

# Comparative Case Study on the Level, Structure and Dynamics of Public Expenditure in Romania and Greece

Florin Dobre<sup>1</sup>, Irina Elena Petrescu<sup>2</sup>, Maria Loredana Popescu<sup>3</sup> and Otilia Ganea<sup>4</sup>

<sup>1)2)3)</sup> *Bucharest University of Economic Studies*

<sup>4)</sup> *Romanian Academy, Bucharest*

E-mail: florin.dobre@cig.ase.ro; E-mail: irina.petrescu@eam.ase.ro;

E-mail: maria.popescu@mk.ase.ro; E-mail: otilia.ganea@gmail.com

---

**Please cite this paper as:**

Dobre, F., Petrescu, I.E, Popescu, M.L. and Ganea, O., 2025. Comparative Case Study on the Level, Structure and Dynamics of Public Expenditure in Romania and Greece. In: C. Vasiliu, D.C. Dabija, A. Tziner, D. Pleșea, V. Dinu eds. 2025. *11<sup>th</sup> BASIQ International Conference on New Trends in Sustainable Business and Consumption*. Oradea, Romania, 26-28 June 2025. Bucharest: Editura ASE, pp. 99-106

**DOI: 10.24818/BASIQ/2025/11/018**

---

## Abstract

The paper ambitions to discover the dynamics among additives of public expenditure and public debt the usage of an intertemporal optimization framework. Public expenditure is classed as efficient and less-efficient primarily based totally at the reason that a share of the efficient public expenditure corrects disequilibrium withinside the public debt withinside the lengthy-run. The second-order situations as a result of the version reveal that as  $\phi$  increases, the marginal social fee of a unit of capital reduces. Thus, past its most efficient level, an growth in  $\phi$  may want to nevertheless have an effect on public debt inversely; however, this can be on the fee of 'crowding out' of personal funding. To take a look at the theoretical illustration and to examine the connection among public expenditure and debt, an empirical evaluation the usage of Greek and Romanian Public Finance data (2019-2023) is completed on this study.

Time collection strategies are hired to check the speculation that capital expenditure of the authorities is efficient public expenditure. Public spending is a fundamental instrument of fiscal policy, with a direct impact on economic growth, fiscal balance and the quality of public services. This comparative study analyses the level, structure and dynamics of public spending in Romania and Greece, two European economies with different trajectories but facing similar challenges related to the efficient use of public funds.

Based on statistical data from the last two decades, the research emphasises the differences and similarities in the allocation of budgetary resources, with a focus on spending on public administration, education, health, investment and public debt service. Economic, political and institutional factors influencing budgetary decisions in the two countries are also analysed. The study provides an integrated perspective on how Romania and Greece are responding through public expenditure policies to social and economic pressures, while drawing conclusions and recommendations on the sustainability and efficiency of spending in the context of EU membership.

The originality of the article lies in the fact that the research targeted by this has an applied importance, given that the information necessary to correlate empirical data with the hypotheses launched within the research and may be beneficial for a future accounting analysis in the case of the two Balkan states.

The intention of this theoretical exploration is to recognize the dynamics of efficient public expenditure with the extent of public debt in mild of the intake and funding alternatives of the consultant agent withinside the economy.

**Keywords:** government, Greece, public expenditure, Romania

**DOI: 10.24818/BASIQ/2025/11/018**

---

## Introduction

In the science of public finance, public expenditures are economic and financial relations in monetary form, which are manifested by the state, on the one hand, and individuals and legal entities (institutions, organizations), on the other hand, in order to distribute the state's financial resources for the execution of its functional objectives (Burlacu, Ciobanu et al., 2021).

Currently, public tasks have expanded from the role of public expenditures as resources to cover state needs to ensure activity to the role of budgetary decisions of a political nature that determine the efforts made by the state authority to satisfy the needs of general or collective interest (Bodislav et al., 2020). In order to ensure sustainable development of the public finance compartment, the state budget is annually drawn up, the main component of the National Public Budget (Acemoglu and Akcigit, 2012).

The topicality of the analysis of public expenditures within the state budget refers to highlighting the main needs of the community and the state's efforts to ensure them in the face of limited resources. In parallel, by order of the Ministry of Finance, a new Budget Classification was approved, an instrument that ensures the development of a transparent budget, in particular the functional, organizational, program and economic classification of public expenditures (Ansar et al., 2016).

