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Conditions and Possibilities of Long-Term Public Debt Management

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ABSTRACT: The socio-economic situation of many countries in a market economy environment still faces new barriers that significantly reduce economic potential and productivity, and negatively affect future development opportunities at local and national level. At present, it is still not possible to eliminate a number of factors that lead to the cyclical development of the market economy, as evidenced by the occurring crisis phenomena, a decline in the expected growth rate of gross domestic product, stagnation and even reduction of individual consumption and many other consequences. Public debt has become a serious problem in highly developed countries, and its size now raises a number of doubts about further sustainable development. From the point of view of achieving the strategic development goals, the existence of public debt may prove to be a particularly dangerous factor. The purpose of this paper is to draw attention to the real size of public debt and its impact on the economy in selected countries of the world, as well as to indicate directions for assessing the needs of effective public debt management in the long term. This problem results from the fact that the current volume of public debt in many countries of the world means that this debt cannot be significantly reduced in the short or medium term. As a result, it is necessary to adopt a long time horizon for public debt analysis and to adopt strategic management methods to reduce the negative impact of public debt on socio-economic development.

KEYWORDS: public debt, strategic management, economic development

Introduction

Socio-economic changes taking place in the world clearly show that we are dealing with launching various mechanisms to support development on a global scale, on a broader scale within international organizations, as well as in other territorial and spatial dimensions at the level of countries, regions and on the local level. These changes make it possible to state that, although with varying degrees of intensity, a process of profound economic change has begun and, as a consequence, the multiplier economic effects are revealed. However, it should be remembered that the world is not free from disparities and some of these effects may occur with varying degrees of intensity, or may not occur at all.

In this regard, a special function is assigned to public administration entities, as well as public enterprises, entities and organizational units financed from funds that are part of public resources. Therefore, it is impossible to ignore the issue of broadly defined public tasks, and thus also the process of providing public services. This approach inclines to pay attention to the basic categories related to the system of organization of the state and society.

On the basis of many years of theoretical and empirical research, as well as on the basis of systematic observation of processes and changes occurring in the world, an important regularity was noticed, according to which an indispensable condition for proper stimulation of socio-economic development is the permanent presence of the public sector in a market economy. The public sector has carried out and still has to fulfill a number of important functions in the economy. Various types of enterprises, entities and organizational units of the public sector have important supporting functions to fulfill both in relation to the economy and in relation to society.

When formulating research assumptions and during the preparation of the paper, it was necessary to recognize the conditions for the functioning of entities and organizational units of the public sector in the situation of the progressing complexity of problems that arise in the conditions of an open global economy. The aim of this paper is to draw attention to the problems related to management in the public sector, including in particular the management of public liabilities in the form of an excessive budget deficit and public debt. The volume of public debt and its impact on the economy in selected countries of the world makes us pay more attention to the analysis and assessment of the possibility of an effective public debt management in the long run. Therefore, it seems necessary to adopt the long-term horizon of public debt analysis because of the consequences that may be particularly negative for the economy and structures of the state. In this sense, it seems necessary to adopt strategic management methods to reduce the negative impact of public debt on the future socio-economic development.

Theoretical background

In research on forecasting and simulating future social and economic phenomena, particular attention should be paid to strategic management instruments, long-term investment programs or long-term asset management, which are the subject of activities undertaken by public sector entities. In the above approach, strategic management is practically associated with the continuous activation of decision-making processes, whose future effects are to directly contribute to improving the conditions and quality of life of the inhabitants of the territorial unit (Jarosiński, Grzymała, Opałka and Maśloch 2015, 33–39). It should be noted that the scope of competences and mandatory tasks of public sector entities is clearly defined in the various documents of applicable law. Thus, it can be reflected in many areas of public administration and its related entities' activities, especially in the scope of financing current operations and financing of investment projects. This dimension of activity of public sector entities is an important determinant that shapes future development conditions in the short and long term (McCartney 2015, 23-42).

Long run development is a complex process due to numerous difficulties in planning and implementation of tasks, mainly in the form of investments, in conditions of uncertainty of future phenomena. This kind of complexity results from the need to define the scope of future public tasks that can be successively defined and implemented as investment projects and reveals itself in the need to establish a long-term financing path for future investments. It is the time dimension that makes forecasting future phenomena a methodological problem and may become a development barrier in the financial dimension (Wang 2006, 21-32; Opałka and Jarosiński 2019, 18-19). It is worth recalling that the longer the forecasting period or investment implementation we are dealing with, the error of such forecasts in the prospective analysis is becoming greater (Zeliaś 1997, 50-68). We can indicate here that even a change regarding only the extension of the investment's time horizon, as already mentioned, may already generate large changes in the factors determining the success of a given investment project.

