COMPETITIVENESS AND ECONOMIC GROWTH. COMPARATIVE STUDY: ROMANIA - BULGARIA

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Alin-Vasile STRĂCHINARU
Doctoral School of Economics and Business Administration,
Alexandru Ioan Cuza University of Iasi
alinstrachinaru@yahoo.com

Abstract: *In terms of structure, state and evolution of the economy in the last decades, Romania and Bulgaria have common characteristics, being similar also, from the development perspectives point of view, with goals and projections that are intertwined.*
This study aims, on the one hand, to capture the economic situation as a whole, at the level of the two countries, and on the other hand to identify the best ideas, but also viable measures, which lead to the achievement of the set objectives, in the next period. At the same time, based on V A R - Vector Autoregression Model analysis, a correlation report is analyzed, which identifies three of the most important macroeconomic indicators, in the current economic environment, namely: public debt, gross domestic product, respectively investments. The reference period considered is between the years 2009 - 2021, with a quarterly frequency.
Keywords: *economic development, public debt, macroeconomic indicators, vector autoregression model (V.A.R.)*
JEL classification: *C33, E44, E60*

Introduction

The analysis of the economic situation must be seen, especially, from the perspective of the evolution of the phenomena that characterize it, which in recent years have shown important fluctuations. This fact is also due to some decisions that are taken at the community level, whether we are talking about NATO or the E.U. and which also affects the most sensitive economies in the region, whose economic development is dependent on financial support from international institutions. Reality confirms, once again, that we live in a dynamic environment, a globalization defined differently at the level of each state of the European Union and beyond, and in terms of the population's perception of the socio-political events taking place - in recent years - further accentuates the uneasiness regarding the continuation of the reforms, in the current economic environment. The pursued goal aims at economic development, as a whole, by appropriating the measures, assuming the responsibilities of the decisions taken - both by the political factors, decision-makers, and by the specialists who issue, approved, opinions, studies and strategies in this regard.
The specialized literature further argues these approaches, in an environment ground by socio-political, cultural (even inter-ethnic) turmoil, between certain pandemic waves - admittedly with an effect felt much more easily, by the population, as between March 2020 and February 2022, all of which culminated in the special military operation launched by Russia in Ukraine. This last conflict has increasingly significant repercussions on the business environment at European and even global level, and the strategies

thought/considered do not seem to take into account, at least declaratively or in the immediate period, compromises, political (or of any kind) for peace in the area. Russia, for example, argues that it "defends itself", and the support given to Ukraine is aimed, according to some specialists in the field, at "stopping Russia" from advancing and conquering new territories.

The accession of the countries of S-E Europe (Romania, respectively Bulgaria) to the European Union took place in 2007, broadly fulfilling the criteria of the Maastricht Treaty, but after the financial crisis, characterized by major imbalances (2008 - 2012), they seemed to no longer be so easy to respect, to implement. In this sense, a remodeling of them was discussed at the level of the Council of Europe, but without a specific result, but rather a greater flexibility, when it comes to the accession of another state to this community.

The objective pursued is represented by the analysis of the correlation between the public debt, the gross domestic product and investments, as the main macroeconomic indicators that characterize the current business environment, with its meanings on the one hand, and on the other hand, finding viable measures, and the strategies to follow for sustainable development in the medium and long term. The dynamics of events at the level of the European community, which implicitly also affected countries like Bulgaria or Romania, in recent years and even decades, were accompanied by major imbalances. Thus, on the one hand, the economic crisis, mentioned, when the world's strongest economies were also affected, referring to the USA, China, Germany and even Russia, and on the other hand, the COVID19 pandemic that started, according to the data, in November 2019 Wuhan - China and the consequences of which are still unknown.

The period of manifestation of these episodes did not leave time for recovery (the affected economies), a fact that further accentuated the problem of the country's deficit with its rather unpredictable impact. It is affecting economic stability and causing the growth, at an accelerated rate, of emergency medical expenses, first of all, then social, but also budgetary ones, which sooner or later affect the level of accumulated public debt but also on the population's income.

The scientific context

The various studies and forecasts describe the evolution of the macroeconomic indicators, but also the relevant factors that reproduce at a given moment, the evolution and perhaps the state of equilibrium, if it exists, from the level of each state or group of states under analysis. Thus, during the conference "Bulgaria and Romania: Country Members of the EU, Part of the Global Economy" (Conference organized by Economic Research Institute, Bulgarian Academy of Sciences and Institute for World Economy at the Romanian Academy. Economic Research Institute, 2019), Irena Nikolova, argues the study, with the title: External debt and debt crises in European economies, in which it shows that the public debt was reviewed and analyzed from the perspective of the European debt crisis at the level of the states that are part of this community. The focus is on countries such as Bulgaria and Romania, supporting at the same time two main aspects of interest, namely:

Debt levels of the member states of the European Union, for the last decade;

Private debt vs public debt and the major challenges in managing them.

External debt, both governmental and private, is analyzed, especially after the financial and economic crisis that started in 2007 and the European debt crisis in 2010.

