

UDC 336.7

JEL: E62 , G18, H53, H61

**IMPACT OF PUBLIC EXPENDITURES ON THE DYNAMICS OF ECONOMIC DEVELOPMENT OF THE REPUBLIC OF BULGARIA****Milen Mitkov**

PhD in Economics, Assistant Professor,  
Department of Aviation Management,  
Bulgarian Air Force Academy,  
Dolna Mitropolia, Bulgaria  
E-mail: milen80pl@abv.bg  
orcid.org/0000-0001-7832-4038

**Introduction.** Regardless of the degree of government intervention in the economy, government spending is huge and often dominant in fiscal policy. Given the fact that costs are the main tool for fulfilling the economic and social functions of the state, adequate measures are needed to maximize their provision. The main goal of economic policy in Bulgaria is to ensure high economic growth in order to reach the average levels of Gross Domestic Product (GDP) per capita in the EU, therefore it is requires to identify all instruments that can affect the level of aggregate production.

**Aim and tasks.** The purpose of this study is to analyze the main factors influencing the effectiveness of government spending on the basis of in-depth analysis and guidance on the implementation of public spending in the Republic of Bulgaria. The following main tasks have been set for the realization of the stated goal: disclosure of the essence and content, through theoretical statements about gross domestic product and government spending; carrying out an analysis of gross domestic product for the period 2010-2020; carrying out an analysis of government expenditures for the period 2010-2020; establishing a link between development of gross domestic product and government spending for the period 2010-2020.

**Results.** Public spending has the potential to play the role of a kind of public lever for reducing the risks of poverty and social exclusion only when it is focused on the real causes of the problem and reaches the ultimate beneficiaries of the system. In 2020, compared to 2010, the gross domestic product increased by a little over BGN 46 million or by 63.8%. The effect of the crisis was reflected in the main macroeconomic aggregates, with a negative rate of -0.4 compared to 2019. In 2020, compared to 2010, government spending increased by just over BGN 20 million or 76.4%.

**Conclusions.** During the considered period 2010-2020, there is a continuous economic growth both compared to the base year and compared to each subsequent year. For the entire period of the study, the pace of development of government expenditures outpaces the pace of GDP development. For the period 2010-2020 consolidated expenditures form a real share of redistribution through public finances in the ratio of about 35-40 percent of gross domestic product.

**Keywords:** Gross Domestic Product, public finances, fiscal policy.

**Received:** December 28, 2021**Accepted:** February 16, 2022

DOI:10.31520/2616-7107/2022.6.1-3

## 1. Introduction.

The state budget covers the revenues and expenditures of the state. The current characteristics of the budget and its structure depend on the economic program of the government, i.e. the budget can be defined as the financial basis of the government's economic program. In accordance with the principles of democratic governance, the change of cabinet implies new aspects of the economic program, and hence the need for changes in the size and structure of budget revenues and expenditures (Al-Ghazali, 2021; Baklanova, Petrova & Koval, 2020; Koval, Mikhno & Petrova, 2020; Kurmanov, Aliev, & Suleimenova, 2019).

When the revenue actually generated at the end of the budget period exceeds the expenditure incurred, the budget ends in a surplus. In cases when the amount of government expenditures is greater than the actual revenues received in the budget, the latter ends in a deficit.

The state budget is a reflection of the cash flows that are created in production. In this respect, the financial plan of government revenues and expenditures largely depends on economic activity, i.e. the movement of budget revenues and expenditures for a certain period is influenced by the existing economic situation (Marinov, 2010; Marinov, 2012; Milinov, Marinov, Radukanov, 2011; Seitzhanov et al, 2020). The latter can be defined as a specific situation or as a state in which the reproductive process takes place.

## 2. Methods for planning budget expenditure.

The state and development of the national economy shape the economic framework of the budget. It should be borne in mind that the economic framework covers both current and past economic activity of the country. Retrospective accounts are important in the second direction.

Some of the methods known in world, European and national theory and practice for planning budget expenditures are corrective (dynamic method, historical budgeting) and program and effective budgeting.

