Public Sector and Budgetary Economy in Transition in Poland in a New Context of Development Economics

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Abstract

The subject of the paper is to present selected problems of the budgetary economy of enterprises and organizational units of the public sector. The main focus is to explore the relations between the principles of the budgetary economy of the public sector units against assumptions of new concepts of economic development. This study refers also to the idea of development economics because the systemic transition towards the market economy in Poland required reconstruction of the economy and the creation of new political, organizational and social structures. In the presented study there were applied analytical methods relating to the empirical data and also analytical methods related to the finances of the public sector. Research methods referred to the theoretical analysis of literature and empirical analysis of the relations between phenomena occurring in the real economy and in the public sector. Preliminary studies indicated that it was not possible to conduct economic policies and maximize tax revenue, particularly by escalating tax burden. Budgetary economy should therefore be conducted according to the principles of rationality and efficiency of resource use. The increase of the budgetary revenues of these group of public sector units must lead to negative consequences, and in particular to increase of the range of the shadow economy.

Keywords: budgetary economy, local and regional development, public finances, taxation.

Introduction

The transition period in Poland brought far-reaching systemic changes, focused on versatile changes in the functioning of the state, economy and society. On the one hand, a number of reforms was initiated, aimed at democratization of public life, and on the other hand, the process of changes in the economy’s systemic character started. Among these changes, the most important issue were problems related to the reconstruction of elites which could effectively implement the said systemic reforms. Switching the economy to the market rules involved not only determining the new functional mechanisms of economic entities, but was also connected with the establishment of a new social consensus which was the biggest challenge; reforms brought about a number of negative phenomena which, for a part of the society, were not understandable and led to deterioration in the society’s living standards.

The beginning of social and economic reforms were also related to the public sector entities and organizational units. In new economic conditions, entities being a part of the public sector, due to the special character and many differences of technical, organizational, spatial as well as financial nature required identification of a new functioning framework and development of adequate management methods, taking account of the special character of public service provision process. One of the most important features of public entities’ and units’ activities is provision of wide range of public services. Such a process has a long-term character of activity. A long-term character results from the need for the sector entities to fulfil the obligations established in legal norms, which clearly constituted the material scope of tasks, principles for their implementation as well as principles of organization and financing of these tasks. The long-term or strategic scope of goals to be met by local government units of various levels seems to be most vital and, at the same time, most difficult problematic scope. Long-term, or rather unlimited character of local government units’ activities means that proper performance of tasks and achievement of goals involves highlighting a considerable number of variables which arise both during the current activities as well as in the course of formulating future goals, including new investment projects on local and regional levels.
The development processes remain a main problem of public entities and also of the enterprises functioning in the real economy. It means that it is necessary to combine and correlate individual goals of inhabitants, economic goals of entities functioning in market economy conditions, social goals of the state and goals of other units functioning in the society. An important problem of long-term perspective on development processes is uncertainty as to the events for future periods and difficulty related to expectations or forecasting of phenomena which are always burdened with risk elements affecting possible achievement of the set goals. It is particularly important to make a reference to the future budgetary income of the public sector entities and units, which in the long term perspective, is customarily connected with financing of the investment and indebtedness service, if a given unit is liable for past periods.

The important subject of the study was to present the selected economy problems of organizational units in the public sector, in particular to examine relations between principles of generating revenue for budgets concerning the said units as part of the optimum tax concept. The main analytical problem is the issue of gathering public income and generating revenues of organizational entities and units in the public sector on the basis of the existing tax system. Responsibility for the implementation of long-term sustainable budget economy is connected with the provision of broadly understood public services at the state and at the local and regional level. It is necessary to pay attention to the problem connected with a long-term maximization of budgetary incomes and therefore, with the possibility of tax burdens growth. Supporting local and regional development can not ignore the main principles of the concept of development economics. The economy of development puts the main emphasis on seeking ways to improve the economic and social situation in poor and developing countries, bearing in mind the evolutionary changes in theoretical approaches to the development. It is therefore proposed to use a wider recognition of the concept of development economics, which in some areas may also have a positive influence on the processes in Poland. This concerns the allocation of own public resources and the EU public resources provided to Poland in the form of support. It is therefore necessary to expect and strive for the best use of resources and to follow the principles of optimization in economic decision-making.