In fact, the economy of the European community and the euro zone has recovered since then and there is a concern about the emergence of a new debt crisis, at the level of the mentioned community, with an emphasis on these two member countries, since 2007.
The results of the study show that Romania is a country with low levels of debt, both governmental and of the private sector, which expands opportunities for economic growth and decreases vulnerability to external environmental changes. As for Bulgaria, the trend in recent years in both external public and private debt shows a decrease. Due to the low levels of public debt and the currency board arrangement and foreign reserves to maintain it, the country has sufficient buffers in the event of an increase in economic risks or a new crisis. Another study, Analysis of the dynamics and structure of Romanian public debt In the period 2007-2017 (Călinică, R. M., 2019) analyze the structure, causes and ways of financing the public debt in general, but also its evolution, size and management methods in Romania as a member state of the European Union.
In the situation where the main needs of the society cannot be financed from the resources attracted in the state budget, i.e. the available financial resources are exceeded, the state through the competent bodies requests a crediting solution, i.e. external resources, i.e. public loans. Currently, the public debt it is a common phenomenon in the economies of different countries, but its share differs from one country to another. The problems on the international financial markets, triggered in 2007 in the USA, intensified in 2008, and the effects of these events were felt in all countries, including Romania. The results of the analysis show that the level of public debt has continuously increased in Romania, and from a structural point of view, external public debt had the largest share. If the revenues of the state budget are exceeded by the budget expenses, loans are used to balance it, thus increasing the public debt. But the real challenge lies in good management, which must aim to maintain an acceptable medium and long-term level of risk and ensure the resources to pay the debt service, at the lowest possible cost. As it has been shown, the loans that make up the public debt are contracted to finance the budget deficit, strengthen the foreign exchange reserve, make investments or maintain the balance of payments, but its level must increase in a controlled manner, without exceeding the legal level or limit, avoiding increases explosive through measures adapted/adaptable to new market requirements.
The Study: On The relationship between economic growth and government debt for Bulgaria. Test of The Reinhart-Rogoff Hypothesis (Yu HSING, 2020), finds that the tipping point in terms of the public debt ratio for Bulgaria is estimated to be approx. 45.26%, which suggests that an increase in the debt ratio above these mentioned levels will cause the real GDP growth rate to decrease. Practically this turning point for Bulgaria is much lower than the one proposed by Reinhart and Rogoff, i.e. 90%. In other words, the Reinhart-Rogoff hypothesis does not apply to the country in question. Bulgaria has shown a downward trend in the long-term public debt ratio, from approx. 79.4% in 1999 to approx. 14.08% in 2010. Even during the global crisis, debt rates remained low, at approx. 14.7% in 2008 and approx. 14.5% in 2009. After the end of the crisis or rather their effects, paradoxically, the public debt of Bulgaria, in 2016, indicated a value of approx. 27.3%, but the Bulgarian government, through concrete measures, managed to stabilize and even reduce the level, so that in 2019, the debt level was below the threshold of 20% of GDP, according to the study. The results of the study show, among other things, that the growth rate of GDP real depends on the employment growth rate, the ratio of investment spending to nominal GDP and the public debt ratio. In other news, the results also show that the

turning point is estimated at 45.26%. The growth rate and the debt ratio have a positive relationship, when the debt ratio is up to the mentioned threshold, and if this threshold is exceeded, the relationship becomes a negative one. The public debt rate in 2019 was below 20% (19.15%, according to the study), which indicates that there would be room for the Bulgarian government to engage in the so-called fiscal expansion, with the risk of increasing slightly, the debt rate, but it can further stimulate its economy, which is experiencing - more of a stagnation - due to the pandemic crisis at European and global level.

The paper: Public debt - Sustainability In E.U. (Scarlat-Mihai, C., F. 2022) analyzes the issue of public debt sustainability, also due to the effects of the COVID pandemic, which caused this level to increase significantly and even worryingly for most states of the European community. Practically, the central point of this work is the analysis of the public debt of the European Union, the influencing factors and its sustainability, at the same time, the way in which economic growth and the budget deficit influence the public debt was taken into account. A multifactorial regression model based on panel data was used, and the result indicates that there is a valid relationship between these variables. According to the same results, there is an inversely proportional relationship between economic growth and public debt and a direct, even significant relationship between the budget deficit and public debt. It was also confirmed that there is a strong relationship between the achievement of budgetary sustainability (measured by the budget deficit) and the sustainability of the public debt (measured by the public debt at the level of the European Union countries) and that the achievement of any of these cannot be achieved independently.

The government deficit management in Greece, Bulgaria and Romania (Letitia, M., Brătulescu, A, 2022), studies the factors that lead to the budget imbalance and the impact of the public deficit, public debt and gross fixed capital formation on economic growth. A special attention is paid both to the relationship between economic growth and the public deficit, but also to the fiscal behavior adopted by Greece, Bulgaria and Romania to face the challenges generated by the crisis that started in 2008 and the COVID 19 pandemic, which broke out at the European level in March 2020.

The result reveals a strong, positive correlation between deficit and economic growth only in the case of Bulgaria, while for the other two countries, whose deficit was much higher throughout the time period, the impact is not so significant. However, governments strengthened gross debt and gross fixed capital formation, which proved to be relevant influencing factors for economic growth in all three cases analyzed.

Another study, with a well-defined future perspective, specifically refers to Bulgaria: Bulgaria and possible euro introduction (Dimitrios K. Dapontas, 2022). It presents the economic history of the analyzed country, as a candidate country for joining the euro zone. Difficulties have been overcome under the bond scheme, at the Deutsche Mark since 1997. Accession to the European Union in 2007, fiscal health and participation in ERM II from 2020 have further encouraged the country's plans to join the euro in 2024, despite the mistrust that exists among the members of the community, divided in opinion fueled, in this period, by a global tension.

According to the Maastricht Treaty, joining the euro consists of five requirements to ensure that a new member state will not have a negative impact on price stability, along with criteria to limit the deficit and ensure exchange rate stability for a term before entering the UEM.

New members are required to join Euro and must meet the following criteria:

Inflation (HICP) at the 12-month average rate, as an unweighted average of the three EU member states with the lowest HICP inflation plus 1.5 average points.

In 2021, HICP inflation for Bulgaria was 6.6%.

The budget deficit cannot exceed 3% at the end of the previous year or the following two years. In other words, the deficit must reach a maximum of 3 -3.5%.

Government debt/GDP ratio, if the gross nominal public debt compared to GDP at market prices cannot exceed 60% at the end of the previous fiscal year or if the limit has been exceeded, the state must guarantee that an annual reduction of at least 5% until the ratio reaches the target of 60%.

Exchange stability on the requesting country is ensured by the peg to the euro for at least two years without turbulence and participation in ERM II. Bulgaria will complete the two-year period in April 2022.

Long-term interest rates (10 years) as an average return for the past year should not exceed 2% than the unweighted average of the 3 countries with the lowest HICP inflation. This rate cannot be weighted if the country does not have full access to funding in the financial lending markets. Countries considered for long-term rates for 2021 are Finland (0), Portugal (0.39%), Malta (0.69%), respectively, averaging 0.36% when Bulgaria had a rate of 0 .44%.

According to the results of the study, Bulgaria is one of the healthiest countries in the European Union. It has the lowest debt/GDP ratio; the government budget deficit is under control and corruption rates have fallen significantly. The major concerns are related to the current global trend of rising inflation and its effect on the Bulgarian economy. In other words, the government in Sofia is certain to join the ERM in 2024 in accordance with the proposed requirements.