Under the corrective method, the planning of expenditure for the next budget period depends on the level of expenditure during the previous financial year (s), adjusted by a certain amount of change. In this sense, the main factor influencing future budget expenditures are past ones, i.e. those that were reached in the previous year (s). In program and effective budgeting, in general, its content is reflected in the consistent transition of the budgeting process through several stages, including: setting priorities in the field; defining the goals for the achievement of which comprehensive policies are developed, provided with the respective resources; analysis of the possibilities for realization of the goals and development of alternative programs; budgeting and on this basis funding of the most effective programs (Petrova, 2019).

In programmatic and effective budgeting, the financing of each project or program is carried out after an assessment of the relationship between benefits and costs. Therefore, the main difference between the traditional (resource) and the analyzed budgetary technique should be sought in the purpose of the expenditure incurred. In the first technique, the costs are related to the need to spend funds in order to carry out the activities of budgetary structures. In the second case, the costs are linked to the need to achieve concrete results from the spending of certain funds.

## 3. Dynamics in the development of public expenditure in Bulgaria.

The main goal of economic policy in Bulgaria is to ensure high economic growth in order to reach the average levels of Gross Domestic Product (GDP) per capita in the EU therefore it is required to identify all instruments that can affect the level of aggregate production. As is well known, the level of Gross Domestic Product can be affected by monetary or fiscal instruments. Aggregate demand depends on consumer spending, investment in new physical capital, public spending and exports. During the period 2010-2020 in Table 1, there is a continuous economic growth both compared to the base year and compared to each subsequent year. In 2020, compared to 2010, the gross domestic product increased by a little over BGN 46 million or by 63.8%.

**Table 1. Gross domestic product for the period 2010-2020.**

Years	GDP (billion BGN)	Growth rate (%)	
		Compared to 2010	Compared to the previous year
2010	73,2	x	x
2011	78,2	6,8	6,8
2012	80,9	10,5	3,4
2013	81,3	11,1	0,5
2014	82,9	13,2	0,2
2015	86,7	18,4	4,5
2016	95,4	30,3	10,1
2017	102,7	40,3	7,6
2018	109,9	50,1	7,1
2019	120,4	64,4	9,5
2020	119,9	63,8	-0,4

Source: based on National Statistical Institute (2021).

The data in Table 1 show that in 2010 the rate of development of the gross domestic product in Bulgaria grew significantly. The most important reason for this is the high growth of foreign direct investment during this period. For the period from 2010 to 2020 there is a theme of GDP growth in the range from 0.2% to 10.1%. In the period after 2010, the slow but real growth of the economy is largely due to the stable banking system, the currency board, as well as EU funds (Petrova, Radukanov, 2021).

The absorption of EU funds has a significant impact on the positive growth of the economy. The crisis caused by the global pandemic dramatically changed the dynamics of economic activity in the Bulgarian economy in 2020. The beginning of the pandemic almost immediately led to job cuts and rising unemployment. The effect of the crisis was reflected in the main macroeconomic aggregates, with a negative rate of -0.4 compared to 2019.

**Table 2. Government expenditures for the period 2010-2020.**

Years	Expenditures (billion BGN)	Growth rate (%)	
		Compared to 2010	Compared to 2010
2010	27,1	x	x
2011	27,4	1,1	1,1
2012	28,3	4,4	3,3
2013	31,1	14,7	9,8
2014	36,3	33,9	16,7
2015	36,1	33,2	-0,6
2016	33,3	22,8	-7,7
2017	35,8	32,1	7,5
2018	40,1	47,9	12,0
2019	43,5	60,5	8,4
2020	47,8	76,4	9,8

Source: based on National Statistical Institute (2021); Ministry of Finance of the Republic of Bulgaria (2021).

As an element of fiscal policy, budget expenditures should be allocated in accordance with and in the implementation of the objectives set in the fiscal ordinance on public finance management. The data in Table 2 are indicative of the nominal increase in expenditures under the consolidated fiscal program of the country for the period 2010 - 2020.

The annual rate of change varies from 1.1% in 2011 to 16.7% in 2014. It should be noted that the growth of government spending is closely dependent on the revenue accumulated in the treasury (the volume of which in the conditions of crisis usually diminishes) and the country's policy of budget deficit financing (Lupu et al., 2018). In 2020, compared to 2010, government spending increased by just over BGN 20 million or 76.4%.