**Condition of the budgetary economy and the regional and local development**

In the market economy conditions it is not possible to implement a social and economic policies which could be expressed by the rapid growth of budgetary incomes, in particular through the increasing of tax burdens of local and regional communities. Development scenario connected to the maximization of tax incomes could not be accepted due to the possibility to distort balance between incomes in the private sector and personal incomes of citizens in the market economy conditions (Mirrlees, 2006, pp. 23-35). Social expectations are oriented rather towards the growth in importance and growth in benefits in the private sector. However, an important question still remains: what relations should be shaped in the future to make it possible to assume that the subject scope and streams of income in the public sector aim at socially acceptable values, that the state budgetary income in the public sector is connected with tasks and financial needs for these purposes, as well as that the tax burden can aim at optimum values (Boadway, 2012, pp. 185-202).

The budgetary economy of the public sector entities and organisational units should be carried out according to the principles of rational and effective use of possessed resources. Such an approach enables to achieve relatively better results, maintaining the present volume of budgetary income. Maximization of budgetary income of above units in the public sector can lead to negative phenomena, in particular to negation of implemented economic programs, aversion to take risk, drop in entrepreneurship as well as to avoidance of taxation and a shift to the grey market. Optimal taxation can be understood as seeking a level of taxes which would ensure an appropriate level of income of budget entities in the public sector and, at the same time, would not cause negative effects on the part of household budgets as well as negative effects on the economy (Tuomala, 2016, pp.1-14). Searching for an optimum taxation should be a generally adopted principle leading to improvement in the effective utilization of public resources and to a greater surplus in the real economy which could be used for development purposes (Stiglitz, 2010, pp. 11-28). An alternative outlook on the problems of effective use of public resources and budget economy of organizational units in the public sector is to draw the attention to management efficiency in the public sector which directly involves better use of possessed resources and, as a consequence, may lead to the reduction of the pressure on the growth in budgetary income and demand for the external funds of refundable character justified by the need to search for sources of financing for increasing tasks, including especially investment tasks.

In the whole economy, including the public sector with local government units, the taxation problem plays a key role. A normal trend is to seek methods leading to the improvement in the income situation of the units which, under such direction of activities, look for possibilities to strengthen their economic and social position. It seems that such direction can be considered completely justified, the more so that units in the public sector, including also local government units at the
regional and local level, are still undergoing implementation of their scheduled development paths which involves the need to provide proper financing sources. Practice and conducted research proved that the main barrier for the fulfilment of many tasks of local government units were insufficient resources of own budgetary funds. Such units very often turn to other external sources of financing their tasks including, both those of refundable character, but also such of non-refundable character. It is also possible to observe adverse effects concerning the excessive use of credits or loans during financing of tasks, including investments. As a consequence of use of the described solutions, we can identify a new problem related to excessive deficit, both at the state budget level and at the level of the abovementioned local government units at various levels.

One of the basic methods to solve the problem of budget funds’ deficiency could be a growth in taxation rate which could, over a short time, result in a clear improvement in the income situation. The question is if such reference to taxpayers’ income may effectively improve the budgetary situation in the long term, what is important during the implementation of various development investments. It seems that the question formulated in this way can be answered affirmatively. A growth in the tax rate may result in a short-term income effect, however, in the long term, the maintenance of stable higher budgetary income is not possible, for various reasons. In the longer period, a clear drop in budgetary income is to be expected, which would be caused by economic and non-economic factors.

The problem of high tax burden can be analysed in theoretical terms, referring to the theory proposed by A. Laffer. According to the cited study, a growth in tax burdens can lead to growth in income only to a limited extent. In the first phase, a growth in a tax rate actually leads to a growth in budgetary income both for the state budget and for the budgets of self-government units. Starting from a certain point, however, despite further growth of tax rates, budgetary incomes will not be growing. In such situation it is possible that the tax incomes will stay at the same level or even will absolutely drop. The course of this phenomena has been illustrated graphically in Figure 1.