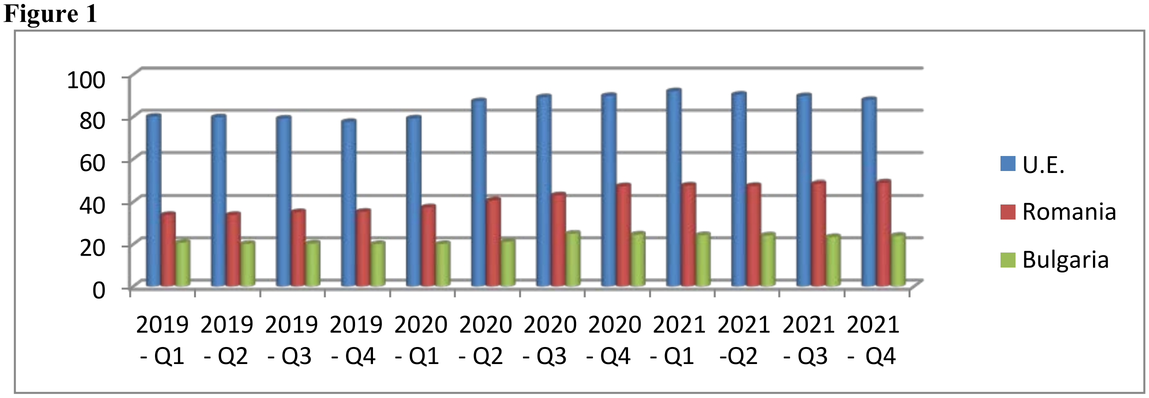
Within the Competitiveness and sustainable development Conference, one of the topics of interest, with applicability at the Romanian level, is presented, namely: Some directions of action in the management of public debt to minimize the risks of a debt crisis in Romania (Milea, C. 2022). Thus, several directions of action in the management of public debt are highlighted to minimize the risks of a debt crisis in Romania, in the domestic and international context.

The analysis considered that the evolution of Romania's total public debt in the period 2015 - 2019 is positive, in the sense of improving sustainability, given that there is a tendency to increase domestic loans (thus reducing the dependence on foreign creditors), the share of debt in foreign currency decreases in the total public debt (reducing the currency risk), the ratio of public debt to GDP is slightly reduced, the importance of medium and long-term debt increases, short-term debt decreases proportionally.

The outbreak of the COVID 19 pandemic required recourse to loans, so the public debt increased against the background of its effects, and the indicators showed significant fluctuations, which required rapid measures and increased vigilance by the authorities, imposing measures to prevent a new, possible , debt crises. There was not, nor is there a universally valid rule for determining a "safe" level of debt. Each country must establish its maximum level based on its own macroeconomic and financial experience, taking into account, in particular, the degree of affordability of the economy.

At the same time, the study reinforces the idea that membership of a monetary union makes a member country more vulnerable to a debt crisis, due to the fact that foreign investors can easily leave the loaned country. Furthermore, it is almost impossible for the country concerned to react through monetary policy. Avoiding a crisis depends entirely on fiscal discipline when a country abandons its autonomous monetary policy.
In other words, each state is responsible for the way it manages the situations that have arisen, in a delicate economic context, ground by socio-economic turmoil; of armed conflict, which does not have a well-defined time horizon and which can give birth to us crisis situations, even of a military nature; by the COVID 19 pandemic, which admittedly does not have or does not have the same "power" anymore, but maybe it is for the moment, due to the nature of the expenses that must be managed as well as possible; of a possible recession, unwanted, but which must be taken into account and perhaps no one is thinking - of a possible new crisis of emigrants, not only at the level of Romania or Bulgaria, but at the level of the entire European community.
The analysis of the studies shows that at the level of the member states of the European Union, which joined in 2007, the economic situation is not a worrying one, although, in some places, things are not going as they should, thus even the least significant developments are surprised, of the macroeconomic indicators, which, as is known, reflect the situation and the economic potential at a given moment.
In other words, the debt level falls within the limits imposed by the Maastricht Treaty, the funds available from financial institutions at European and even global level should create favorable conditions for economic development and better management of the situation/situations existing, and the strategies considered, must enjoy a high level of flexibility, which allows optimal management, on the fly, of some situations, even momentary crises.
Thus, the level of public debt in relation to GDP for the analyzed countries, in the last 3 (three) years, is presented in the following table:

Figure 1

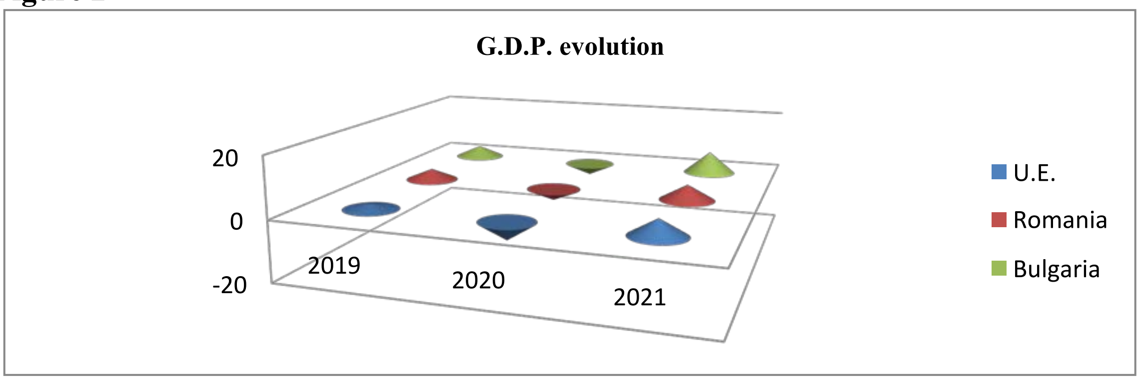


Source: Eurostat

As the data shows, the way of managing the contracted loans falls within certain acceptable limits, although these countries, and especially Romania, must pay more attention to the way of allocating those funds, in those sectors of activity vital, in order to be able to talk about sustainable economic growth in the medium and long term, based on economic policies to support and encourage investors and implicitly investments. The various studies

present thresholds that must be respected, referring, in particular, to those countries - such as Romania and Bulgaria - whose economy is not so well developed, compared to countries such as France, Germany, the Netherlands, etc. In other words, these thresholds present values that fall within the range of 53 - 55% of GDP in order to be able to speak of sustainable development and without overburdening the economy, whose degree of affordability must be very well managed.
The existing balance between the two states is also given by the evolution of other macroeconomic indicators, with pronounced impact. In other words, consumption and investment in recent years have made an important contribution to the development of countries.
As for the evolution of GDP, for example, as a macroeconomic indicator that reflects the state of the economy, the situation is presented according to the table:

