

The effects of fiscal policy on development of companies

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The research within this work is aimed at determining the effects of allocating larger funds for university education upon the development of companies. The corporate development can be based on the rise in the number of employees who are studying for the doctoral degree and attend the courses in permanent training and education. The analysis of the transmission mechanism of alternative measures of fiscal policy used to increase the funds allocated for the university education will help establish whether the larger funds allocated for the university education can be justified.

1. Introduction

The starting point of the work is the belief that the larger funds allocated for the purpose of financing university education will have a positive effect upon the development of companies. Here we will analyse the effects of alternative measures of fiscal policy the aim of which is the increase in funds to finance university education in Serbia. From the point of view of corporate competitiveness, special importance is attached to the realisation of doctoral studies and permanent training programmes. The existing mechanism of allocation defined in the Decree (the Government of the Republic of Serbia, 2005) does not recognize nor does it ensure the allocation of funds for financing either doctoral studies or permanent training programmes.

The attitudes on the need for neutral allocative role of fiscal policy can be given emphasis to on an academic level, however, in practice, the measures of fiscal policy directly influence the private sector (Rothbard, 1981). If the need to increase the funds for the purposes of financing university education be adopted as a goal, it will be necessary to determine whether and to which extent it is possible to allocate additional funds in the budget (Johnstone, 2003).

One potential channel for increasing funds for university education is adopting the measures that will stimulate companies to increase the allocation of funds for university education. The relationship between the university education and economy should function on the feed-back principle:

1. a quality and efficient university education enhances the development and improvement of the competitiveness of economy
2. by employing university graduates economy gives a feed-back information on the quality of the existing study curricula, or on the necessity that these curricula should be adapted to the changing demands of economy.

2. Effects of increase of funds for university education upon the development of companies

The field of research into the university education financing will focus upon the financing of doctoral studies and the permanent training programmes, since the current academic programmes display the following characteristics:

1. Doctoral studies

The importance of doctoral studies is reflected in the very contents of the teaching process, which consists of the educational and the scientific-research work. Hence having completed the doctoral studies, the students are competent to conduct research independently. Apart from universities and institutes, the research can be conducted in companies as well. The research work of the employees may be a significant factor of improving competitiveness and development of companies.

2. Permanent training programmes

Permanent training programmes play a very important role in improving and modernizing the knowledge of the employees who completed their education processes and have since never been in contact with new theoretic and empiric achievements.

The structure of tuition at the doctoral studies and the permanent training programmes forms the basis for a sustainable economic growth over a long-term period. The competitiveness of companies whose employees follow these programmes grows as a result of developing innovation (doctoral studies) and a continuous improvement of knowledge and skills (permanent training).

In numerous studies a qualitative research was conducted into a cause-effect ratio between the effect of an increased level of education upon qualification and the resulting rise in the individual's income on the micro plane. The reason for this attitude is based on equalizing investments into people to investments in-

to capital. Hence the increased investments result in increased productivity (Becker, 1975). It is necessary, however, to determine to which extent the increase in the level of education affects the rise in the individual's income, i.e., whether the increase in the education level has a crucial impact upon the rise of the individual's income.

The alpha factor marks the correlation of additional education share in the rise of the income an individual earns (Glennester, 1998). In this work we present a hypothesis that the value of the alpha factor = 0.6 (that is, that 60 per cent of additional income is the result of additional education, whereas the remaining 40 per cent of additional income is earned on the basis of natural capacities). Therefore, the prevailing role in the individual's income increase is directly related to the increase in the level of education.

Although the reaserch so far can be conditionally approved of, due to the arbitrary calcaulted alpha factor (and the variables affecting the alpha factor), the increase in education clearly has a dominant impact upon generating additional income.

Natural capacity, albeit an important factor of production, only forms the basis necessary for the production process to be performed. An important aspect is also the awareness of a manifest fact that the offer of natural capacities is limited. Unless these natural capacities are upgraded by modern knowledge and skills, the productivity will obviously decrease. On the basis of the attitudes presented we can draw a conclusion that an optimal effect upon the economic development can be achieved only if conditions are created for a continuous improvement of the employees' knowledge and skills.

3. Possible solutions to the issue of increasing funds for university education

Increasing funds for financing doctoral studies and permanent training programmes is possible to achieve by either increasing public expenditures or determining tax reliefs for the companies.

On the academic level, the decision of the state on the increase in public expenditures for the purpose of financing the doctoral studies and the permanent training programmes has a negative impact upon the budgetary balance, decreases the level of national savings, consequently putting pressure towards increasing a balanced interest rate and decreasing investments. The accumulation of budgetary deficits in a long-term period increases the level of public debt, shifting the burden of

too big present public expenditures to future generations. On the other hand, in practice, the increase in public expenditures for the abovementioned purposes would not have any significant negative effects upon the budgetary balance over a short-term period.

The analysis of potential negative effects of the increase in public expenditures upon the macroeconomic stability in a short-term period has to be supplemented by the long-term effects. Namely, in case the gross national product increases over a long-term period as a consequence of larger investment into education, then a resulting increase in public revenues will make it possible to service the accumulated public debt.

The transmission channel of increasing public expenditures for university education is specific (Stiglitz, 2004), since the period in which the effects will be visible cannot be foreseen at the moment the measures are adopted. The basic obstacle for predicting the effects is that it is not possible to establish the average duration and success of studies, especially not finding employment upon graduation. The positive effects of the increase in public expenditures on macroeconomic stability can therefore be expected only upon the completion of the study cycle of the first generations which is financed according to a new system and upon their employment.