The expenditures under the consolidated fiscal program (including the contribution of the Republic of Bulgaria to the general budget of the EU) for 2020 amount to BGN 47,850.4 million. For comparison, the CFP expenditures for 2019 amount to BGN 43,501 million (Communities, 2021). This is due to an increase in expenditures, primarily on financing social benefits due to the COVID-19 crisis, both in the medical field and in pension provision (monthly supplements to the pensions of all pensioners), taking into account indexation for this period, as well as other expenses in accordance with the measures taken by the government.

In most cases, the increase in spending in the current period compared to the previous one is associated with an increase in social benefits, as well as financing subsidies and other expenses to neutralize losses in all sectors associated with losses in the national economy and the consequences of measures to combat the COVID-19 pandemic .

The examination of government expenditures by functional classification provides important information about the attitude of governments to key and important for the economy areas, such as education, health, defense, public works, etc., which requires their consistent study in retrospect and perspective. Budget expenditures in these areas are also key tools for actively influencing economic growth and the business cycle.

The priorities in the expenditure policy in the medium and long term can be distinguished by the shares formed on the basis of the average values of the expenditures by functions in the structure of the Consolidated Fiscal Program.

As an element of fiscal policy, budget expenditures should be allocated in accordance with and in line with the objectives set in the government's fiscal policy for public finance management.

The classification of costs is one of the important steps for their effective management. According to the Unified Budget Classification, expenditures are divided into functions, groups, activities, paragraphs and sub-paragraphs. The generalizing element of the budget classification is the function, which includes in its structure the groups uniting the activities. The classification of costs by function and group is as follows:

I. Function General civil services:

Group A) Executive and legislative bodies.

Group B) General Services.

Group C) Science.

II. Function Defense and security:

Group A) Defense.

Group B) Police, internal order and security.

Group C) Judiciary.

Group D) Prison administration.

Group E) Protection of the population, management and activities in case of natural disasters and accidents.

III. Function Education.

IV. Health function.

V. Function Social security, assistance and care:

Group A) Pensions.

Group B) Social benefits and allowances.

Group C) Programs, activities and services of social security, assistance and employment.

VI. Function Housing, public works, utilities and environmental protection:

Group A) Housing construction, public works, communal services.

Group B) Environmental protection.

VII. Function Leisure, culture, religious activities:

Group A) Holiday business.

Group B) Physical culture and sports.

Group C) Culture.

Group D) Religious work.

VIII. Function Economic activities and services:

Group A) Mining, fuels and energy.

Group B) Agriculture, forestry, hunting and fishing.

Group C) Transport and communications.