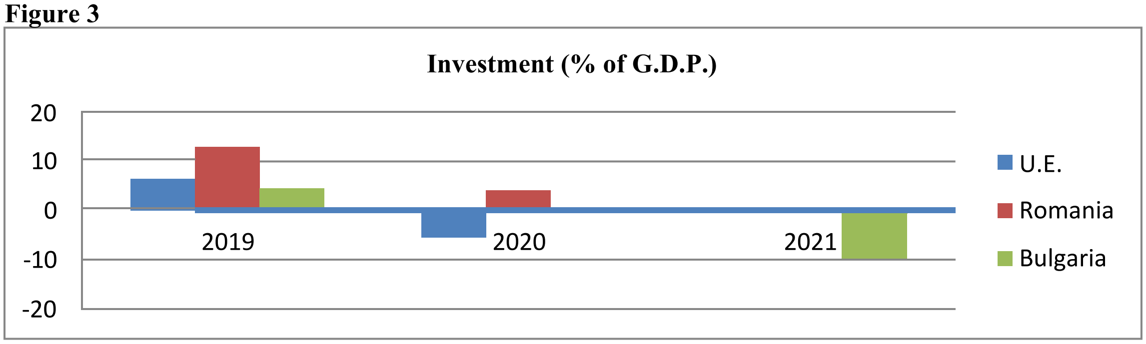
Figure 2



Source: data.OECD

Another relevant indicator that reflects, on the one hand, the evolution of the economy, and on the other, the dynamics of the public debt, is represented by investments, which according to table no. 3, regarding Romania and Bulgaria as member states of the European Union and in relation to it, the situation is as follows:

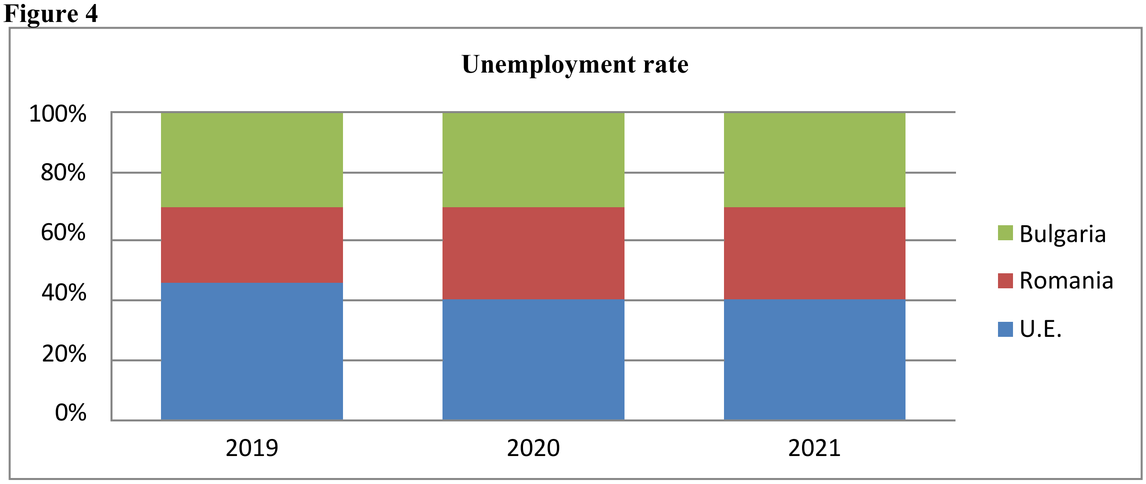
Figure 3



Source: data.OECD

According to the table, it can be seen that in the period leading up to the pandemic crisis, Romania benefited from massive investments, at a level even higher than the European Union average, and this materialized in the construction of administrative buildings / offices and homes, thus facilitating the obtaining of income, it is true at a lower level, but constantly, during the analyzed period. Investments create an environment conducive to development, but they must be supported by firm policies, based on medium and long-term strategies, which on the one hand offer a certain stability to investors, and on the other hand support, through fiscal-budgetary policies that allows the depreciation of investments of any kind and the generation of a certain profit, which can also be reinvested. Another relevant indicator that reflects the dynamics of the public debt is represented by unemployment. The salary theory, according to the yield criterion, states that it is more advantageous for companies, respectively multinational companies, to pay high / high salaries, so that work is a clearly superior alternative to dismissal and at the same time, it will further improve the quality of the results. And in this case, there is a certain state of equilibrium, regarding the countries analyzed, and these data are presented in the following table:

Figure 4

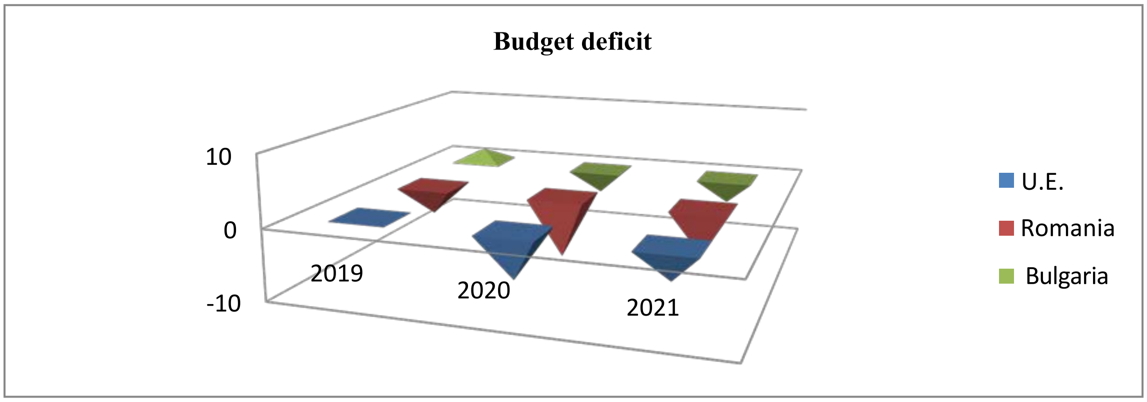


Source: data.worldbank.org

Macroeconomic indicator that largely explains the evolution of the economy with implications for the sustainable development of the analyzed states, is represented by the budget deficit that occurs when a government's expenses exceed receipts.