The changes in taxation can influence the changes in the behaviour of the private sector (Feldstein, 2008). The majority of Serbian companies are not yet sufficiently aware of the need to invest into the additional knowledge of their employees, therefore it is necessary that these companies be in a short-time period stimulated by tax reliefs, so that they can allocate part of their funds into improving their employees' knowledge. The desired effect, the increase in the funds for the purpose of financing university education, can be achieved by fiscal policy measures by which the companies will be encouraged to finance the studies and attendance of given academic programmes for their employees.

A most appropriate form of taxation for enforcing the proposed measures is the capital gains tax. It is necessary that the limit (a given amount in percentage) be established to which the company expenditure for financing doctoral studies and permanent training programmes would be exempt from the tax base of the corporate capital gains tax (tax deductions).

It is necessary that the allocation mechanism of public expenditures be compared to the allocation mechanism of the tax concessions. On an academic level, it is possi-

ble to identify the arguments in favour of either approach, however, in the case observed, the decrease in taxation would create a significant external effect. The transfer of resources allocation from the public into the private sector would allow for the creation of a feedback between the private sector and the university education by establishing the study curricula/programmes that offer the knowledge and skills required and applicable in the corporate development and business.

The proposed solution has four advantages compared to that of the increase in the public expenditures:

1. in case the public expenditures are increased, the effect upon the budget deficit is direct, since the overall increase in the public expenditures increases the budgetary deficit, whereas in the case of tax deductions (decrease in public revenues) the effect upon the budgetary deficit is indirect.
2. the increase in the public expenditures for the purpose of financing university education is strongly irreversible, since in unfavourable market conditions it is very difficult to enforce the decrease in public expenditures (such measures would cause the dissatisfaction of the employees, the blockade of the already launched projects ...).
3. the approval of tax incentives is reversible, since certain forms of tax incentives (among which the solution proposed) are of temporary character - they last only until the market has improved the resources allocation.
4. part of the resources allocation is transferred from the public into the private sector thus promoting the competition among universities and colleges, which has a positive effect upon improving the quality of study programmes.

4. Conclusion

Investments into university education results into the increase of the human capital, which enhances the competitiveness of the economy. The challenges to the development of small economies will be based on improving the existing resources management, development of innovation and continual development of knowledge. Therefore the prerogative of any society that tends to develop and improve the standard of living is to increase the funds allocated for financing university education on the macro level.

To achieve the set objective - a positive effect of fiscal policy measures upon the corporate development - it is necessary to adopt incentive measures of taxation policy which are a superior allocation mechanism compared to the increase in public expenditures.

BIBLIOGRAPHY

- [1] Tanzi V., Schuknecht L., Reconsidering the fiscal role of government: The international perspective, *The American Economic Review*, Vol. 87, No. 2, 1997.
- [2] Popović D., *Poresko pravo- opšti deo*, Cekos, Beograd, 2006.
- [3] Vlada Republike Srbije, *Uredba o finansiranju, normativima i standardima rada univerziteta i fakulteta za delatnosti koje se finansiraju iz budžeta*, *Službeni glasnik Republike Srbije*, 12/2002, 100/2004, 26/ 2005.
- [4] N.G.Mankju, *Principi ekonomije*, Beograd, Ekonomski fakultet, 2005.
- [5] Burda i Viploš, *Makroekonomija*, *Evropski udžbenik*, Beograd, 2004.
- [6] Stiglitz J. E. , *Ekonomija javnog sektora*, Ekonomski fakultet, Beograd, 2004.
- [7] Schuknecht L., Fiscal policy cycles and public expenditure in developing countries, *Public Choice*, 102, 2000.
- [8] Feldstein M., Effects of taxes on economic behavior, *NBER Working paper* 13745, 2008.
- [9] Glennerster H., *The state of welfare: The economics of social spending*, Oxford: Oxford University Press, 1998
- [10] Barr N., *The economics of welfare state*(3rd ed.), Oxford: Oxford University Press, 1998.
- [11] Johnstone D. B., Cost sharing in higher education: tuition, financial assistance and accessibilitz in a comparative perspective, *Czech Sociological Review*, Vol. 39, No. 3, 351- 374, 2003.
- [12] Vossensteyn H., *Fiscal stress: Worlwide Trends in higher education finance*, *NASFAA*, vol. 34, No.1, 2004.
- [13] Schwartz G., Ter- Minassian T., (2000), The distribution effects of public expenditure, *Journal of economic surveys*, Vol. 14, No.3.
- [14] Musgrave R., Reconsidering the fiscal role of government, *The American Economic Review*, Vol. 87, No. 2., 1997.
- [15] Medina Cas S., Ota R., Big government, high debt and fiscal adjustment in small states, *IMF Working Paper* 08/ 39, 2008.
- [16] Hillman A., *Public finance and public policy*, Cambridge University Press, New York, 2003.
- [17] Vickery W., Meaningfully defining deficits and debt, *The American Economic Review*, Vol. 82, No. 2, str. 305- 310, 1992.
- [18] Kopcke R., (ed.), *The macroeconomics of fiscal policy*, The MIT Press, 2006.
- [19] Becker V.G., *Human Capital: A Theoretical and empirical analysis with special references to education*, NBER, Columbia University Press, 1975.
- [20] Rothbard M., The myth of neutral taxation, *Cato Journal*, Vol. 1, No. 2, 1981.