Of course, we are dealing with important short-term factors shaping development processes, which are usually considered in terms of operational management. They come from the sphere of operational management and refer to existing resources. We are also dealing with a group of factors that affect development processes in the long term. Higher risk, when it comes to the accuracy of forecasts over the course of a multiannual basis, may be associated with unpredictable or poorly identifiable phenomena that we do not yet know at the start of the project. This uncertainty regarding the impact of various factors in future periods means that strategic management of investment projects in the public sector is becoming a significant factor in achieving socio-economic final effects. Ferlie and Ongaro have already pointed out the importance of strategic management in the public sector. The authors emphasized the recognition of public sector problems in the division of three important levels of management: strategic, tactical and operational. (Ferlie and Ongaro 2015, 166-180).

Strategic planning is also a method that allows to take into account the broader context of socio-economic phenomena that can constitute the environment of projects financed in the future. Therefore, by attempting to specify individual factors and their impact on the course of economic phenomena in the future, we can reduce investment risk and financial risk and thus contribute to reducing public debt in the future through better management of financial resources. As part of strategic management, efforts are made to develop decision-making situations that can then create secure conditions for making decisions of varying levels of generality. Therefore, elements of strategic management take a very important place in the structure of multi-level management in the public sector (Jarosiński and Opałka 2016, 78-81).

Properly prepared and implemented strategic management process allows to reduce significantly uncertainty appearing in projects and ensures better ordering and rationalization of decision-making processes. In the long term, the management problem is so complex that it requires consideration of many threads already at the stage of planning an investment or group of projects. Therefore, the bundle of organizational goals, the organization's vision and mission, strategic goals and related main goals as well as implementation tasks should be taken into consideration. A separate category that is closely related to the implementation of long-term investment projects is the problem of financing these projects and the often observed phenomenon of public debt on the side of the budgets of public entities responsible for investments (González Sánchez, and de los Ríos Sastre 2012, 133-144). Therefore, public debt management is becoming a key problem around which all important financial factors that determine sustainable development are focused (Wolswijk and de Haan, 2005, 1-21).

The budget deficit and the excessive public debt associated with it are considered a negative phenomenon, although they are often intended to stimulate investment in the economy of a country that benefits from the possibility of financing a wider range of public expenditure (Barro 1979, 940-971, Eberhardt and Presbitero 2015, 45-58). A disadvantageous phenomenon in some countries that use loan instruments is that the funds obtained are transferred to projects that do not increase the competitiveness of the economy, instead of being invested in research and development of new technologies, which would allow raising the level of competitiveness of the given economy. The decrease in the competitiveness of a given country is not conducive to the perspective of repayment of loans taken. In the longer term, new threats to public finances may occur. Strategically, they can be a serious problem for the proper management of the liabilities that make up this debt. An excessive budget deficit and public debt associated with this deficit can lead to a worsening of the overall socio-economic situation. First of all, it is about increasing debt servicing costs, reducing budget revenues and difficulties in financing new enterprises in the future (Missale 2000, 58-91). Public debt management of public sector entities takes place in complex financial conditions. This is due to the overlap of many public liabilities, identified at the level of operational management and obligations arising from already existing, previously incurred public debt. Budget funds must therefore be divided into financing of current tasks, which are often mandatory, as well as repayment of principal instalments and interest related to repayment of liabilities from past periods (Jarosiński 2019, 109-113).

The budget deficit and public debt are often defined in different ways, although the problem applies in principle to the same phenomena (Irwin 2015, 711-732). In view of the growing level of public finance systems in many countries around the world, the instruments to control public debt and strengthen the ability to service liabilities in the short and long term are gaining importance. At this point, it is worth recalling the method of recognizing public debt management developed by the World Bank and the International Monetary Fund (IMF), where it is pointed out that public debt management is primarily aimed at developing the public debt portfolio in a targeted and effective way. The role of the public debt management strategy is to determine the expected acceptable scale of using the loan funds at the lowest possible costs and maintaining a safe level of risk (International Monetary Fund 2001, 10-37). The main risk factors for the public debt portfolio result from the structure of unpaid debt, including refinancing risk, interest rate risk and currency risk. An important element of this type of strategy are also goals and assumptions regarding the development and maintenance of an effective government securities market. A very important element of the strategy is the adoption and application of a comprehensive set of public debt management performance indicators. For example, the World Bank has developed the Debt Management Performance Assessment (DeMPA) methodology in order to assist and help countries in improving their public debt management. That methodology enables monitoring of key values in categories such as: management and development of the strategy (e.g. legal framework), coordination with macroeconomic policies, including fiscal or monetary policy , researching the sources of borrowing (domestic or external), the use of cash flow forecasting instruments and cash balance management as well as recording debt levels along with adjusting operational risk management procedures in terms of ensuring safety (World Bank 2016, 1-75).