Figure 1: Tax rates and the tax revenues, the Laffer curve

The course of the Laffer’s curve shows that the initial growth in income taxation rate leads to a systematic growth in tax revenue which in point t_k achieves their maximum, namely the condition in which tax income are the largest compared to all possible combinations of the tax rate amount. In the range t_o-t_k we can observe a growth in tax revenues. Starting from point t_k, regardless of the further growth in tax rate amount, the growth in tax revenue is no longer observed. Next we can see a reverse phenomenon, the tax revenues upon exceeding t_k tax rate point are gradually reduced. This phenomenon shows the behaviour of taxpayers in the event of continuous growth in tax rates. The normal reaction of taxpayers is the aversion towards making efforts to achieve higher revenues. It results simultaneously in limitation of economic activity and entrepreneurship. A potential and particularly unfavourable problem can be here a moving of business activities to the "grey market". It could lead to the reduction in the effective individual tax rates of a particular entrepreneur. Such a situation may result in shaping and popularizing fixed negative behaviours of taxpayers, and they may not respond to system changes with regard to taxation.


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Concerning the correctness of tax effectiveness implied on the ground of analysis of the theory proposed by Laffer, it is also necessary to refer to main problem associated with tax division of surplus and further allocation of public goods. The question is whether, in a future perspective, is it possible to increase budgetary income of the state and local government units as a systematic growth, relating to the future needs and social expectations. The question also is whether it is possible to seek adaptation of the budgetary income size which would be conducted through the growth in tax burdens, even if it is connected with the growth of the economic basis. Therefore, is it possible in the market economy, to create such a proportion of division of total economic surplus in the society, where the significant position would be taken by subsequent expenses related to financing of various public tasks.

Various unexpected changes of tax systems may cause major risks for the economic development and social sphere, especially in the situation of a need to look for maximization of tax revenue. These are currently observed and it seems that through the growth in tax burdens it will be possible to balance cash income streams and expenses implemented under budgetary economy at the state and self-government units level. Difficulties in incomes and expenses balancing become the first symptom of irregularities in the economy. In the long period it must lead to broader negative phenomena. They may appear as growth in budgetary deficit and problems related to the excessive debt and difficulties with the indebtedness service can appear (Carlberg, 1988, pp. 45-62). As a result, a number of negative external effects may appear in the economy, potentially leading to the reduction in investment value. These effects can emerge relatively quickly in the condition of open economy. Such conditions has been appeared within the structures of the European Union and also in economic organizations having much broader, even global dimension.

The concept of optimal taxation with respect to selected public and private sector taxes is in essence a proposal to make more efficient use of the resources available and to reduce excessive fiscal burden. It is also fully compatible with the concept of development economics, where in certain situations entrepreneurs and individuals are not able to accept high tax rates level created in a systemic form. According to the concept of development economics, it is advisable to look for alternative solutions that would allow higher efficiency of the allocation of resources while reducing tax burdens. It is also important that, according to the concept of development economics, it is possible to create new stable economic conditions.

Periodically we can accept excessive tax burdens which would be justified solely by the need to implement development investments in the public sphere over a relatively short period of time. This complex problem could be solved through determination of such tax burdens which, on the one hand, would be accepted by the society and economy and on the other hand, would satisfy demands related to financing of development projects. It would be possible to seek an optimum tax level. Taking into consideration funds disbursed for the implementation of public investments, it would be necessary to determine methods and to monitor the quality and the scope of services and goods delivered to the society under the consensus in the sphere of tax burdens. This solution should be referred to the tasks assigned to the central administration and to the tasks assigned to the units at the regional and local level.