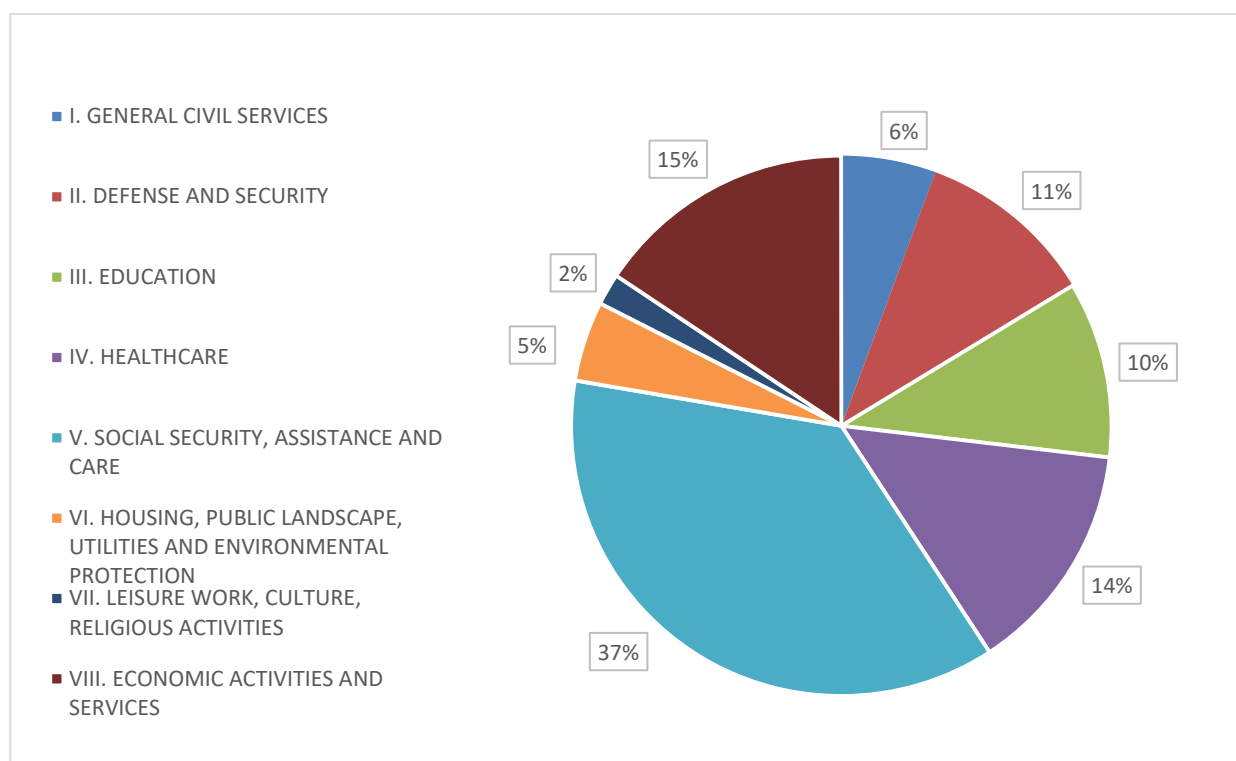
Group D) Industry and construction.

Group E) Tourism.

Group F) Other economic activities.

IX. Function Costs not classified in other functions.

As can be seen from Fig. 1. with the largest share (of 37%) among the functional areas of the Consolidated Fiscal Program are the expenditures for Social Security, Assistance and Care. In second place with 15 percent are the costs of economic activities and services. In third place with 14 percent for healthcare. In fourth place are the expenditures for Defense and Security expenditures with a share of 11 %. Next are education costs with a share of 10%, which puts them in fifth place. In sixth place with a 6 % share in the overall structure are the expenditures for General Civil Services. In seventh place are the costs of housing, public works, utilities and environmental protection with a share of 5 %. And last in the separate functions are the expenses for Holiday work, culture and religious activities with a share of 2 %.