Thus, it can be seen that the public debt management strategy helps to make safe decisions on taking loans based on the results of cost-risk analysis, while providing an important organizational and legal basis that strengthens the position, but also the responsibility of organizational units and persons entrusted with operational public debt management. Moreover, by building a multilateral agreement, the strategy additionally supports development processes on the domestic debt market, being a reliable source of information for market participants on the long-term objectives of the central government defining the pursued public debt policy in the state (COMCEC Coordination Office 2017, 13-14). A well-prepared and implemented strategy provides a platform for coordination of activities and intergovernmental communication, as well as communication between state administration structures and creditors, which contributes to reducing uncertainty and eliminating the risk of public debt.

Results of empirical research and discussions

The empirical material collected during research for presentation in the submitted paper covers a wide collection of information on the overall situation of height formation and the management of existing public debt in the world. Extensive empirical data constituted a methodological problem, due to emerging difficulties with comprehensive presentation of results in countries of the world and various directions of strategic public debt management. Therefore, it was decided to present empirical data for the years 2008-2019 only for selected countries of the world, with the main focus being on the Member States of the European Union.

The research shows that in 2008-2019 the situation of many countries in the world in terms of the size of public debt has systematically deteriorated. It is characteristic that a relatively high volume of public debt was observed in highly developed countries of the world. For example, in United Kingdom, public debt has almost tripled, from 824.1 to 2,223.5 EUR bln (an increase of 169.8%), at the same time in France public debt increased by 73.7%, in Italy by 38.6%, in the United States amounted to 172.1% in the discussed period, in Portugal by 84.5% or in Spain 169.8%. In many other countries, there has also been an increase in public debt, with increases also in relatively small-scale countries, as well as in large economies, with a high population. Table 1 presents figures describing the situation regarding changes in the volume of public debt in selected countries of the world. It should be emphasized that the increase in public debt has become a widespread phenomenon, this is a general regularity, where it is difficult to find exceptions to this rule, although of course it is possible to indicate the countries where public debt occurred, but its volume decreased during the period considered.

Table 1. General government consolidated gross debt in EUR bln.

Specification	**2008**	**2010**	**2012**	**2014**	**2016**	**2018**	**2019**
European Union	7 199.2	8 855.5	9 845.2	10 440.1	10 766.9	10 969.7	11 060.2
Euro area	6 700.8	8 199.1	9 114.9	9 674.6	9 970.0	10 161.1	10 250.4
Belgium	327.7	364.1	404.8	431.2	451.3	459.1	467.2
Bulgaria	4.9	5.9	7.0	11.6	14.2	12.5	12.4
Czechia	42.3	59.1	71.8	65.6	65.0	67.4	68.4
Germany	1 668.5	2 112.6	2 227.4	2 215.2	2 169.0	2 068.6	2 053.0
Ireland	79.6	144.2	210.0	203.4	200.6	205.9	204.0
Greece	264.8	330.6	305.1	319.6	315.0	334.7	331.1
Spain	440.6	649.2	889.9	1 039.4	1 104.6	1 173.3	1 188.9
France	1 370.3	1 701.1	1 892.5	2 039.9	2 188.5	2 314.9	2 380.1
Italy	1 738.5	1 920.7	2 054.8	2 203.0	2 285.6	2 380.9	2 409.8
Cyprus	8.7	11.0	15.6	19.0	19.5	21.3	21.0
Netherlands	353.9	378.7	432.4	455.6	438.4	405.5	394.6
Austria	201.8	244.7	261.0	280.0	296.3	285.3	280.4
Poland	144.7	194.5	216.2	204.5	229.0	240.8	245.5
Portugal	135.5	180.0	217.2	230.1	245.2	249.3	250.0
Romania	16.6	36.7	49.4	58.5	62.9	70.9	78.1
Finland	63.3	88.2	107.8	123.8	137.4	139.3	142.5
Sweden	117.7	151.9	163.6	191.3	195.3	183.0	169.0
United Kingdom	824.1	1 387.6	1 745.9	2 060.4	2 022.8	2 054.9	2 223.5
Turkey	176.6	224.7	218.1	207.7	199.2	187.2	212.2
Norway	126.5	142.1	121.5	99.5	126.9	139.7	145.5
Japan	7 571.5	9 572.0	9 977.0	8 353.0	10 265.2	10 309.1	10 744.2
United States	7 787.8	10 703.4	12 670.9	15 072.8	18 965.2	19 536.3	21 191.4