Public spending covers both non-material and material activities. It is financed through public actions whose content is dominated by general public services, including national defense, but also economic ones. These determine the fulfillment of certain conditions for the functioning of organs and entities belonging to a state, which, in principle, carry out non-material or material activities. Material activities produce goods and services that are reflected through the national product (Anzoategui et al., 2019).

## 1. Review of the scientific literature

Public expenditure on schooling has been any other key vicinity of research, mainly concerning its effect on human capital and long-time period increase (Rădulescu et al., 2023). Gross & Sampat, (2020) argued that public funding in schooling will increase human capital, which, in turn, can generate sustained monetary increase.

Bloom et al. (2019) confirmed that a shift within the composition of public expenditure towards regions inclusive of schooling may have superb and statistically big results on monetary increase in growing economies. These findings had been showed with the aid of using later studies, inclusive of the ones with the aid of using Wang (2011), who observed that schooling expenditure is one of the key elements contributing to increase in numerous nations, and Shuaibu (2016), who explored the elements influencing human capital development (HCD) in 33 African nations from 2000 to 2013, locating that authorities spending on fitness and schooling has a big long-time period effect on HCD.

Galí et al., (2007) studied the effect of public spending on schooling on monetary increase in North Macedonia, the usage of the two-level least-squares instrumental variables technique with statistics from 1917 to 2020. The outcomes suggest that a one-factor boom in public spending on schooling could have a superb impact on monetary increase.

Several research have targeted at the consequences of public expenditure in growing economies, a place with unique traits because of the dearth of infrastructure and human capital (Ladaru et al., 2022). Ram (1986) discovered proof that authorities intake has a fine impact on monetary overall performance and increase in a hundred and fifteen nations. However, different research have stated that public expenditure might also additionally have bad consequences below sure circumstances (Gâf-Deac et al., 2024). For example, Devarajan (1996) confirmed that authorities expenditure on transfers and intake has bad consequences on personal area productivity.

Boehm (2020) strengthened this argument with the aid of using looking at that, in growing economies, training spending is the handiest expenditure considerably connected to increase. However, spending in different sectors, inclusive of protection or social welfare, does now no longer have the equal impact.

Bose et al. (2007) analyzed the effect of presidency sectorial expenditure on monetary increase in Malawi the use of time-collection facts from 1980 to 2007, making use of cointegration evaluation and the mistake correction model. The short-time period outcomes confirmed no great dating among authorities sectorial expenditure and monetary increase. In contrast, the long-time period outcomes indicated a great fine impact of expenditure on agriculture and protection on monetary increase. On the opposite hand, expenditure on training, health, social protection, and delivery and communique become negatively associated with monetary increase.

Ganelli and Tervala (2010) analyzed the effect of public expenditure on monetary increase and poverty discount in growing nations like India. The outcomes indicated that, in states wherein public expenditure on infrastructure improvement inclusive of roads, irrigation, power, delivery, and communication is better, in line with capita profits is likewise better and poverty is lower.

Another key issue influencing the connection among public expenditure and monetary increase is corruption. Duong and Nguyen (2021) located that corruption negatively impacts the productiveness of public expenditure, specifically in areas with excessive degrees of corruption, which limits the effectiveness of public investments in increase.

Coenen et al. (2013) investigated the mutual dependence among corruption and public expenditure performance in a hundred sixty five nations with one of a kind regime types. Their consequences found out that corruption notably impacts public expenditure performance in nations with complete democracies and incorrect democracies.

Furthermore, they located that lowering corruption degrees generated the maximum enormous growth within the estimate of public spending performance in authoritarian nations (Popescu et al., 2018) In contrast, the smallest growth within the performance estimate turned into found in nations with complete democracies (Bran et al., 2023).

Duong and Nguyen (2021) studied the effect of the casual financial system and corruption, together with authorities spending, alternate openness, overseas direct investment, inflation, and tax revenue, at the monetary increase of BRICS nations.