A budget deficit is of quality only when at least two conditions are met: On the one hand the deficit is fully reflected in investment expenditure and, in particular, in infrastructure development, and on the other hand it is covered with resources financial security, in order not to resort to inflationary monetary issues. I think that it has suffered the most, as a fluctuation, as a result of the socio-economic and political events of recent years, and it creates the premises for future perspectives that place Romania's neighbor at a higher level. The evolution of this indicator is presented in the following table:

Figure 5



Source: Eurostat

With regard to this indicator of overwhelming importance, in order to limit as much as possible the harmful effects of the pandemic collaborated with those of the armed conflict and to be able to continue talking about economic development at the community level, the revision of the fiscal rules was analyzed, so that the provisions of the Stability and Growth Pact, which limit, among other things, the deficit below the threshold of 3% of GDP, and the public debt below 60% of GDP. were suspended when the COVID 19 pandemic began to give countries and their governments a so-called leeway in the fight against the SARS CoV2 virus.

The first results for 2021 and the first semester of 2022 indicate that both the Bulgarian and Romanian economies have returned to growth, so that budget rules could be reintroduced starting this year.

On another note, it should be noted that they will take into account the level of debt already accumulated, the need for sustained investments not only in infrastructure but also in other vital activity sectors, and last but not least, the need for "green energy" in the fight against climate change, why not recognize an aspect, a branch of national interest - if we refer to Romania and P.N.R.R.

In the current existing geopolitical context, social, budgetary and any other expenses should be reviewed, being at the same time consistent with the events that are happening and with the existing difficulties, generated by the Russian-Ukrainian conflict and the need to support the economy as a whole, based on a budget very well anchored in a reality, rather relative than one that generates stability.

In the sense of what has been presented, which has as its starting point the management of public expenses, in order not to affect the level of public debt even more, it must be stated that in the last 10 - 15 years, the economy of the two states has kept the same trend, perhaps with different objectives - only for the time being, which had as their main objective economic growth, as a pillar of sustainable development in the medium and long term, with additional allocations for research and especially innovation. These are considered, in the current political-economic environment, factors and at the same time, assets that, depending on how they will be "used/supported", can represent a concrete way of positive evolution in terms of the economy of the analyzed states.

The economic crisis, characterized by an acute lack of liquidity, as is known, affected both economies quite seriously, and their recovery required a concerted effort on the part of political forces, supported by researchers / scientists and last but not least of funds, refundable / non-refundable from international institutions / bodies, which also provided specialized assistance, showing leniency, flexibility and an accuracy of the data that presented/showed the best way to overcome the given situation. It is true that there were also shortcomings, but precisely these contributed or rather represented points of differentiation in the development of one country, to the detriment of the other, especially through the way in which the authorities knew how to manage the shortcomings that appeared (for example, the period 2016 - 2018 was interpreted somewhat differently by the governments of the two states, for Romania it represented a period in which the premises were negotiated and created for growth, even based on consumption, while for Bulgaria, if there was economic growth, it it was also sprinkled with some shortcomings that had to be corrected over time, with certain repercussions, which otherwise did not, in the end, have such a negative effect on the economy).

If one considers The Annual Report of the Institute for Management and Development /IMD/ from Lausanne /Switzerland, published in May 2015 - at approx. 3 years after the end or at least the limitation of the effects of the financial crisis - it can be said with certainty that Romania was in 47th place, meritorious from the point of view of the competitiveness of the economy, ahead of countries like Bulgaria (55), for example, Hungary (48), Slovenia (49), Greece (50), but overtaken by Slovakia, 46th place, worldwide. This detail/survey shows that Romania has succeeded, it is true with some setbacks and even compromises, to get out of this vortex, showing a real perspective of development, which by the way continued until the outbreak of the COVID 19 pandemic.

Another noted aspect relates to the management of oil products, extraction, distribution, redistribution to the population and companies, which, this time, places Bulgaria ahead of its neighbor (Romania). Regarding derivative products, a certain "equality" can be found, which is reflected in the economy and regarding the evolution of the most important macroeconomic indicators analyzed. Moreover, these, oil, gas, respectively energy, represent, in the current environment, ground by pandemic, conflicts and war, such a sensitive element that a better responsible management can be a destabilizing element - in terms of economic development , which will hardly be able to be rebuilt, to support a growth, be it linear with benefits for companies that will fall again later, but also sensitively on the incomes of the population.

In another way of thinking, culinary/gastronomical, if the economic evolution was analyzed, it can be stated, taking into account the experiences in the field, that our country won and continues to hold supremacy, in relation to Bulgaria, even approaching - still keeping the proportions of another state, with which it borders, namely Hungary. The latter is quite close to the USA. which, as is known, is in the top 5, worldwide, from this analyzed point of view, which after all represents the "salt and pepper" of an economy that is also characterized by a diversity, which must be exploited, placed in the value on a much more representative level.

According to the data and at the same time, the program launched - IncubatorX SME, in 2022, for the period March - November, by B.E.R.D. and Ascendis (training company) I.M.M./ companies, with potential from Romania and neighboring countries interacted, on the one hand, with consultants, whose experience left its mark on the development of the companies they represent, and on the other hand, with successful entrepreneurs, whose business plans , well and realistically penciled, gave promising results - this experience

being beneficial, useful and at the same time constructive, regarding the transformation of ideas into innovative products and services for companies and their representatives.
This approach aimed, among other things, at providing the 3 most important conditions for the creation of new products/services, and these refer to ideation, inspiration and the incubation of ideas. The starting point, in launching this program, was the fact that approx. 0.1 - 0.2 % of small and medium-sized companies in Romania and neighboring countries - in the analyzed case, Bulgaria, create truly new products that enjoy a high degree of pure innovation; because in the end this is the key to the development of any business. Practically, out of the 82 registered companies from countries such as Romania, Croatia, Bulgaria and Serbia - which have also applied, in this field, innovation - 48 of them have been selected to participate, actively, and only 6 have reached the "final" of the program and of these (six) only 3 actually launched new products on the market.
In other words, such programs are useful / essential for the development of an environment, even an entrepreneurial system, which can generate a high added value, capable of providing real support to an economy constrained by various disturbances, sometimes unable to provide viable development solutions on medium and long term. Looking at it from another point of view, innovation, as a solution and pillar of growth, needs support from investors and significant allocations from state budgets to give tangible results both for I.M.M. - urs, with their contribution, as well as for the large supply chains of raw materials and even finished products.
In general, the economies of the European Union states have been constrained, forced to take certain non-compliant decisions and measures, in the current geopolitical context, so that the assumption of responsibility, regarding the decisions taken by political factors becomes a defining element, which gives a even greater weight to the income and expenditure budget that must be drawn up and assumed, much more realistic, connected to everything that happens, able to manage any situation that arises and without significantly affecting the activity of profitable businesses/companies - which in the end also ensures the population's income.
As found in each macroeconomic indicator (inflation, deficit, unemployment, etc.), each factor (deficit financing and public debt) has its own contribution to the sustainable development of a state, so each government is responsible for the policies and measures implemented, because they constitute the basic element/elements and in terms of harmonizing them with the strategies proposed to be implemented at the level of the entire European community, taking into account the financial and socio-political difficulties at the European and world level.