**Figure 1. Government expenditures by function for 2020.**

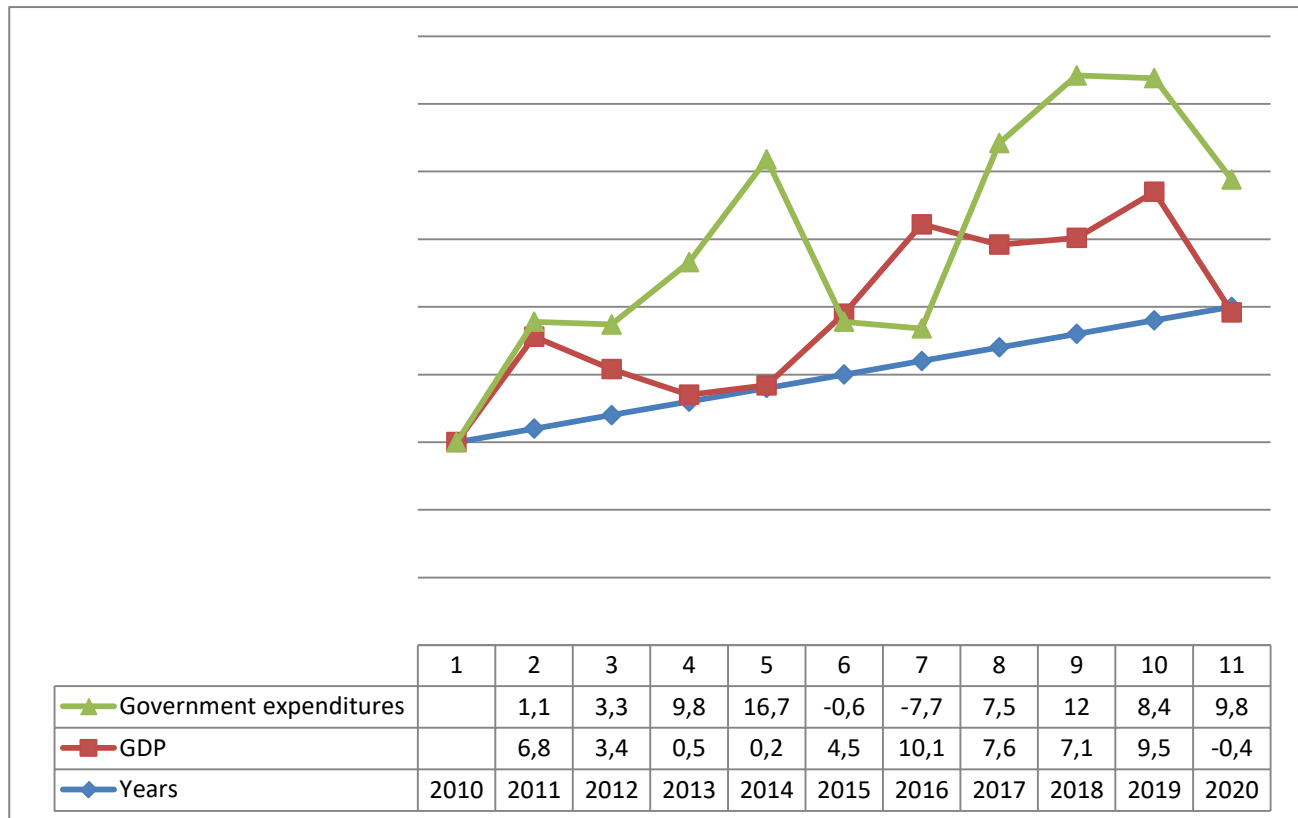
Source: Ministry of Finance of the Republic of Bulgaria (2021).

Economic logic allows us to look for a relationship between the costs of public institutions and the level of GDP. The presentation of the budget indicators only in absolute amounts is not as indicative as when they are expressed in relative values

compared to the main economic indicators. In this sense, the current analysis would be incomplete without measuring budget expenditures in relative terms against the leading indicator of economic activity - gross domestic product.

Figure 2 shows the two time series, logarithmic with natural logarithmic values in order to achieve better comparability over time. In the years from 2010 to 2013, the pace of GDP development and government spending

remained relatively at the same level of about 3.4%. In the following years, from 2014 to 2015, the pace of development of government expenditures significantly outpaced the pace of GDP development.



**Figure 2. Rate of GDP development and government expenditures for the period 2010-2020.**

*Source: based on National Statistical Institute (2021); Ministry of Finance of the Republic of Bulgaria (2021).*

In the period 2015 - 2017 there is a tendency to outpace the pace of GDP compared to the pace of development of government spending. For the entire study period 2010-2020, the pace of development of government spending outpaces the pace of GDP development. Economic logic allows us to look for a relationship between the costs of public institutions and the level of GDP. The presentation of the budget indicators only in absolute amounts is not as indicative as when they are expressed in relative values compared to the main economic indicators. In this sense, the current analysis would be incomplete without measuring budget expenditures in relative terms relative to gross domestic product as the leading indicator of economic activity.

The data in Table 3 show that consolidated expenditures form a real share of redistribution through public finances in the ratio of about 35-40 percent of gross domestic product for the studied years (from 2010 to 2020).

Implementing the main objectives of government fiscal policy and public finance management aimed at realistic budget planning, pursuing a coherent fiscal policy to avoid the pro-cyclical impact of the budget on the economy, ensuring priority government policies and limiting inefficient spending and structures, are a prerequisite for increasing economic activity and growth in the country (Castro, Martins, 2018; Veiga, Veiga, 2019).