The complexity of financing of public tasks in the market economy conditions needs the best solutions possible in the tax sphere to be implemented. It is a continuous process, which should be cyclically verified towards long term efficacy of used solutions. The optimum taxation, considering many years of experience, is a relatively new phenomenon. The mismatch of the tax rates to the possibilities of economy and society and, at the same time, fast growth in the public sphere expenditures are becoming the reason why problems of macroeconomic character are observed. It is reflected in the excessive budget deficit appearing not only in poorly developed countries, but also in the largest economies of the world (Messere, de Kam, Heady, 2003, pp. 47-51). Looking for the optimum taxation has become a new direction in research, along with seeking fair goods redistribution. The problem of a mismatch between the tax system and the effects related to it was emphasized by N. G. Mankiw, M. Ch. Weinzierl and D. F. Yagan, with a conclusion that a well-built tax system should guarantee maximization of social welfare. Social welfare would be achieved both within personal income, enterprises’ income, but also under the provision of public services provided by entities and organisational units in the public sector, namely under income originating from taxes. This issue seems logical, covering even elements of choosing the best solutions possible (Mankiw, Weinzierl, Yagan, 2009, pp. 147-174, Heady, 1993, pp. 17-41).

Tax rates in the market economy still remain an important sphere of activity of private entities, and of various entities and organizational units of public sector. Tax rates and tax revenues are instruments of development of effective demand on the market, as well as an important instrument of the financing of projects in the framework of various forms of public intervention. It is believed that these financial flows are also by now an important field of activity in the conditions of the social market economy in Poland.
Empirical study on budgetary economy of self-government units

In practice, we can observe various conditions concerning construction of the tax system, ensuring fulfilment of social welfare maximization. Growth in the wealth level must be developed by new investments, both in the sector of enterprises of the real sphere as well as in the sphere of entities and organizational units in the public sector. New investments require to ensure within the tax system sufficient funds for their financing.

Investments in the public sector are usually realized in the long-term perspective. Such investments always are connected with the removal of development barriers in changing social and economic conditions or increasing of public services quality. Especially important role is played by self-government units as the entities responsible for the creation of conditions and supporting development at the local and regional level (Ruskowski, Salachna, 2007, pp. 98-102). Thus the scope of responsibility assigned to local government units and their possibility of supporting development processes is considerable. However, it is limited and focuses on cases of public nature, excluding the possibilities to conduct business activities in various forms typical for enterprises operating on the open market. The provision of public services is also important for the support of widely understood economic processes and for the creation of good business conditions for entities belonging to the private sector.

The activity of self-government units must be focused also on correctly conducted long-term budget management and on implementation of recognized and hierarchized development objectives. It needs to provide sources of financing of the goals in the current perspective, as well as in the strategic perspective. In case of self-government units, the scale of the problem is extensive and includes a number of issues related to new investment projects (Siuda, 2009, pp. 136-144, Jarosinski, Opalka, 2014, pp. 13-28).

At this point, it is worth noticing the changes in budget income situation of local government units, with changes in the situation of population’s income which occurred in Poland in the years 2004-2015. The comparison aims at analysing changes which took place in Poland in the market economy conditions it personal income per capita as well as in budgetary income of communes, districts and local provinces. Empirical data gathered in Table 1 show that personal income per capita, in the years 2004-2015, grew by 114.1%. In this period, budgetary income of communes per capita grew by 117.5%, budgetary incomes of districts per capita grew by 87.8%, while budgetary incomes of provinces per capita grew by 144.4%. The collected data indicate that in the period of 2004-2015 personal income of the population per capita had lower growth rate than incomes of self-government units per capita.

Table 1: Budgetary revenues of gminas, poviat and regions per capita vs. personal income in Poland in the years 2004-2015 in thous. PLN