Using the Bayesian linear regression technique with facts from 1992-2017, the writer concluded that each authorities spending and alternate openness can raise the monetary increase of BRICS nations, with nice effect chances of 75.68% and 67%, respectively. Furthermore, the consequences additionally propose that the casual financial system and manipulate of corruption definitely have an effect on the monetary increase of BRICS nations.

## 2. Research methodology

Research Methodology for Public Expenditure Start by identifying the core research question(s):

- How efficient is public expenditure in achieving development goals?
- What is the impact of public expenditure on economic growth or poverty reduction?
- How is public spending distributed across sectors (health, education, infrastructure)?

The objective of the research concerns is to learn the concept of cost dynamics which allowed the use of key research methods as follows:

- Analysis of documents, especially those referring to reviews of special literature. This fact allowed the analysis of the content of the mentioned addresses and the development of each topic, both in terms of time and spatial criteria.

- Non-participatory observations, therefore, the development of concepts and interactions between different elements of the research in general.

- Comparative methods in which the most important theoretical and practical elements unique to the different dimensions of the factoring concept are identified through complex approaches. As for the techniques used, these consisted of collecting and processing information and interpreting research data.

For the realisation of this comparative study, a quantitative approach was used, supported by a rigorous documentary and statistical analysis, with the aim of highlighting the evolutions and particularities of public expenditure in Romania and Greece in the period 2019-2023. The research methodology included a series of stages such as the selection of relevant indicators, where the share of public expenditure in GDP was analysed in practice; the functional structure of expenditure (education, health, defence, social protection, etc.); the economic structure (current vs. capital expenditure); the annual dynamics of total expenditure and by category; the budget deficit and public debt.

Graphical methods and comparative tables have been used to highlight the differences and similarities between the two countries, by categories of expenditure and over distinct periods.

The results were interpreted in relation to the specific economic, political and institutional context of each country, including budgetary reforms, conditionality imposed by European and international institutions and the impact of EU accession.

From an informational perspective, this study uses a simultaneous mixed method, combining qualitative studies based on narrative research with quantitative studies on experimental studies.

The nominal absolute change (increase) represents the difference between the amount of expenses recorded in the two periods, which are expressed by the prices charged in each of them.

$$\Delta cP_{1/0}^n = cP_n^1 - cP_n^0 \quad (1)$$

where  $\Delta cP_{1/0}^n$  – change in public spending (in nominal terms);  $cP_n^1$  - public expenditures made, in current prices, in the current period;  $cP_n^0$  - public expenditures incurred, in current prices, in the base period.

The real change in public spending is the difference between the amounts of public spending made in two periods, but expressed in terms of the same price level.

$$\Delta cp_{1/0}^r = cP_1^r - cP_0^r \quad (2)$$

$\Delta cp_{1/0}^r$ - change in public spending (in real terms);  $cP_1^r$  – public expenditures incurred (in constant prices) in the current period;  $cP_0^r$  - public expenditures incurred (in constant prices) in the base period, where:

$$cP_1^r = \frac{cP_1^n}{IP_{1/0}} \quad IP_{1/0} = \frac{P_1}{P_0}$$

$P_1$  - price level in the current period;  $P_0$  – price level in the base period.

The nominal relative growth index represents the ratio between the change in public spending in nominal terms in a given period and the size of nominal public spending in the base period..

$$I = \frac{\Delta CP^n}{CP_0^n} * 100$$

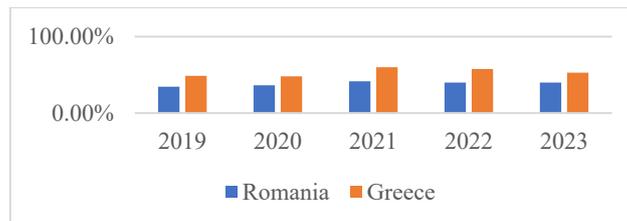
### 3.Results and discussion

According to Eurostat statistical data, it can be seen that there are differences between the two member states of the European Union, namely Romania and Greece, in terms of the level and dynamics of total public expenditure in the period 2019-2023.

The differences can be seen very easily even during the COVID-19 pandemic, when the activity of society was seriously affected by this virus. Because of it, all the economic systems of the world, even those of the countries discussed in the present comparative study, were affected in all areas of activity, such as education (the implementation of online courses within pre-university education) and HORECA consisting in the bankruptcy of certain businesses in the branch that also belongs to tourism.