Source: own study on the base of data of European Commission, Economic and Financial Affairs (AMECO), https://ec.europa.eu/economy_finance/ameco/user/serie/ResultSerie.cfm

A quite characteristic phenomenon is the situation in the Member States of the European Union. In the years 2008-2019, public debt within the Union increased by 53.6%, and in the euro area this growth stood at 53.0%. Considering the situation prevailing in the euro area countries as compared to all EU Member States, public debt in the euro area accounted for 92.7% of the European Union's public debt.

A fairly positive situation as regards changes in the level of public debt took place in the countries joining this organization in 2004 and later. You can point here among others to Bulgaria, Czechia and Poland. Due to the relatively low level of socio-economic development of the aforementioned group of countries, the volume of public debt was relatively low compared to the situation of highly developed Western European countries. However, while an increase in the volume of public debt in countries with a lower level of development can be considered a normal phenomenon due to the aspirations of the public authorities of these countries to relatively quickly eliminate the disproportions in the level of development and to undertake costly and capital-intensive public investments, however, in the case of highly developed countries, the level of public debt was caused by slightly different factors.

Thus, we have here confirmation of the generally observed principle that public debt in individual countries of the world has its own autonomous causes and therefore should be analyzed from the point of view of strategic management of this debt, taking into account the internal specificity of these countries. Figures 1 and 2 present a graphic illustration of changes in the situation regarding general government expenditure in total and broken down into current expenditure and expenditure related to current debt servicing in 2008 and 2019.

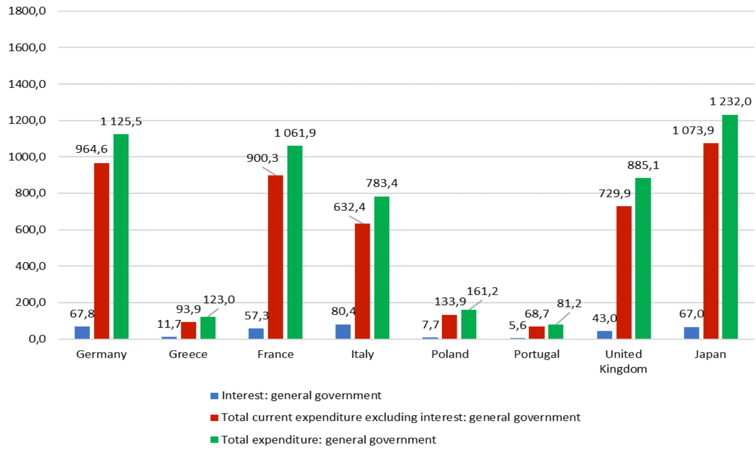

Figure 1. Interest of general government, Total current expenditure of general government excluding interest and Total expenditure of general government in 2008 in EUR bln.

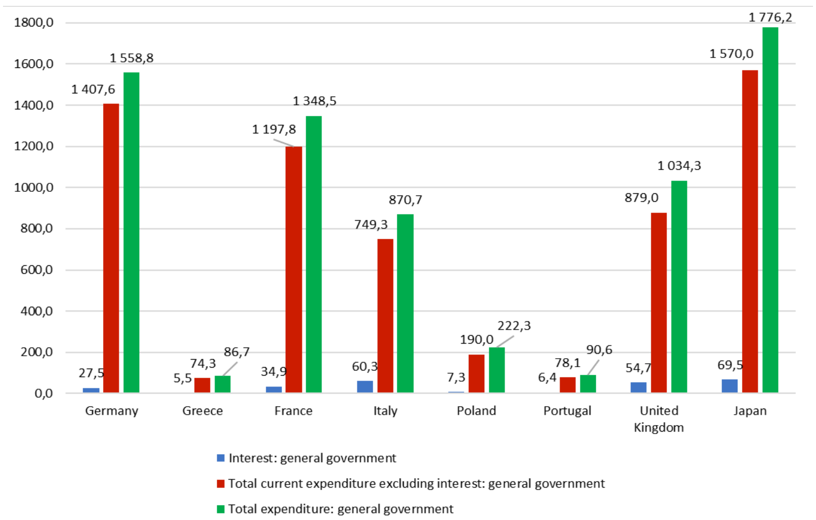

Figure 2. Interest of general government, Total current expenditure of general government excluding interest and Total expenditure of general government in 2019 in EUR bln