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<tbody>
<tr>
<td>Personal income per capita</td>
<td>8.88</td>
<td>9.12</td>
<td>9.96</td>
<td>11.16</td>
<td>12.6</td>
<td>13.32</td>
<td>14.28</td>
<td>14.76</td>
<td>15.36</td>
<td>15.6</td>
<td>16.08</td>
<td>16.68</td>
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<tr>
<td>Budgetary revenues of gminas per capita</td>
<td>1.89</td>
<td>2.15</td>
<td>2.43</td>
<td>2.73</td>
<td>2.93</td>
<td>3.02</td>
<td>3.28</td>
<td>3.44</td>
<td>3.62</td>
<td>3.75</td>
<td>3.97</td>
<td>4.11</td>
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<tr>
<td>Budgetary revenues of poviat per capita</td>
<td>0.49</td>
<td>0.54</td>
<td>0.59</td>
<td>0.64</td>
<td>0.71</td>
<td>0.79</td>
<td>0.87</td>
<td>0.91</td>
<td>0.87</td>
<td>0.89</td>
<td>0.92</td>
<td>0.92</td>
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<tr>
<td>Budgetary revenues of regions per capita</td>
<td>0.18</td>
<td>0.19</td>
<td>0.25</td>
<td>0.30</td>
<td>0.33</td>
<td>0.51</td>
<td>0.37</td>
<td>0.39</td>
<td>0.40</td>
<td>0.42</td>
<td>0.46</td>
<td>0.44</td>
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<tr>
<td>Total budgetary revenues of self-government units per capita</td>
<td>2.56</td>
<td>2.88</td>
<td>3.27</td>
<td>3.66</td>
<td>3.98</td>
<td>4.32</td>
<td>4.51</td>
<td>4.74</td>
<td>4.89</td>
<td>5.06</td>
<td>5.35</td>
<td>5.48</td>
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It should be noted that, apart from the growth rate of budgetary income in the abovementioned groups, we have noticed significant differences in sizes of these incomes. In 2004 personal income of population per capita was higher by 369.8% than the budgetary income of communes per capita. In 2015 the difference between compared income categories was lower and amounted to 305.8%. These numbers indicate that in the market economy conditions in Poland, the income...
situation of natural persons improved and in comparison with budgetary incomes of communes per capita, was significant high. Therefore it should be remembered that, according to the tax system adopted in Poland, income redistribution was also oriented towards achieving objectives and tasks of the local government units as a part of the public sector. A slightly different situation was observed when it comes to budgetary income of districts and provinces per capita. A graphic illustration of changes in the level of personal income per capita comparing to total budgetary revenues of gminas per capita and comparing to total budgetary revenues of all levels of self-government units per capita are presented in Figure 2 and Figure 3.

Figure 2: Personal income and total budgetary revenues of gminas per capita in Poland in the years 2004-2015 in thous. PLN

![Figure 2](image)

Source: own based on data in Table 1.

Throughout the whole discussed period, the level of budgetary income of districts per capita as well as the level of budgetary income of provinces per capita was lower than the level of personal income per capita. Over that time, we observed the growth in differences in the level of income. When it comes to the income situation of local government units per capita in comparison with the income situation of inhabitants, in the case of local government units (gminas and powiats), the discussed income category grew by 113.3% with the comparison to personal income growth per capita (87.8%).

Under conditions of the market economy, we can expect that the income situation of population would undergo faster improvement than the income situation of self-government units belonging to the public finance sector. The collected data show, that we were dealing with a reverse trend in the past, the incomes of self-government units grew faster. It resulted from the influence of two groups of factors. The first one covered applicable principles of gathering budgetary incomes of the state as well as the redistribution system of these resources. The second covered low level of social and technical infrastructure development in Poland and the related development needs. The only way to reduce the differences and mitigate disproportions were new investments undertaken during the examined period. Therefore, it can be assumed that the tax system was logically subordinated to higher investment needs which occurred in the public finance sector.

Figure 3: Personal income and budgetary revenues of self-government units per capita in Poland in the years 2004-2015 in thous. PLN

![Figure 3](image)
Source: own based on data in Table 1.

The collected data prove that we have been dealing with clear fiscal orientation of the state which should have temporary character. It should be stated that the removal of the discussed development barriers will create real grounds to mitigate tax burdens and will open a way towards the construction of an optimum tax system, where proportions of income redistribution will be slightly different and more inclined towards personal needs of inhabitants. The current situation may be considered as a temporary condition which should evolve towards mitigation of tax burdens and a gradual withdrawal from the maximization of budgetary income at the level of state and at the level of self-government units.