**Table 3. Government expenditures and GDP for the period 2010-2020.**

<b>Years</b>	<b>GDP (billion BGN)</b>	<b>Expenditures (billion BGN)</b>	<b>Expenses in % of GDP</b>
<b>2010</b>	73, 2	27,1	37,1
<b>2011</b>	78, 2	27,4	35,0
<b>2012</b>	80, 9	28,3	34,9
<b>2013</b>	81,3	31,1	38,2
<b>2014</b>	82, 9	36,3	43,8
<b>2015</b>	86,7	36,1	41,6
<b>2016</b>	95,4	33,3	34,9
<b>2017</b>	102,7	35,8	34,8
<b>2018</b>	109,9	40,1	36,4
<b>2019</b>	120,4	43,5	36,2
<b>2020</b>	119,9	47,8	39,8

*Source: based on National Statistical Institute (2021); Ministry of Finance of the Republic of Bulgaria (2021).*

Compared to 2019, in 2020 higher costs were incurred, mainly related to the measures taken to prevent the spread of COVID-19 and its treatment, measures to support business and social measures to reduce the negative effects of the pandemic.

Government spending is also growing significantly as a share of GDP. The change in the indicator is mainly related to the costs for the construction of the Hemus motorway and other priority road infrastructure projects; the supply of F-16 Block 70 fighter jets and basic equipment for the construction of battalion combat groups of the mechanized brigade, as well as the implementation of the National Plan for Reconstruction and Sustainability and the progress of projects funded by EU programs under the new program period.

Expenditure on social transfers excluding those in kind increased significantly, mainly due to an increase in the cost of pensions and an increase in benefits and benefits for households, mainly due to changes in legislation.

In social transfers in kind, which mainly cover healthcare expenditures, there is an increase on an annual basis due to an increase in expenditures on health insurance payments for hospital care for R&D, medicines, outpatient care and medical diagnostic activities. Significant for the increase in these costs is the increase in the part of the insurance income on which the state pays health contributions for persons insured at the expense of the state budget.

Therefore, the measures taken to increase government funding in the socio-economic sphere are aimed at achieving a social effect and mitigating the consequences of the crisis, incl. payments for the least socially protected word: financing of the medical sector, monthly allowances for pensions, etc.

#### **4. Conclusions.**

Regardless of the degree of government intervention in the economy, government spending is huge and often dominant in fiscal policy. Given the fact that costs are the main tool for fulfilling the economic and social functions of the state, adequate measures are needed to ensure them as much as possible. The importance of the expenditure policy in the modern state finances of Bulgaria is further strengthened by two complex factors, which have a multifaceted manifestation on all spheres of our economic and social development at the beginning of the XXI century.

The first of these factors is manifested in the very nature of government spending and is the set of radical reforms carried out in the public sector (public administration, health care, pensions).

The second factor can be considered external to the conduct of government spending policy in Bulgaria, namely the limited monetary and exchange rate policy of the central bank under the currency board.

Another factor that has a significant impact on the size and direction of spending budget resources in recent years is related to the economic situation - the spread of the global economic recession with all its negative consequences.

The main constraints to expenditure policy stem from government debt service payments, combined with relatively low public sector cost efficiencies and the need to maintain a low budget deficit in order to meet the Maastricht convergence criteria.

It is necessary to reduce the current account deficit and keep the level of government debt at reasonable levels in order to ensure macroeconomic stability and conditions for balanced long-term economic growth. Strengthening fiscal restraint is also seen as an important tool for the ubiquitous imposition of tight budgetary constraints on the economy and the acceleration of ongoing reforms.

As an element of fiscal policy, budget expenditures should be allocated in accordance with and in line with the objectives set in the government's fiscal policy for public finance management (Chugunov et al., 2021).

Although the reforms in the field of healthcare implemented in recent years, the problems regarding the financing and functioning of the health insurance system of the Republic of Bulgaria are still serious and require timely, adequate actions.

In this regard, health policy in the coming years will focus on improving control and efficiency in the allocation of resources in the sector, in order to avoid abuse, improve access to emergency services, improve the quality of hospital care and improvement of the normative regulation in certain directions. It is important for the management of the health system to improve the efficiency of funding by reaching consensus on funding mechanisms and the need and opportunities for the introduction of diagnostic-related groups, completing the process of implementing e-health and optimizing the hospital system.

