Factors of Poland’s economic growth after accession to the European Union

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1. Introduction

In recent years we have been watching an increase of interest in the economic growth both among the states leading in the worldwide economy and member states of the European Union. Consequently, in all economically developed states attempts are made to define basic factors and their parameters, which are determinants of the economic growth at a present stage of international market development.

A problem of decreasing a developmental distance between states and regions is another widely discussed issue. It is generally assessed that this is a phenomenon difficult to be managed. It is not a question about chances of the states, which are far away from the world’s forefront, to accelerate their development, but which factors can stimulate the economic growth and be a source of the success. International actions (e.g. The Lisbon Strategy of the Council of Europe from year 2000) and national actions undertaken so far often lead to different results and cannot be unequivocal grounds for making a decision.

Poland’s accession to the European Union caused a necessity to re-orientate the hitherto existing strategy of the state development. A question can be put if the present developmental strategy will have a positive influence on improvement of the economy efficiency on a macro-scale and on a level of enterprises and if it will create positive impulses to increase Poland’s international economy competitiveness.

2. Factors of the economic growth and the developmental strategy of the Polish economy

Since Poland’s membership in the European Union, the centre has faced a dilemma: how the accession has limited a possibility of the autonomous developmental strategy and how to make use of new developmental opportunities. Analysis of the changes occurring in the Polish economy and analysis of the economic parameters included in the Lisbon Strategy\(^1\) show that the most essential factors, which will influence the economic growth in Poland in the nearest future are:

- work resources,

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- innovations,
- capital spending.

In Polish materials and planning documents, the above mentioned elements are the factors which will have the strongest (positive or negative) influence on the economic growth of the state in a period of years 2007-2013, however the influence of factors like the regional differentiation and economic-financial effects of Poland’s entrance to the euro zone is also noticeable. All these growth factors have served for the initial material to design basic macroeconomic categories, characterizing the Poland’s economic growth. A developmental scenario assumes that the high pace of GDP (gross domestic product) growth – over 5% per annum - will be maintained till year 2013 – and thanks to that it would be possible to decrease the income gap in relation to the average of EU states from the current ca. 40% to 75% in 2013. A summarizing listing of the most important parameters characterizing competitiveness and creativity of the state and enterprises is presented in Table 1.

Table 1. Poland’s developmental scenario till year 2013 – basic macro- and microeconomic parameters.

<table>
<thead>
<tr>
<th>Parameters of the Polish economy</th>
<th>Initial level - year 2004</th>
<th>Target point - year 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic macroeconomic parameters:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Increase of GDP in % (fixed prices)</td>
<td>4,2</td>
<td>5,5</td>
</tr>
<tr>
<td>2. Resources of active manpower (in thou.)</td>
<td>17.104</td>
<td>17.087</td>
</tr>
<tr>
<td>3. Natural unemployment (in %)</td>
<td>15,0</td>
<td>5,0</td>
</tr>
<tr>
<td>4. Persons with higher education at the age of 25-65 (in %)</td>
<td>12,5</td>
<td>20,0</td>
</tr>
<tr>
<td>5. Spending on research and development (% GDP)</td>
<td>0,56</td>
<td>2,0</td>
</tr>
<tr>
<td>6. Capital spending (% GDP)</td>
<td>19,0</td>
<td>25,0</td>
</tr>
<tr>
<td>7. Inflation rate (%)</td>
<td>3,0</td>
<td>2,0 – 3,0</td>
</tr>
<tr>
<td>8. State budget deficit (%)</td>
<td>5,6</td>
<td>2,0 – 3,0</td>
</tr>
<tr>
<td><strong>Basic microeconomic parameters:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Share of enterprises</td>
<td>39</td>
<td>60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value 1</th>
<th>Value 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Incurred spending on innovative activity in a total number of enterprises (in %)</td>
<td>19.6</td>
<td>32</td>
</tr>
<tr>
<td>2. Share of sold production of new and modernized products in total sold production in industry (in %)</td>
<td>13.847.5</td>
<td>16.600</td>
</tr>
<tr>
<td>3. Spending on innovative activity in industry (in m PLN)</td>
<td></td>
<td></td>
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</tbody>
</table>


The above mentioned scenario is difficult to be implemented, however consistent monitoring of the established parameters and adjustment of the legal system and institutional environment to the EU requirements offers these opportunities. The essential issue is to make maximal use of the structural funds and the cohesion funds within operational programs.

Some analysts of the economic growth bring to attention the threats, which can be an essential restraint in implementation of the strategy, namely:

1. **Manpower resources**: natural unemployment (and especially in a part of the manpower without adequate qualifications) is the restraint of the economic growth. Manpower resources could have a positive influence on the economic growth only if their jumping, quality change would take place. Two conditions shall be met to obtain the increase of a share of educated persons to ca. 20% (and to decrease unemployment to ca. 5%) within 10 years:
   a) it shall be assumed that upgrade of the qualifications is the priority of the Poland’s economic developmental strategy, that is to admit, that education of the society is becoming the strategic target, which will be an instrument in upgrading the qualifications. Therefore it is necessary to increase a so-called scholarship indicator on the intermediate level and to increase a number of students, which unfortunately is not noticeable. Public and private spending on education is insufficient.
   b) in order to depart from automatic decreasing of unemployment, we have to engage more public money (including the union grants) and to transfer them from programs of fighting against natural unemployment (including social security funds) to reinforce the education system.

