THEORETICAL ASPECTS OF FINANCING HIGHER EDUCATION

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Abstract: This article deals with theoretical aspects of financing higher education, to which primarily belongs the issue of the character of education as a good, but also particular reasons for the state intervention to the education and a question about student's financial participation on the costs allied to their education.

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Introduction

In connection with the issue of financing education it is very important to discuss about the character of education as a good. Is it possible to consider the education as a public good? Education is often considered as a public good, from which is consequently derived, that the responsibility for providing and financing education should take on the state. As we can find out thereinafter, this opinion is not exactly correct.

Determination of the character of education

The first place in defining the concept of public good belongs to ***Paul A. Samuelson***[24] (to another authors, who deal with the issue of public goods belong for example married couple of Musgrave's[25], Stiglitz[26], Buchanan[27], Mankiw[28], etc.). Samuelson is considered as the establisher of the theory of public goods. He distinguishes between private and public goods. He accepts public goods as goods, which bring benefits for all members of society to the intent that the consumption of a public good by one subject do not preclude its consumption by another subject. Exactly this characteristic differentiates public goods from private goods. Resulting from the Samuelson's article we can define two main characteristics typical for public goods:

[24] SAMUELSON, P. A.: *The Pure Theory of Public Expenditure.* In: The Review of Economics and Statistics, Vol. 36, 1954, No. 4.
[25] MUSGRAVE, R. A. – MUSGRAVE, P. B.: *Public Finance in Theory and Practice*. New York: MacGraw – Hill, 1989.
[26] STIGLIZT, J. E.: *Economics of the Public Sector*. New York: Norton and Co., 1988.
[27] BUCHANAN, J. M.: *Public Finance in Democratic Process: Fiscal Institutions and Individual Choice*. Chapel Hill: The University of North Carolina Press, 1987.
[28] MANKIW, G. N.: *Macroeconomics*. New York: Worth, 1992.

- ***non – rivalry*** – this characteristics points out that consumption of one good is possible to realize with more individuals without losing benefit from its consumption,
- ***non – exclusion from the consumption*** – this characteristics means that it is not possible to exclude anyone from the consumption of public good.

According to the typology of goods and defining concept of public good on the part of particular authors and their view at the issue of the character of education as a good, I attained to conclusion, or more precisely, I identify with the opinion that only the obligatory education belongs to public goods (because this type of education meets the condition about non – rivalry and non – exclusion from the consumption). It is not possible to classify higher education as a public good, because the consumption of it is partly rivalry and it is characterized by relatively easy exclusion from the consumption. Also its consumption is possible to willingly refuse. Higher education can also not be classified as a private good, because its consumption by one individual allows consuming by another. For reasons given, I consider higher education as a mixed good, which a consumer can consume so far to fill the capacity without reducing any benefit, which have another individuals from its consumption. This conclusion is also resulting from the working paper, which was made by the International Monetary Fund in 1999[29]. In this document it is noticed, that higher education is in general partly rivalry and also excludable.

Causes for the state intervention to higher education

As I mentioned in the previous part, it is necessary to consider higher education as a mixed good. So the state intervention in financing this part of education becomes necessity. This argument is testified to many factors, which are in general instrumental to give reasons for the state intervention to economy, but later these factors have been applied to providing and financing education. A pioneering article in the mentioned sphere was introduced by an important american economist Milton Friedman in 1995 under the name of „The Role of Government“[30]. To the factors that give reasons to the state intervention in education, Friedman classed under mentioned four points, which have been further applied for higher education by me:

- capital market imperfection,
- incomplete information,
- possibility to create a monopoly,
- existence of positive externalities.

In case of providing higher education through the market, students, which do not dispose of sufficient financial resources, would be forced to borrow this necessary money. But human capital obtained by education is unmarketable. It is not possible to buy it. It is possible to buy only services, which we are able to provide through it. So it is not possible to use the human capital as collateral to obtain a student loan. If students do not dispose of any assets, which they could use as collateral, they would have a problem to obtain needed financial resources in the capital market. This may conduce

[29] WIGGER, Berthold U. – WEIZSÄCKER, Robert K.: IMF Working paper: *Risk, resources, and education – public versus private financing of higher education.* International monetary fund, 1999, p. 3.