Methodology and data used

The methodological framework aims to use an analysis tool, namely V.A.R. (Vector Autoregression Model), in order to capture the evolution of the variables and their effects on the economies of the analyzed countries, namely: Romania and Bulgaria respectively. The data used have a quarterly frequency, for the reference period 2009 - 2021 and concern the evolutions analyzed both from an economic point of view, as well as their development as member states of the European Union since 2007. In the analysis of the V.A.R model, quarterly data of the public debt, GDP, respectively investments were used, for the mentioned reference period. The data source for public debt is EUROSTAT, and for GDP respectively investment is O.E.C.D. and includes 153 observations.

The case of ROMANIA

After the estimation of the VAR model, it is observed that there is an inverse (-) effect in the evolution of GDP starting from the 2nd trimester. Therefore, a change in GDP by 1 (one) percentage point will attract, over time, a change in the opposite direction, on the one hand, and on the other hand, public debt negatively influences GDP, starting with 1 quarter and positive GDP starting with the 2nd trimester, having the same trend. As for the investments, they have a positive impact on the evolution of the public debt even in the case of both regions, a fact proven by the economic reality. The more that is invested, the more the public debt increases.

GDP = C(1,1)*GDP(-1) + C(1,2)*GDP(-2) + C(1,3)* INVESTMENTS(-1)+ C(1,4)*INVESTMENTS(-2) + C(1,5)* PUBLIC_DEBT(-1)+C(1,6)*PUBLIC_DEBT(-2) + C(1,7)

GDP = - 0.33228637312*GDP(-1) - 0.41226140491*GDP(-2) + 0.13769207420*INVESTMENTS(-1) + 0.00892839853*INVESTMENTS(-2) - 0.15481642306*PUBLIC_DEBT(-1) + 0.150661358261*PUBLIC_DEBT(-2) + 0.0133282184235

From another point of view, regarding the results of the estimation, it can be said that: GDP negatively influences the public debt, but with a lag of 1-2 quarters and at the same time, the public debt positively influences the public debt, but also with a lag of 1 quarter and negatively, but with a lag of 1-2 quarters.

Investments, according to the equation below, have a negative impact on the public debt, an effect contrary to that expected by the economic reality, a fact explained by the inefficient management of resources in order to obtain sustainable economic performances.

PUBLIC_DEBT = C(3,1)*GDP(-1) + C(3,2)*GDP(-2) + C(3,3)*INVESTMENTS(-1) + C(3,4)*INVESTMENTS(-2) + C(3,5)*PUBLIC_DEBT(-1) + C(3,6)*PUBLIC_DEBT(-2) + C(3,7)

PUBLIC_DEBT = - 0.0757091936232*GDP(-1)- 0.370567225524*GDP(-2) - 0.0344477879683*INVESTMENTS(-1) - 0.0530324439845*INVESTMENTS(-2) + 1.04491738776*PUBLIC_DEBT(-1) - 0.0343323693744*PUBLIC_DEBT(-2) + 0.00451255599311

In other words, it can also be stated that: GDP negatively influences investments, but with a delay of 1-2 quarters, and this is also due to a less efficient management of resources.

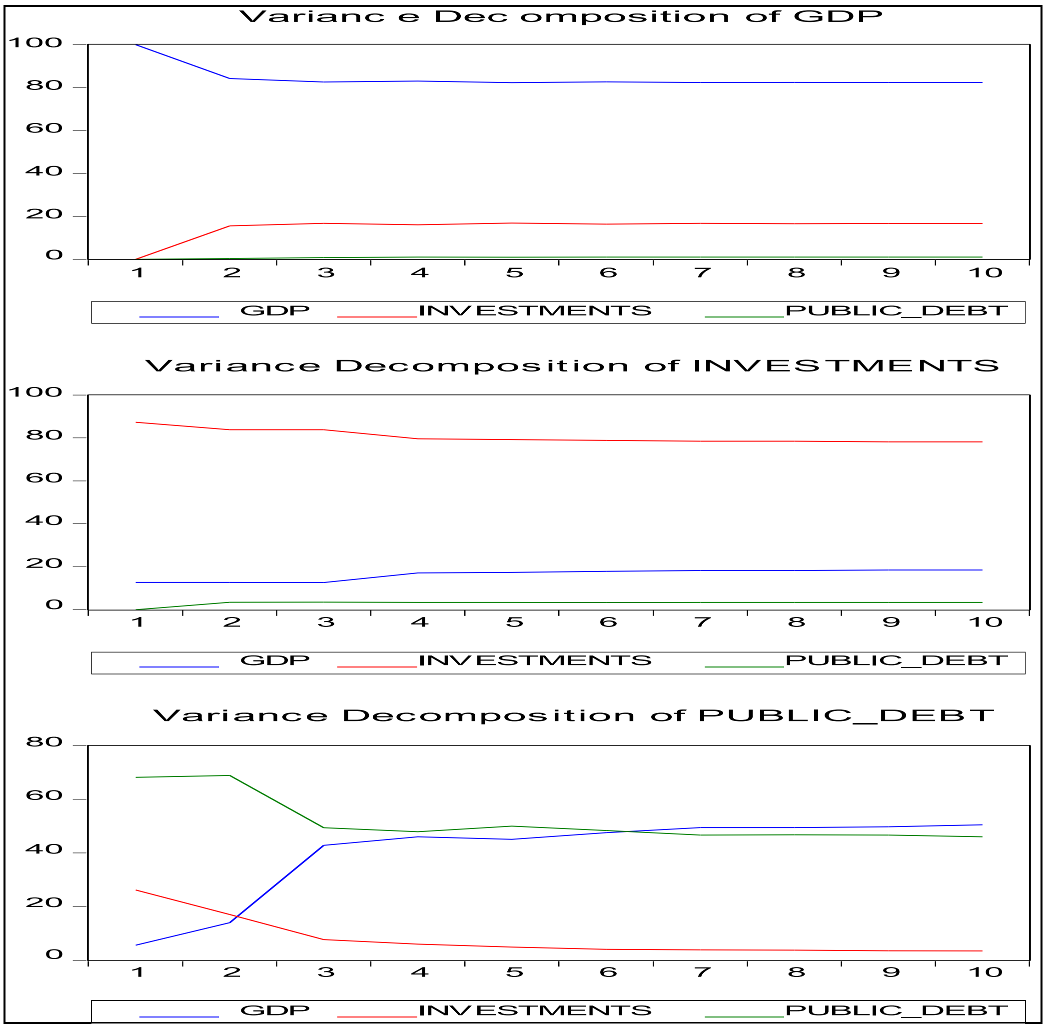
At the same time, it is found that investments have an inertia effect in their evolution, in the case of both lags and last but not least, it is shown that public debt negatively influences investments, with a delay of 1 quarter and also a positive influence is observed, but with a delay of 2 quarters, a fact validated by the economic reality, in the case of both situations, because, on the one hand, investments can attract an increase in the debt, but on the other hand, an unsustainable investment can be the cause of the growing public debt, which is not necessarily desirable, for a prosperous economy, according to the following equation:

