 158). Data on return created for an individual by education is therefore an indicator of productivity of education that creates motivation and necessary stimulus for continuation of study (Psacharopoulos and Patrinos 2004b, p. 8).

According to the human capital theory, more education means higher productivity, assuming a perfect labour market and the condition of work payment by its limit value (Boarini and Strauss, 2007, p. 6), and increased productivity is reflected in higher wage premium (Olssen et al., 2004, p. 148), safer and higher quality employment and possibility of income increasing (European Commission, 2010, p. 18). Wage premium is often a good incentive for individuals to invest in higher education, and at the same time it is used to determine the balance between supply and demand of (higher) education that senses the connection between labour market and HE system (OECD 2011, p. 138). Individuals with HE manage financial means more efficiently, invest them in deposits, capital, pension or mutual funds that represent additional sources of income (IHEP 1998, p. 16). Private benefits are often expressed numerically, by private rate of return, which is based on a comparison of all measurable costs and benefits of education for an individual (CEGES 2007, p. 15).

Another important theoretical assumption on private benefits of higher education relates to improved employment opportunities and lower risk of unemployment for individuals with higher education. Although Blondal et al. (2002, p. 44) study found slim differences between tertiary and secondary

education, Boarini and Strauss research (2007) shows a more complex calculation of employment premium. They have summarized the expected increase in net earnings throughout of the life period of graduates (Oliveira Martins et al. 2009, p. 131) and noted that higher education improves the labour market integration and possibilities of faster employment.

Social economic benefits

Social economic benefits relate to broader economic, fiscal benefits and benefits of the labour market (Psacharopoulos, 2009, p. 4; IHEP, 1998, p. 14). We are dealing with benefits of higher education as a result of its contribution to general economic development of a country (IHEP, 1998, p. 14). Individuals with higher salaries contribute more tax revenues to the Treasury, benefit from smaller amounts of social transfers, have bigger savings and consequently enable higher investments thus largely contributing to social welfare (Bloom et al., 2007, p. 299). Trained and educated workers are more productive, more creative in development and application of new technologies, more flexible, they learn new skills more easily and they are interested in global economic and business issues (Bloom et al.; 2007, p. 299). In case of highly educated people the state has additional benefits because the likelihood of claiming the state financial support is lower (Bloom et al.; 2007, p. 299), although this is about redistribution of fiscal benefits that do not directly increase the productivity of the economy (Herndon, 2008, p. 7). Also, the level of education is associated with increasing consumption of goods which is growing due to higher income (IHEP, 1998, p. 14). Globalization change in economic systems has prompted the need for flexible and adaptable labour force that is adapting to social and economic changes more rapidly. Higher education contributes to preserving competitive advantage as higher education graduates have skills of critical thinking, writing and communicating (IHEP, 1998, p. 14).

Private non-economic benefits

The effect of higher education for an individual is not only economical. Relations, values and behavioural patterns of individuals with completed higher education shape social environment and create social change (Bowen, 1997, p. 263). Many authors therefore believe that investments in education create broader non-economic benefits (Berhman, Crawford and Nevzer, 1997, p. 1), such as longer life expectancy of graduates, better health, greater involvement in public and social life, better social cohesion and lower crime rate (Wolfe and Haveman, 2002, p. 99; European Commission, 2010, p. 15). Private non-economic benefits received by individuals with higher education (or their families) are interrelated with external (social) benefits – externalities, received by broader society, although clear dividing lines cannot be determined.

External benefits or externalities

Externalities are social benefits in a broader sense, which have characteristics of public good and are created because of individual's education, but are obtained by other peers of current or future generation (McMahon, 2004, p. 211; Santiago et al., 2008, p. 24). External benefits can contribute to public interest in three forms (Vila, 2000, p. 26): i) promoting economic development by creating new technologies, ideas and products, ii) reducing (to some extent) inequality in distribution of wealth and iii) stability of social structures.

External benefits of HE, non-economic by nature, are indirectly reflected in economic benefits as well (Sianesi and Van Reenen, 2002, p. 6). They include (Santiago et al., 2008, p. 24–25; Vila, 2000, pp. 26–

27; Wolfe and Haveman, 2002, p. 113) i) health effects, reflected in lower infant mortality rate, improvement of public health, prolongation of lifetime and lesser likelihood of spreading of infectious diseases; ii) birth-rate effects, including fewer births due to prolonged studies of women; iii) increasing volunteering and charity which affects reduction of inequalities (Vila, 2000, p. 27); iv) greater political stability, due to strengthening of democracy and human rights by improving social institutions and higher turnout in elections (McMahon, 2004, p. 238); v) reducing level of crime, since more educated individuals have higher income which leads to reduced likelihood of criminal behaviour; vi) contribution to development and transfer of new technologies; vii) environmental management, including lower levels of water and air pollution (McMahon 2004, p. 240); increasing of social justice and equal opportunities since individuals with more years of education follow the social and economic development process more easily (Vila, 2000, p. 27).

Contribution to economic growth

According to new theory of growth, new knowledge is created due to economic incentives which allow space for public policy (Riddell, 2004, p. 8). On the other hand, the theory also allows considering the enlargement, spill over and transfer of new knowledge that is necessary for understanding and processing new information and for successful use of new technology that also leads to increase of economic growth (Becker and Lewis, 1992, p. 2; Woessmann and Schutz, 2006, p. 6).

Hanushek and Woessmann (2008, p. 1) have summarized three links connecting education and economic growth: i) education increases stock of human capital, that results in higher productivity and thus higher production level (this conclusion is based on neoclassical growth theory); ii) education increases innovation in economy, creation of new knowledge and technologies (according to theory of endogenous economic growth) and iii) education enables faster transmission and dissemination of knowledge, processing new information and introduction of foreign technologies for own needs).

In new growth models, spill over effects of education are particularly emphasized which is reflected by the i) presence of individuals with HE increases productivity of those without HE; ii) investments in human capital create possibilities of spill over of technological progress and accumulation of knowledge; iii) environment with high average levels of human capital increases ability to learn from each other; and iv) increased mobility of staff that enables transfer and dissemination of knowledge and that promotes the exchange of views, knowledge and skills (European Commission, 2010, p. 21; Sianesi and Van Reenen 2002, p. 5).

Conclusion

In this paper we distinguish five types of higher education benefits: private economic and non-economic benefits, social benefits, external benefits (i.e. externalities) and contribution to economic growth that gives us total list higher education benefits. Private economic benefits relate to higher earnings premiums, higher employment level and lower unemployment level; social economic benefits result from higher public returns in higher tax revenues and social contributions. Private non-economic benefits result from better health, civil engagement, longer life expectancy and improvement in happiness. While external non-economic benefits relate to lower crime, democratization, civil society. At a macro level, economic benefits include better productivity and knowledge spill-overs (higher total factor productivity) (Education at a Glance, 2019; Hermansson et al. 2017). Our literature review is

also consistent with findings of Hermannsson et al. (2017) who further explored the external benefits of higher education in detail.

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