In the years 2008-2019, current expenditure increased significantly in the group of presented countries, while debt service expenditure was at a relatively stable level. Due to extensive empirical material, it was not possible to provide a broader graphic illustration, but the data presented in Table 1 and Table 2 as well as the graphic illustration for eight countries clearly shows that public debt service is a recurring item in current expenditure. Table 1 and Figure 1 do not show expenditure related to the repayment of principal installments, but are limited to presenting data related to the payment of interest. Repayment of principal installments is always an additional burden on current budgets and can significantly reduce the possibilities of financing tasks.

The study attempted to assess the scale of public debt service in relation to GDP. The study took into account the same group of countries that was selected for the presentation of results in Table 1. In the period covered by the study, the situation regarding the share of debt service in GDP significantly differed between individual countries, but also significantly differentiation was observed in the scope of changes in the internal situation of countries in subsequent years of the analyzed period.

Table 2. Interest of general government as % of GDP

Specification	2008	2010	2012	2014	2016	2018	2019
European Union	2.79	2.66	2.89	2.46	2.01	1.73	1.54
Euro area	2.95	2.78	3.04	2.60	2.12	1.84	1.63
Belgium	4.03	3.56	3.49	3.20	2.68	2.09	1.97
Bulgaria	0.84	0.70	0.80	0.86	0.88	0.66	0.56
Czechia	0.99	1.31	1.42	1.30	0.92	0.75	0.72
Germany	2.66	2.46	2.31	1.61	1.21	0.95	0.80
Ireland	1.28	2.83	4.17	3.90	2.31	1.64	1.28
Greece	4.82	6.04	5.27	3.96	3.18	3.29	2.94
Spain	1.58	1.89	3.03	3.43	2.75	2.44	2.28
France	2.88	2.53	2.62	2.16	1.84	1.71	1.44
Italy	4.91	4.28	5.16	4.58	3.91	3.66	3.37
Cyprus	2.63	1.96	3.14	3.20	2.67	2.42	2.51
Netherlands	2.04	1.78	1.68	1.47	1.15	0.89	0.77
Austria	2.95	2.89	2.71	2.44	2.08	1.63	1.42
Poland	2.11	2.49	2.66	1.95	1.71	1.44	1.38
Portugal	3.12	2.94	4.87	4.88	4.15	3.38	3.00
Romania	0.66	1.51	1.75	1.65	1.50	1.14	1.23
Finland	1.40	1.33	1.43	1.23	1.10	0.92	0.86
Sweden	1.62	1.09	0.93	0.70	0.54	0.50	0.38
United Kingdom	2.16	2.84	2.83	2.63	2.41	2.45	2.17
Turkey	-	3.85	2.88	2.23	1.99	2.97	3.53
Norway	2.01	1.07	0.77	0.71	0.56	0.49	0.51
Japan	1.96	1.92	2.00	1.93	1.78	1.58	1.53
United States	3.95	4.24	4.26	3.93	3.86	3.91	3.90

Source: own study on the base of data of European Commission, Economic and Financial Affairs (AMECO), https://ec.europa.eu/economy_finance/ameco/user/serie/ResultSerie.cfm

It is worth noting that in the countries of the European Union it was possible to lower the discussed index in 2019 compared to 2008 by 44.8%, while in the euro area by 44.7%. The worst situation in this respect in terms of the European Union took place in Italy, a relatively high share of debt service in relation to GDP was recorded in 2008, in subsequent years and in 2019, 3.37%. In 2019, a relatively negative situation also occurred in Portugal, Greece, Spain and France, but it was significantly better than before, e.g. in 2010-2014. In the group presented in Table 2, the worst indicator level was recorded in 2019 in the USA, which was 3.90%. It is worth noting that in the entire period 2008-2019 the share of debt service in relation to GDP was relatively high. Graphic illustration of this phenomenon for selected countries included in Table 2 is presented in Figure 3.