2. **Innovation factor**: one does not have to produce (create) innovations to become their beneficiary, but the innovations can be simply bought; hence the increase of innovation import can become the essential factor of the economic growth, not less important than national innovation sources. The alternative of
innovation import has also its justification in a periodical weakness of Polish centres for generating the innovative solutions. Import of innovations is cheaper than their production in the state and does not always provide effective competitive advantages, because a solution considered as the innovation in the state is not often the innovation in the worldwide scale.

The optimal solution would be to combine an effect of innovation import with their creation in the state, but not necessarily in a high-tech field, but also in fields, which have real opportunities for a market success (food industry, tourism, services). As mentioned previously, at present innovations are rarely the technical-technological solutions, but their essence is an idea, the following conclusions can be drawn:

the increase of creativity (innovative potential) is in a close relation to a number of educated persons and a level of spending on research and development.

Whilst searching for interdependence between a qualification level and a level of spending on research and development, the following deductions can be encountered in the literature:

- if a share of persons with higher education in the population in a production age (25-60/65 years) is ca. 10%, a share of spending on research and development in GDP should be at least 1% (in Poland 0,56% of GDP),

3. Capital spending: because spending on research and development is not classified as capital spending, and it constitutes the supplement, it is necessary to increase expenses on education and investments. In Polish circumstances we deal with foreign sources (so-called direct foreign investment or non-returnable sources), national sources (savings and national budget) and credits (national and foreign). When evaluating the efficiency of specified sources, it can be noticed that

a) foreign sources are limited, as a result of low profitability of the investments in Poland. Their maximal share in GDP can oscillate within 2-5%.

b) credits, when considering high costs of their service (a result of a low rating of the Polish economy) cannot constitute an important supplement of financing the investment expenses. The additional barrier is also a limit of the admissible internal debt, amounting to 60% of GDP. It is assessed that total spending on investments from foreign sources and financed from credits will not exceed 6-8% of GDP.

When assuming the required share of capital spending of GDP in amount of 25%, with a downward tendency of the public sector in production of GDP, one should expect a decreasing role of public expenses. On the other hand it will mean the increase of importance of a national propensity to savings, which remains in a direct relation to the increase of population personal income. Therefore higher qualifications and intensification of innovations will determine a level of financing

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3 Possibly L. Balcerowicz is right when advancing a thesis on a determining role of the technology transfer, see the article: Economic pension. We owe the economic growth to transfer of ready technologies, not the science, Wprost magazine, 5th of December 2004.

the investments in the nearest future, what will be an essential condition to obtain the anticipated rate of the economic growth.

It should be noticed, that a role of research and development activity (in brief B+R) in creation of the economy based on knowledge has been recently undermined. J. Winiecki writes that it is not possible to identify in a justified way a high level of research and development expenses with the highly innovative economy\(^5\). In the author’s opinion wrong views in this matter result from two theoretical weaknesses, namely:

a) The influence of institutional factors on the efficiency of resource use (including research and development resources) is widely underestimated. There are economy institutions, which are conducive to a transformation of resources into effects and there are ones, which obstruct it. It should be remembered that research and development activity is regarded as a cost, not an economic effect, and this cost can be transformed into more or less effective results – in the EU there are states, which in spite of relatively high spending on research and development obtain a low pace of GDP growth (Sweden, Germany, Ireland and Italy).

b) authors overestimating a role of research and development also do not notice the fact that there is a distinct positive dependence between a level of the economic development and a level of the research and development/GDP relation – the lower level of development, the lower research and development/GDP relation. There is no interrelation (also in Poland), that when increasing GDP per capita all branches of the economy are starting to clearly increase their expenses on research and development (in case of enterprises and branches a measurement concerns a relation of expenses on research and development to a sale value).

3. Summary

Creativity of the Polish economy is still low, and it is characterized by a peculiar dichotomy: on the one hand official optimism of the centre manifesting in drawing the ambitious plans of introducing the creativity (what is objectively determined by requirements of the Lisbon Strategy), on the other hand a low level of indicators (criteria) of innovative and technological competitiveness. Authors of the Lisbon Strategy assumed that economies of the European Union states, based on creativity, would develop faster than the USA economy. The factors, which have a direct influence on the economic growth should be stimulated to implement this plan and to make use of the opportunity for fast development in the Polish circumstances. These factors are: the increase of investments and spending on research and development, a qualification level of personnel and of whole society and innovations. These factors, without a risk to make a mistake, can be named mega-factors.

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Placing particular emphasis on the above mentioned mega-factors can lead to elimination or a significant decrease of many unfavourable phenomena accompanying the Polish way towards the modern, innovative economy, including among other things:

- low spending on research and development, including a low share of extra-budgetary spending (of the private sector), small interest of industrial enterprises in technology transfer,
- too low share in export of Polish technologically advanced products,
- disturbing lack of a conviction about the strategic importance of knowledge and education (personnel education) for the future of Poland, and also a possibility of entering the knowledge society (official EU aim).

Meeting the above conditions can have a favourable influence on maintaining the high pace of the Poland’s economic growth, what would enable to reach by Poland 75% of the economic development average of 25 EU states within 8-10 years. At the same time the basic aim of our membership in the European Union would be fulfilled in a significant degree.

**Bibliography**

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**Summary**

The article is dedicated to basic factors of the Poland’s economic growth. In view of Poland membership in the EU the most important factors are: human resources, innovations and investments, which are also determinates of the developmental strategy of the state till year 2013.
It is assumed that making use of a positive influence of growth factors can contribute to increase of the position and the economic efficiency of enterprises, with a simultaneous determination of potential threads on a human factor side and also in institutional policy of the state.

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