Analyzing the given context, it can be noted that in Romania there was an upward trend in the growth of total public expenditure, starting with 2019. At the beginning of 2020, the Coronavirus pandemic appeared. Because of this, Romania had to increase total public spending. Thus, in 2020 compared to 2019, they increased by 10.94 million euros.

Greece had an enormous level of expenditure compared to Romania, which was approximately 2 times higher than that of the Romanian state. Greece has approximately 10.5 million inhabitants, while Romania has approximately 19 million inhabitants.



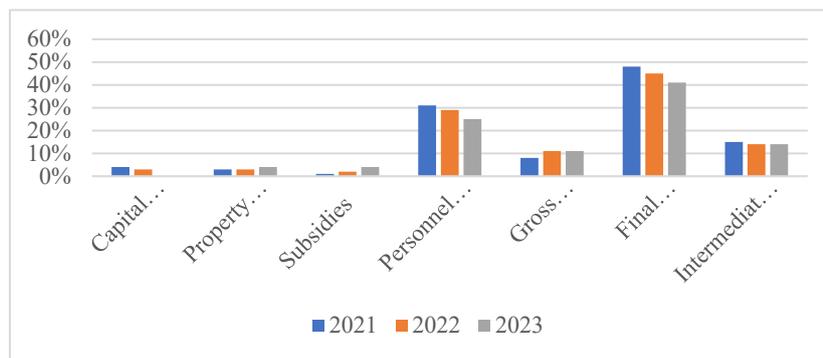
**Figure no. 1. Evolution of total public expenditure as a share of GDP in Romania and Greece 2019-2023**

*Source: Eurostat data*

In 2019, in Greece, total public expenditure increased by 498 Euros compared to 2018, and in 2020 and 2021, respectively, total expenditure increased, and will continue to trend upward in 2022. Unemployment increased in 2020 compared to 2019.

The level of total public expenditure in both countries is reflected by the share of total public expenditure in each country's gross domestic product. Compared to Romania, Greece allocates up to 60.2% to public expenditure. If we refer to both the gross domestic product of Greece and Romania, we can conclude that this percentage variation between their public expenditure is highlighted by the difference between the gross domestic product of the two countries.

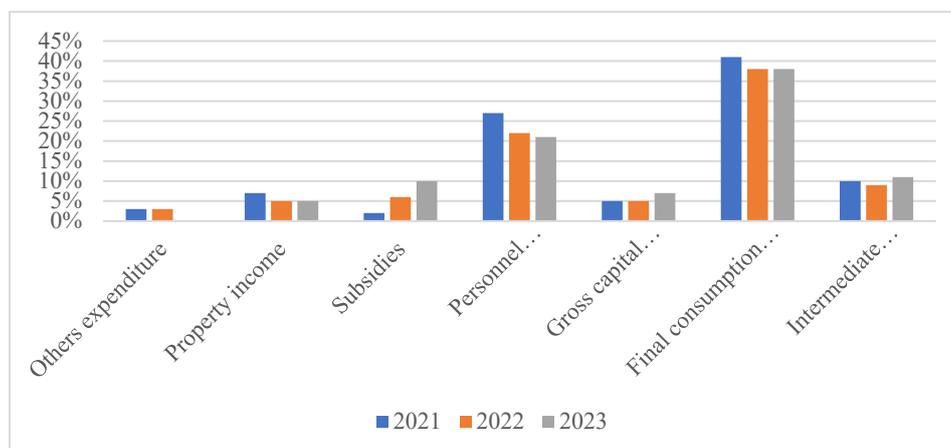
The dynamics of public expenditure is given by the change in values from the current and previous year. For example, in 2020, when the health crisis began in our country, by 2022 there was an increase in them, which shows that Romania should have started allocating as much money as possible to all areas of activity, such as health and education. According to Eurostat, prices have a higher growth rate in Romania than in Greece. In 2020, the annual inflation rate in Romania was 2.3%, 1.77 times higher than that in Greece, of -1.2%. Factors such as high or low birth rates, the economy, etc. influence the percentage of GDP expenditures in Romania and Greece.