In 2010, the worst situation among the group of countries surveyed was observed in Greece, but in subsequent years, due to the adoption of a restrictive anti-crisis policy in Greece, the value of this indicator was relatively quickly reduced. The collected data clearly show that both the budget deficit and the existing public debt are now an immanent feature of public sector management. They are the result of forcing public expenditure over the possibilities of collecting funds for public purposes. This problem is already so complex that governments and international organizations are taking steps towards creating general principles that would effectively manage public debt. Public debt management strategies are thus being developed as a response to this problem in individual countries of the world, they are also the subject of research and recommendations by the IMF and the World Bank. In accordance with the guidelines of national debt management strategies or strategies formulated by international organizations, public finance should strive for more balanced achievement of socio-economic results as well as public objectives.

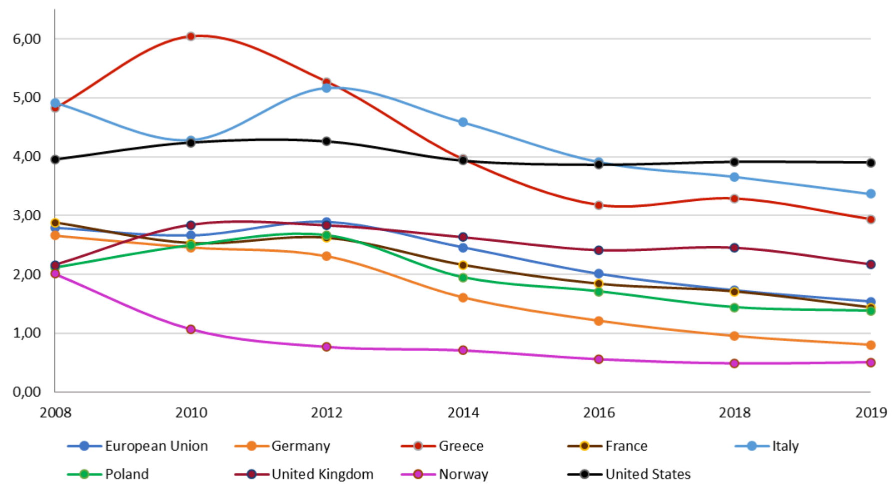

Figure 3. Interest of general government as % of GDP

The World Bank research conducted in 2013 shows that among 117 surveyed countries, 60% of them prepared and approved an official debt management strategy (Cabral 2015, 7-17). These countries clearly indicated in their strategies the achievement of the strategic goals they set to limit the impact of excessive public debt. These objectives were also directed at various forms of public debt management by paying attention to budget management. In general, strategic documents are designed to reduce financial risk by ensuring that the government can meet its commitments on time. Debt management strategies must therefore be linked to other public policies that have a wider reach that goes beyond the public sector. These strategies indicate the need to create an institutional unit to deal with public debt management. The experience of many countries in the world allows us to assess that such a solution is a move in the right direction, because it is difficult from the level of one country with its own socio-economic specificity to manage public debt in conditions of limited possibilities

(COMCEC Coordination Office 2017, 19-37). Therefore, it is easier to take a slightly broader action, coordinated even by international organizations, which would give the opportunity to use good practices, use various forms of consultation, financial advice and give the opportunity to cooperate in a broader scope than would apply to only one country.

Conclusions

Public resource management is becoming an increasingly difficult and more complex task, especially for the managers responsible for dealing that problem. These difficulties are caused by various factors that comprehensively affect the public sphere. The most important problems are related to raising funds for public tasks and balancing identified social needs with the possibilities of financing them.

The effective management of public resources plays an increasingly important role at the stage of collecting budget funds and during the financing of tasks. Public sector management is clearly divided into two groups of problems. First of all, we are dealing with short-term management of an operational nature, which covers the general scope of current operations, and secondly, we are dealing with an important scope of activities in the long-term perspective. In this case, we are therefore dealing with strategic management.

Solving problems related to the budget deficit and public debt has become an important scope of management in the public sector. Effective public debt management requires the use of effective tools to guarantee sustainable financing of public tasks in the long term. One of such tools should be the widespread use of strategic management instruments. This postulate is fully consistent with the national guidelines of many countries and the guidelines of international organizations. These solutions should lead to an improvement in the efficiency of public resource management, increased financial security and optimization of public effects.

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