INVESTMENTS = C(2,1)*GDP(-1) + C(2,2)*GDP(-2) + C(2,3)*INVESTMENTS(-1) + C(2,4)*INVESTMENTS(-2) + C(2,5)*PUBLIC_DEBT(-1) + C(2,6)*PUBLIC_DEBT(-2) + C(2,7)

INVESTMENTS = - 0.478376915189*GDP(-1) - 0.38850744445*GDP(-2) - 0.137250999381*INVESTMENTS(-1) + 0.0585078418731*INVESTMENTS(-2) - 1.70694217027*PUBLIC_DEBT(-1) + 1.800292337*PUBLIC_DEBT(-2) - 0.0156143760096

In other words, a change in the investment indicator will be effectively reflected in its evolution and dynamics, only after 1 - 2 quarters.

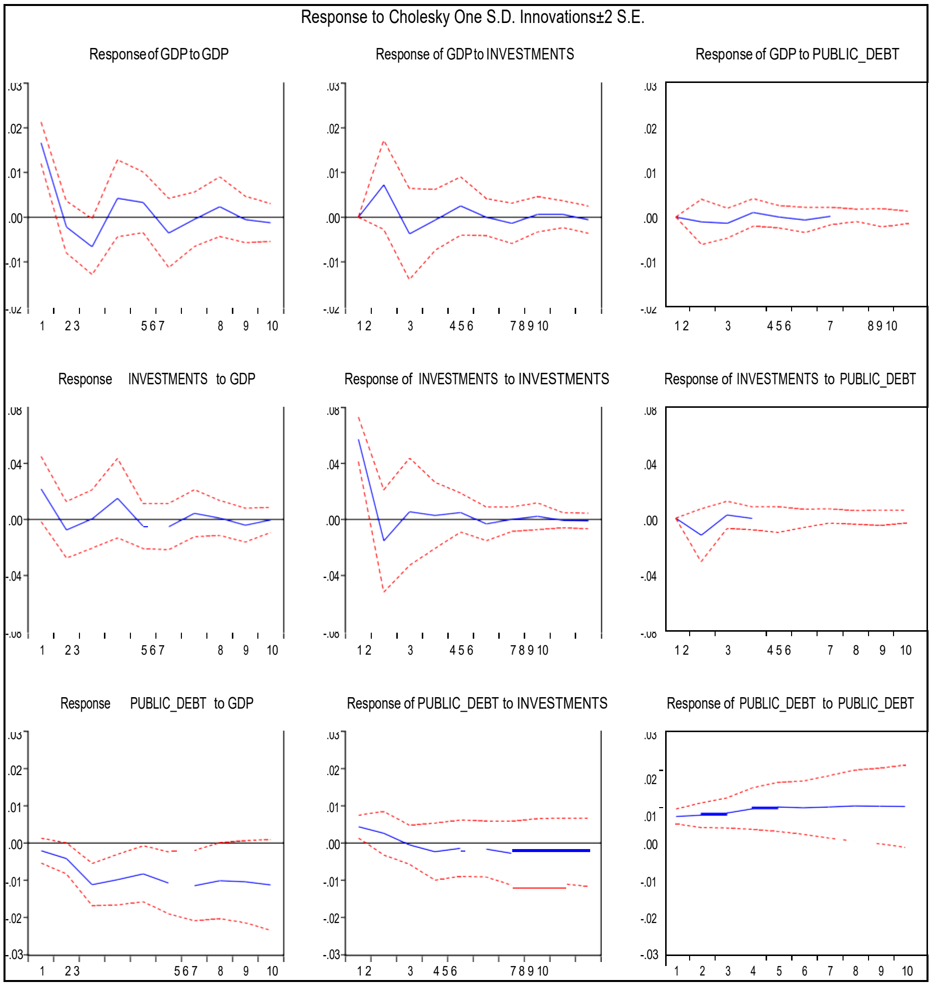
Figure 6 Variance decomposition (Romania)



Source: author`s calculations, with Eviews software

The analysis of the "variance decomposition" indicates that, on the one hand, the public debt variance is explained in proportion to approx. 15% of the GDP variation in the first two quarters, and starting from the third quarter the proportion increases to 40%. On the other hand, the variation of the public debt is explained by its own variation in the proportion of approx. 75% in the first two quarters and starting from the third quarter the proportion drops to 55%. Regarding investments, their evolution influences the public debt, in proportion to approx. 25-15% in the first 2-3 quarters, the percentage decreasing considerably, with the passage of time.

Figure 7 Impulse response functions



Source: author`s calculations, with Eviews software

According to the graphs above, the following can be concluded:
There is an inertia effect in the evolution of GDP (first line);
There is an intensification of investments when the GDP increases, this is also due to the allocation of additional funds, when the economic evolution allows and it is desired, even in linear conditions, to have an announced continuity in this regard;
An adverse effect is observed in terms of the evolution of the public debt when changing the GDP. In other words, an increase in GDP leads to a decrease in public debt, a fact also validated in economic reality, but this time too the period did not have the desired continuity, but rather was a fluctuation.

The case of BULGARIA

Following the estimation of the VAR model above, it can be stated that, on the one hand, there is an inertia effect in the evolution of GDP starting from the 2nd quarter. Therefore, a change in the GDP by 1 percentage point will attract, in time, a change in the same direction, and on the other hand, the public debt positively influences the GDP, starting

with the 1st quarter (having same trend) and negative GDP - starting with the 2nd quarter, continuing its trend.
Moreover, it can be said that investments also have a positive impact on the evolution of the public debt, starting with the first period, and a negative one, with a delay of 2 lags.
Thus, the more one invests, two situations are taken into account in the economic reality:
- Public debt increases, but loans are used constructively;
- If the amortization period is fulfilled, the long-term effect on the economy also becomes positive.