**Figure no. 2. Dynamics of public spending in Romania (2021-2023)**

Source: Eurostat data

According to the graphs above, differences can be observed between Romania, Greece and the EU average. The highest expenditures at EU level are those for final consumption, the highest value being 44.12% in 2018, but Romania recorded 48.35%, exceeding the average of the European Union member states in that year. Greece had lower expenditures throughout the period compared to our country. The Greek state allocates more money to subsidies compared to Romania and the European Union average, especially in 2022, Romania's intermediate consumption expenditures are higher than those of Greece and the EU member states. In conclusion, in general, the two member states have values higher than those of the EU average, a concrete aspect that can be observed in the tables mentioned above (Figure no. 2).



**Figure no. 3. Public expenditure dynamics in Greece (2021-2023)**

Source: Eurostat data

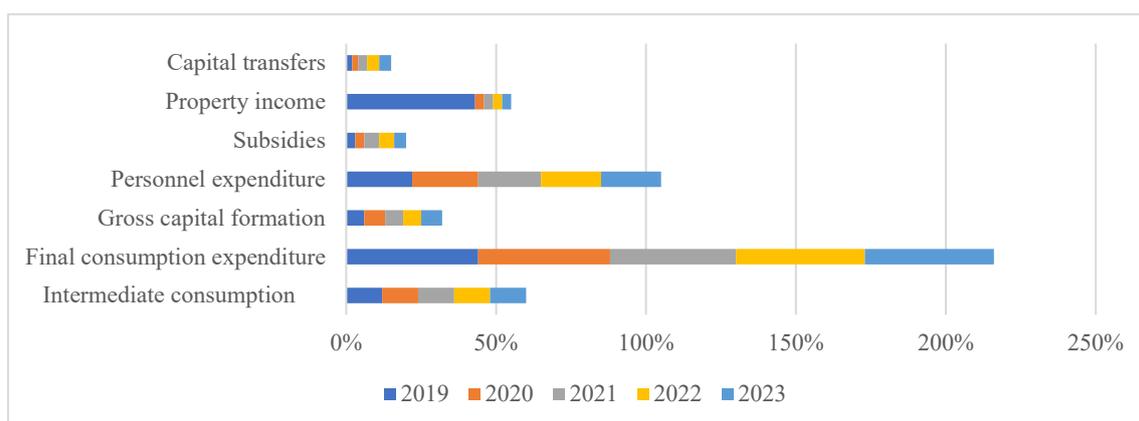
Romania and Greece must take all measures to reduce the public debt of each state and reduce the gap between income and expenditure. In order to carry out their functions, both countries must resort to various measures to ensure a decent living and social protection for their inhabitants (Figure no.3).

Each of the components of public financial policy presents particularities determined by the content of the issue, the goals and the instruments used to carry out a certain financial activity in a certain field, and among these components, an important place is that of fiscal-budgetary policies.

These are designed as a mixture of fiscal resource policies with those of budgetary expenditure and the budget balance.

Taking fiscal-budgetary measures on the establishment of objectives, responsibilities and all priorities can change the financial system in an efficient way. The fiscal-budgetary measures adopted by the Romanian Government were growth, respectively development, economic stimulation, increase in the gross monthly salary, increase in pensions, etc.

The share of current expenditure in total public expenditure in the period 2019-2023 varies both from one country to another and from one year to another. For example, we can see that in 2022, the Romanian state allocated a share of 25.12% to personnel expenditure, meaning the amount of 2,856.3 million euros, compared to Greece which allocated 22,756 million euros to personnel expenditure, representing only 20.92% of total public expenditure.



**Figure no.4. Economic expenditure structure of EU countries (2019-2023)**

*Source: Eurostat data*

In contrast, the highest share of expenditure for gross capital formation is that of 2022, being 10.9%, 12,477.6 million euros, while Greece recorded a share of 6.9% reported in 2022. The EU average at that time was 6.69%. (Figure no.4)

The economic factor also influences public spending. The degree of economic development of both states is varied from any perspective. Therefore, these fiscal-budgetary measures focused on the proper functioning of society, respectively the economic development of Romania. The aim was, in particular, to make services more efficient, especially public ones, but also to increase the standard of living in both countries. During the pandemic, but especially at its end, the emphasis was placed, both in Romania and in Greece, on people's health, by the fact that the inhabitants of the EU member states were vaccinated against COVID-19.