It is necessary to take into consideration the economic and social preferences related to the elimination of the abovementioned development barriers which assumed the form of low level and low quality of social and technical infrastructure. The change in this condition may cause permanent, long term and positive effects to reduce the demand for investment capital in the public sector. The obtained effects may contribute to the maintenance of development impulses in the long term and create new possibilities of income redistribution. Therefore, it can be assumed that with regard to budget economy of local government units, significant changes may occur, consisting in the reversal of the trend observed in the years 2004-2015, involving maximization of budgetary income for the reduction of tax burdens and seeking an optimum tax system.

We can assume that in the future the budgetary incomes of self-government units may be stabilized, slightly grow or, in some cases, even reduce. Such scenarios may be the result of the evolution of the scope of tasks and changes in the needs in the area of public services. It also may be the result of the stabilization of budget economy, improved effectiveness of resource allocation and increased management quality, both in the current and the strategic perspective. Therefore, we can make a hypothetic assumption that the target model of optimum taxation in Poland will create conditions to change the tax revenue redistribution. As a part of the study a simulation was conducted consisting in verification of the existing system of generating revenue of budgets of self-government units. As a result, hypothetic cash flows were adopted which, upon aggregation, gave final results of budgetary income which may be achieved after 2019. Expected changes in relation to the situation observed in the period of 2004-2015 are presented in Figure 4.

Figure 4: Personal income and total budgetary revenues of self-government units per capita projection in Poland in the years 2004-2024. Changes in the level of budget revenues to the optimization of the tax system in thous. PLN
The prospective analysis related to personal income per capita in Poland as well as total budgetary income of self-government units shows that we can expect the improvement in the income situation of population per capita in the period until 2024. It will take place with the simultaneous reduction in budgetary income of self-government units per capita. We should remember that the above considerations are of hypothetical and general character. Expected changes in the level of income in Poland can appear only after the planned reform of the tax system. Such changes require the implementation of a complex legislative process, assuming that that tax burden optimization will be approved by various business, social and political environments.

Conclusions

In the examined period, financing of public tasks in Poland was set in different conditions and consisted in various social and economic changes. Firstly, it is necessary to point that in the period of 2004-2015 broad investment program in public finance sector was implemented. For this purpose many sources of financing of new investment were implemented. New financing sources became available as a result of the system transformation in Poland, as well as a result integration processes in Europe, in which Poland also took part. Except own sources, which usually constitute the main basis for financing of investments, significant external funds of refundable and non-refundable character were introduced to the public sector. Such conditions appeared especially after 2004 when Poland accessed European Union. This fact made it possible to activate stable support mechanism for financing of investments in the public sector in the period of 2004-2015. At that time it was possible to increase quantitative and qualitative effects of new investments. It should be pointed out that good financial situation will not be permanent in the future prospect. Better social and economic situation in Poland will lead to reducing of the financial support of the EU. It is necessary to remember that in the long term new development investments will have to be financed only on the basis of own budgetary sources or on the basis of the financial means existing on the open financial market.

It is necessary to consider the need to depart from the maximization of budgetary incomes in self-government units resulting from possible future limitation of the demand for financial resources in the public sector. This phenomenon may be associated with the more effective use of own resources, changes in tax system as well as moving towards the limitation of budgetary income as a result of planned tax reforms. There is no doubt that in the long term according to concept of development economics, the countries covered by the European Union's support program, including Poland, will have to work out and consolidate their own development path in the form of sustainable development. Taking into account a wider context of future development, introduction of such changes may be difficult. These changes will depend on a number of different factors of an economic, political, organizational and legal nature and will depend also on many social determinants. It is also a question of examining the changes of tax system which would allow optimization of a tax system and indicate actions aimed at improving effective use of public resources. The presented scenarios of a possible course of phenomena in the future refer to possibilities of stabilization or even reduction in the demand for budgetary resources under conditions when the existing barriers and development limitations has been removed.
References