[30] FRIEDMAN, M.: *The Role of Government.* In: Solo, R.A.: Economics and the Public Interests. New Brunswick: Rutgers University Press, 1955, p. 123-144.

to very low demand for higher education, what would be an unfavorable phenomenon for the society. That is the reason for a state intervention to the process of providing higher education. State should correct the imperfection of the capital market (for example by providing state loans for the students).

Next reason for a state intervention is related to the problem of **incomplete information**. Each consumer knows his own needs, which he would like to meet the best. This applies to the sphere of obtaining education too. But in many cases students do not dispose of sufficient personal knowledge or experience, through which they would be able to choose the optimal choice for their study. That is the reason why parents enter to this process, but this could conduce to the fact, that the parent's decision may not be the best choice in favor of their child. This can be a result from busyness, indolence or insufficient informedness of the parents. It is very difficult to obtain the needed data base of all information for an optimal decision and as it is not possible to construct an ideal information system, information asymmetry will always exist and will be a cause of education's market failure. That is the reason why state enters to this process and collects needed information, which is through its character a rare good.

Possibility to create a monopoly in the sphere of education as alternatively cause for market failure and for some needs of state intervention is primarily related to creation a space monopoly. This type of monopoly guarantees monopoly position of one school in the region (for example in case of less populated region), whereby there is no competition provided.

Positive externalities do exist in a situation, when some benefit rises to someone, who does not pay for it. The benefits, which are produced by education, are most frequently divided into public and private. The public benefits of education, which have effect on general living standard and are exploited by each citizen of the society, we consider as a positive externality, which is the reason for state intervention in sphere of financing education. The benefits directly arising from higher education were dealt by David E. Bloom, Matthew Hartley and Henry Rosovsky from the american universities of Harvard and Pennsylvania.[31] From their point of view higher education attained provides extensive array of public and private benefits (see Table 1).

Table no. 1 The Array of Higher Education Benefits

	Public	**Private**
Economic	• Increased Tax Revenues	• Higher Salaries and Benefits
	• Greater Productivity	• Employment
	• Increased Consumption	• Higher Savings Levels
	• Increased Workforce Flexibility	• Improved Working Conditions

[31] BLOOM, E. D. – HARTLEY, M. – ROSOVSKY, H.: *Beyond Private Gain: The Public Benefits of Higher* Education. In: Forest, J. J. F. – Altbach, P. G. (editors): International handbook of higher education. Part one: Global themes and contemporary challenges. Springer, 2006, p. 300.

	• Decreased Reliance on Government Financial Support	• Personal / Professional Mobility
Social	• Reduced Crime Rates	• Improved Health / Life Expectancy
	• Increased Charitable Giving / Community Service	• Improved Quality of Life for Offspring
	• Increased Quality of Civic Life	• Better Consumer Decision Making
	• Social Cohesion / Appreciation of Diversity	• Increased Personal Status
	• Improved Ability to Adapt to and Use Technology	• More Hobbies, Leisure Activities

Source: BLOOM, E. D. – HARTLEY, M. – ROSOVSKY, H.: Beyond Private Gain: The Public Benefits of Higher Education. In: Forest, J. J. F. – Altbach, P. G. (editors): International handbook of higher education. Part one: Global themes and contemporary challenges. Springer, 2006, p. 300.

For example, the increased earnings that result from a college education lead to greater tax revenues and enable increased savings and investment. Skilled workers are likely to be more productive, more creative in their development and use of new technologies, more adaptable and better able to learn new skills, and to have a greater knowledge of global economic and business conditions. Educated people are also less likely to have to claim government financial support.[32]

Some authors (for example Dietsch[33]) do not agree with the fact, that higher education is connected to existence of positive externalities. According to Dietsch, higher education, in comparison with elementary and secondary education, brings only private benefits. But he assigns this fact only to education, it does not concern to research, which is realized on the universities. In his point of view the research realized on the universities brings benefits for the whole society.