#### **Acknowledgements.**

The author would like to express his deepest gratitude to the Department of Aviation Management of the Bulgarian Air Force Academy for the technical and financial support for this study.



## REFERENCES

- Al-Ghazali, A. (2021). Theoretical and applied aspects of basic R&D during the period of transition to post-industrial knowledge economy. *Access to science, business, innovation in digital economy*, 2(1), 103-115. [https://doi.org/10.46656/access.2021.2.1\(8\)](https://doi.org/10.46656/access.2021.2.1(8))
- Baklanova, O., Petrova, M., & Koval, V. (2020). Institutional transmission in economic development, *Ikonomicheski Izsledvania (Economic Studies)*, 29(1), pp. 68-91.
- Castro, V., & Martins, R. (2018). Politically driven cycles in fiscal policy: In depth analysis of the functional components of government expenditures. *European Journal of Political Economy*, 55, 44-64.
- Chugunov, I., Pasichnyi, M., Koroviy, V., Kaneva, T., & Nikitishin, A. (2021). Fiscal and Monetary Policy of Economic Development. *European Journal of Sustainable Development*, 10(1), 42-42.
- Communities (2021). Here are the decisions made by the caretaker government today – Politics. <https://www.txtreport.com/news/2021-10-02-here-are-the-decisions-made-by-the-caretaker-government-today---politics.ByB6q8SEK.html>
- Koval, V., Mikhno, I., & Petrova, M (2020). Management in the field of waste management in the conditions of transition to the circular economy in UKRAINE. ACCESS Press Publishing house.
- Kurmanov, N., Aliev, U., & Suleimenova, S. (2019). Analysis of the Efficiency of Innovation Management in the Countries of the Eurasian Economic Union. In *Polish Journal of Management Studies*, 19(1), 204–214.. <https://doi.org/10.17512/pjms.2019.19.1.15>
- Lupu, D., Petrisor, M. B., Bercu, A., & Tofan, M. (2018). The impact of public expenditures on economic growth: A case study of Central and Eastern European countries. *Emerging markets finance and trade*, 54(3), 552-570.
- Marinov, M. (2010). Comparative Analysis and Rating of the Municipal Finance. *Dialogue*, 05, 163-171.
- Marinov, M. (2012). Researching variations in the market trend by using indicators for technical analysis. "Scientific research" Almanac, 18, 195-197.
- Milinov, V., Marinov, M., Radukanov, S. (2011). Research of the influence of financial crisis on the mortgage market. "Scientific research" Almanac, 14, 124-154.
- Ministry of Finance of the Republic of Bulgaria (2021). Official website. [www.minfin.bg](http://www.minfin.bg)
- National Statistical Institute (2021). Statistical data. <https://nsi.bg/en>
- Petrova, M., & Radukanov, S. (2021). Expenditures for innovations and foreign direct investments in Bulgaria - regional aspects, features and trends. SHS Web of Conf., 10th Annual International Conference "Schumpeterian Readings" (ICSR 2021), Virtual and Perm, Russia, April 7 and April 15-16, 2021. Volume 116, <https://doi.org/10.1051/shsconf/202111600050>
- Seitzhanov, S., Kurmanov, N., Petrova, M., Aliyev, U., & Aidargaliyeva, N. (2020). Stimulation of entrepreneurs' innovative activity: evidence from Kazakhstan. *Entrepreneurship and Sustainability Issues*, 7(4), 2615-2629. [https://doi.org/10.9770/jesi.2020.7.4\(4\)](https://doi.org/10.9770/jesi.2020.7.4(4))
- Veiga, L. G., & Veiga, F. J. (2019). The Effects of Electoral Incentives on Fiscal Policy: Evidence from a Legislative Change at the Local Government Level. In *The Journal of Law, Economics, and Organization* (Vol. 35, Issue 2, pp. 394–421). Oxford University Press (OUP). <https://doi.org/10.1093/jleo/ewy027>
- Zaruba, N., Petrova, M., Vostrikov, K., Wolfson, E. & Nikiforova, O. (2021). Actual strategies of interaction between government bodies and mining enterprises: personnel problems. *E3S Web of Conferences*, 315, 04002. <https://doi.org/10.1051/e3sconf/202131504002>