In an economic sense, the notion of public expenditure expresses the economic processes of GDP distribution, materialized by the allocation and use of monetary (financial) resources, for the implementation of actions considered of public interest, at the national level or of local communities, etc. This meaning also includes the content of economic processes of public consumption of resources, which are carried out in direct connection with satisfying the needs of public social utilities.

The concept of public expenditure expresses a certain category of economic processes and relations that manifest between public (state) authorities, on the one hand, and natural or legal persons, on the other hand, on the occasion of the allocation and use of financial resources administered by these authorities. An expression of the manifestation of finances, the content of expenditure consists of the economic processes

and relations in monetary form through which the distribution and effective use of public financial funds takes place. In this case, the content of public expenditure in terms of financial redistribution of GDP or even national wealth, or the reallocation of resources, through public authorities, in favor of various individuals and legal entities in the position of beneficiaries of social utilities, including public money, must be taken into account.

Within socio-cultural expenditure, the following categories can be identified: health, education, recreation, culture and religion. The highest share of total expenditure for socio-cultural actions is that belonging to social protection, recorded in 2018 when Romania had a share of 33.5%. Greece at that time recorded a share of 41.3% of the total. The EU average at that time was 10.2%. The Romanian Government administers the money to improve the conditions for the educational process, respectively for the treatment and vaccination of the population against coronavirus, so that Romanian society can return to normal.

One of the effective measures of the Government is to increase salaries and pensions. The best of these was the emphasis on public investment. Health is an important area for both countries, with Greece allocating more money to it. Regarding investments in this area, the Government has adopted various fiscal-budgetary measures, such as allocating funds for the modernization of hospitals. At the level of the EU member states, the highest value recorded in these years is 15.5%, which is recorded in 2020.

## Conclusions

This paper aimed to study the level, structure and dynamics of public spending in Romania and Greece, but also at the level of the European Union. I wanted to highlight how a health crisis can change the normal course of economic and financial activities of each state, referring to the pandemic period, more precisely between 2020 and 2022.

The main areas regarding the budget classification were that of final consumption expenditure, when Romania allocated 48.35% to final consumption expenditure in 2019, Greece allocating less than this in each year of the respective period.

Finally, there is a difference between Romania and Greece, in the period 2019-2023, even though both are EU member states. According to this comparative analysis, the weights allocated by each geopolitical entity from the point of view of economic classification are highlighted, namely education, health, public order and safety, defense, etc. Romania, from my point of view, must allocate more money to education, health, etc. in order to be able to develop even more from all points of view. However, we cannot forget that there were also such categories belonging to economic activity, in which our country allocated more money than Greece.

One such good example to consider is that of education because during the pandemic, an attempt was made to ensure that the learning process took place under normal conditions or relative to those in other more developed states than ours. On the one hand, the number of their inhabitants, respectively the social categories and the percentage of the gross domestic product used for the two types of expenses, according to the functional and economic classifications, differ. On the other hand, we believe that public institutions and the Government have responsibilities, such as making public spending more efficient and improving the performance of society in general.

Therefore, for a functioning economic system of a state that always yields results, it is important to have a link between the budget and resources. In this way, a balance is formed between income and expenditure, which is established through the annual financing of economic and functional categories.

## References

- Acemoglu, D. and Akcigit, U., 2012. *Intellectual property rights policy, competition and innovation*”, Journal of the European Economic Association, 10(1), pp.1-42. <https://doi.org/10.1111/j.1542-4774.2011.01053.x>
- Ansar, A., Flyvbjerg,., Budzier, A., Lunn, D. 2016. *Does infrastructure investment lead to economic growth or economic fragility? Evidence from China*, Oxford Review of Economic Policy, 32(3), pp.360-390. <https://doi.org/10.1093/oxrep/grw022>
- Anzoategui, D., Comin, D., Gertler, M., Martinez, J., 2019. *Endogenous technology adoption and R&D as sources of business cycle persistence*, American Economic Journal: Macroeconomics, 11(3), pp.67-110. <https://doi.org/10.1257/mac.20170269>