From my point of view, higher education attained brings positive externalities, so I incline to the side of these authors, who defined the public benefits arising from higher education.

Student's financial participation on the costs allied to their education

To existence of benefits arising from higher education attained and with the mixed character of education as a good, it is also connected the issue of the application of student's financial participation on the costs allied to their education, ergo the issue of the application of tuition fees. Apart from the public benefits, which we consider as a positive externality and are the reason for a need of state intervention to the sphere of

[32] BLOOM, E. D. – HARTLEY, M. – ROSOVSKY, H.: *Beyond Private Gain: The Public Benefits of Higher* Education. In: Forest, J. J. F. – Altbach, P. G. (editors): International handbook of higher education. Part one: Global themes and contemporary challenges. Springer, 2006, p. 299.

[33] DIETSCH, P.: Financing higher education: The case for a graduate tax. In: Les Ateliers de L'éthique, Vol. 1, 2006, No. 1, p. 88-102.

financing higher education, we meet also the private benefits, which have effect on increase of living standard for particular higher educated individuals. Exactly these private benefits are adduced as one of the main reasons for a need of student's financial participation on the costs allied to their education. The main arguments, which are in general adduced in favor of or against applying tuition fees, are following:

Arguments for applying tuition fees:

- limitedness of public resources, which is incompatible with the increasing interest in higher education,
- existence of private benefits resulting from higher education attained and also the character of higher education as a mixed good,
- the tuition fees will conduce to an increase of student's motivation for study,
- additional resources obtained from the tuition fees will conduce to the increase of the quality of study and also of the attained education.

Arguments against applying tuition fees:

- applying of tuition fees creates a barrier to entry in higher education, what will conduce to its lower consumption,
- payment of the costs of higher education is included in tax payment, so the financial resources for payment of the costs of higher education are the issue of the government budget priorities, so it is possible to decrease resources in another competitive sphere,
- existence of public benefits resulting from higher education attained, from which has a benefit the whole society,
- tuition fee is often connected to lower quality of higher educated individuals, who consider its ending as a matter of course by reason of paying.

The issue of financing higher education has happened in many countries often question under debate in the last time. It is because of the increasing interest in higher education, which became a trend of present time and which we can see almost everywhere in the world, is encountering constantly rising requests for additional financial resources of the universities. This increasing interest in higher education is a reasonable phenomenon on the score of existence of benefits, which are connected with attained education. Undoubtedly the main reasons for a constantly increasing interest in study on the universities are higher earnings for employees with higher education in comparison with employees without it and also a very high employment rate of individuals with higher education attained.

The issue of obtaining additional financial resources is relating to countries, in which the system of higher education is covered primarily through the public resources. From the most developed countries in the world, the OECD countries, are these primarily Scandinavian countries (Denmark, Finland, Iceland, Norway and Sweden), Slovak Republic, Czech Republic, Poland, Germany, Greece and Ireland. These countries should think about a change in their system of financing higher education in the future (for example by implementation of student's financial participation on the costs allied to their education), because apart from that they might not be able to cover constantly increasing demand for higher education and also increasing quality of higher education. This could consequently endanger their position in the international competition and also in the process of globalization.

Conclusion

Education is in general considered as a public good, but this opinion is not exactly correct. It is possible to consider it as a public good only in the sphere of obligatory education, because it meets the condition about non – rivalry and non – exclusion from the consumption. This is not correct in the case of higher education, which is necessary to be considered as a mixed good. It consequently results a need for state intervention in the sphere of financing higher education. This intervention is inevitable because of four main reasons: the capital market imperfection, the incomplete information, the possibility to create a monopoly and existence of positive externalities.

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