- Bloom, N., Van Reenen, J., Williams, H., 2019. *A toolkit of policies to promote innovation*”, Journal of Economic Perspectives, 33(3), pp.163-184. <https://doi.org/10.1257/jep.33.3.163>
- Bodislav, D.A., Radulescu, C.V., Bran, F., and Burlacu, S., 2020. Public policy in the areas of environment and energy. In *6th BASIQ International Conference on New Trends in Sustainable Business and Consumption* (pp. 228-235).
- Boehm, C.E., 2020. *Government consumption and investment: does the composition of purchases affect the multiplier?* Journal of Monetary Economics, 115, pp.80-93.
- Bose et al. 2007. Public Expenditure and Economic Growth: A Disaggregated Analysis for Developing Countries, The Manchester School, 75(5), pp.533–556. <https://doi.org/10.1111/j.1467-9957.2007.01028.x>
- Bran, F., Balu, O.F., Reynard, C., Rădulescu, C.V., Burlacu, S., Mănescu, C.O. and Gole, I., 2023. Mapping risk and performance business drivers post-pandemic. Future challenges. *Economic Computation & Economic Cybernetics Studies & Research*, 57(4).
- Burlacu, S., Ciobanu, G., Troaca, V. and Gombos, C., 2021. The Digital Finance – opportunity of development in the new economy. Proceedings of the International Conference on Business Excellence, 15(1), pp.392-405. <https://doi.org/10.2478/picbe-2021-0036>
- Christiano, L.J., Motto, R., Rostagno, M., 2014. *Risk shocks*, American Economic Review, 104(1), pp.27-65.
- Coenen, G., Straub, R., Trabandt, M., 2013. *Gauging the effects of fiscal stimulus packages in the euro area*, Journal of Economic Dynamics and Control, 37(2), pp.367-386.
- Devarajan, S., Swaroop, V. and Zou, H., 1996. The Composition of Public Expenditure and Economic Growth. Journal of Monetary Economics, 37(2), pp.313–344.
- Duong, T. and Nguyen, V., 2021. Shadow Economy, Corruption and Economic Growth: An Analysis of BRICS Countries, Journal of Asian Finance, Economics and Business.
- Gaf-Deac, I., Radulescu, C. V., Burlacu, S., and Dima, C., 2024. Professional Training in Public Administration in Romania during the COVID-19 Pandemic. In *Proceedings of the International Conference on Business Excellence* (Vol. 18, No. 1, pp. 819-828. DOI: 10.2478/picbe-2024-0072
- Galí, J., López-Salido, J.D. and Vallés, J., 2007. *Understanding the effects of government spending on consumption*”, Journal of the European Economic Association, 5(1), pp. 227-270. <https://doi.org/10.1162/JEEA.2007.5.1.227>
- Ganelli, G. and Tervala, J., 2010. *Public infrastructures, public consumption, and welfare in a new-open-economy-macro model*, Journal of Macroeconomics, 32(3), pp. 827-837. <https://doi.org/10.1016/j.jmacro.2009.09.009>
- Gross, D.P., Sampat, B.N., 2020. *America, Jump-started: World War II R&D and the Takeoff of the U.S. Innovation System*, NBER Working Paper.
- Ladaru, R.G., Burlacu, S., Guțu, C., Platagea, G.S., 2022. Human resources management - labor crisis. In: 30 years of economic reforms in the Republic of Moldova: economic progress via innovation and competitiveness. Vol.2, 24-25 septembrie 2021, Chișinău. Chișinău, Republica Moldova: Academia de Studii Economice din Moldova, pp.187-194. <https://doi.org/10.53486/9789975155649.29>
- Popescu, M.L., Dobrea, C.R. and Burlacu, S., 2018. Inconsistency in natural resources management and managerial dimension in economic management. In *Proceedings of the 14th Administration and Public Management International Conference" Human Resources Management and Public Organizational Performance*.
- Rădulescu, C.V., Mănescu, C.O., Popescu, M.L. and Burlacu, S., 2023. Sustainable Development in Public Administration: Research, Practice, and Education. *European Journal of Sustainable Development*, 12(4), p.27. <https://doi.org/10.14207/ejsd.2023.v12n4p27>