GDP = C(1,1)*GDP(-1) + C(1,2)*GDP(-2) + C(1,3)*INVESTMENTS(-1) + C(1,4)*INVESTMENTS(-2) + C(1,5)*PUBLIC_DEBT(-1) + C(1,6)*PUBLIC_DEBT(-2) + C(1,7)

GDP = 0.812064389204*GDP(-1) + 0.285266671619*GDP(-2) + 0.143350495963*INVESTMENTS(-1) - 0.111351411139*INVESTMENTS(-2) + 0.251631122016*PUBLIC_DEBT(-1) - 0.229437039096*PUBLIC_DEBT(-2) - 0.0955689822801

On another note, the following variants should also be emphasized, which according to the results can be interpreted as follows: GDP negatively influences the public debt, in the first quarter, and positively with 2 quarters; and public debt positively influences public debt, but still with a lag of 1 quarter and negatively, but with two quarters.
At the same time, the investments have a negative impact, on the public debt, only in the first quarter, an effect contrary to that expected by the economic reality, a fact explained by the inefficient management of resources in order to obtain sustainable and positive economic performances, starting with the second quarter, according to the following equation:

PUBLIC_DEBT = C(3,1)*GDP(-1) + C(3,2)*GDP(-2) + C(3,3)*INVESTMENTS(-1) + C(3,4)*INVESTMENTS(-2) + C(3,5)*PUBLIC_DEBT(-1) + C(3,6)*PUBLIC_DEBT(-2) + C(3,7)

PUBLIC_DEBT = - 0.538931094403*GDP(-1) + 0.529442670262*GDP(-2) - 0.168585557182*INVESTMENTS(-1) + 0.202319026485*INVESTMENTS(-2) + 1.3734615776*PUBLIC_DEBT(-1) - 0.417145233034*PUBLIC_DEBT(-2) + 0.024853994093

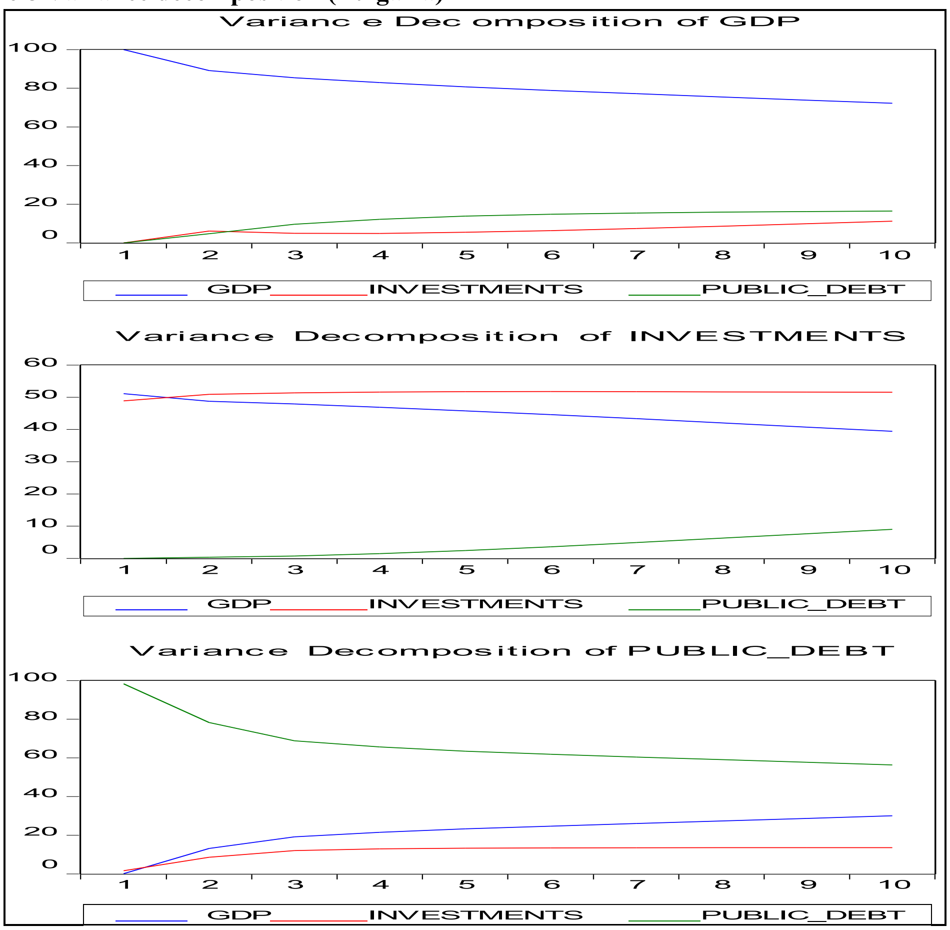
According to another equation, reproduced below, it is found, on the one hand, that GDP negatively influences the public debt, in the first quarter, and positively with 2 quarters, and on the other hand, investments have an inertia effect in their evolution, in the case of both lags. As for the public debt, it positively influences investments with a delay of 1 quarter and at the same time, a negative influence is also observed, but with a delay of 2 quarters.
The economic reality of recent years, even decades, surprises by the way the various analyzed indicators are compared. In other words, this proves, on the one hand, that investments can attract an increase in debt, but on the other hand, a less sustainable investment can be the cause of a decreasing public debt, which is not necessarily desirable, from the point of view of the investments made, for a prosperous economy. These, the investments must not necessarily cover the "rates" on the contracted loans, but rather facilitate economic development so that the debt and implicitly the maturities no longer constitute a problem of national or even regional interest.

INVESTMENTS = C(2,1)*GDP(-1) + C(2,2)*GDP(-2) + C(2,3)*INVESTMENTS(-1) + C(2,4)*INVESTMENTS(-2) + C(2,5)*PUBLIC_DEBT(-1) + C(2,6)*PUBLIC_DEBT(-2) + C(2,7)

INVESTMENTS = - 0.37045986999*GDP(-1) + 0.383644474994*GDP(-2) + 0.780981021449*INVESTMENTS(-1) + 0.31105673060*INVESTMENTS(-2) + 0.221206362258*PUBLIC_DEBT(-1) - 0.0529467352726*PUBLIC_DEBT(-2) - 0.0542782932593

In other words, a change in the investment indicator will be effectively reflected in its evolution and dynamics, only after 1 - 2 quarters.

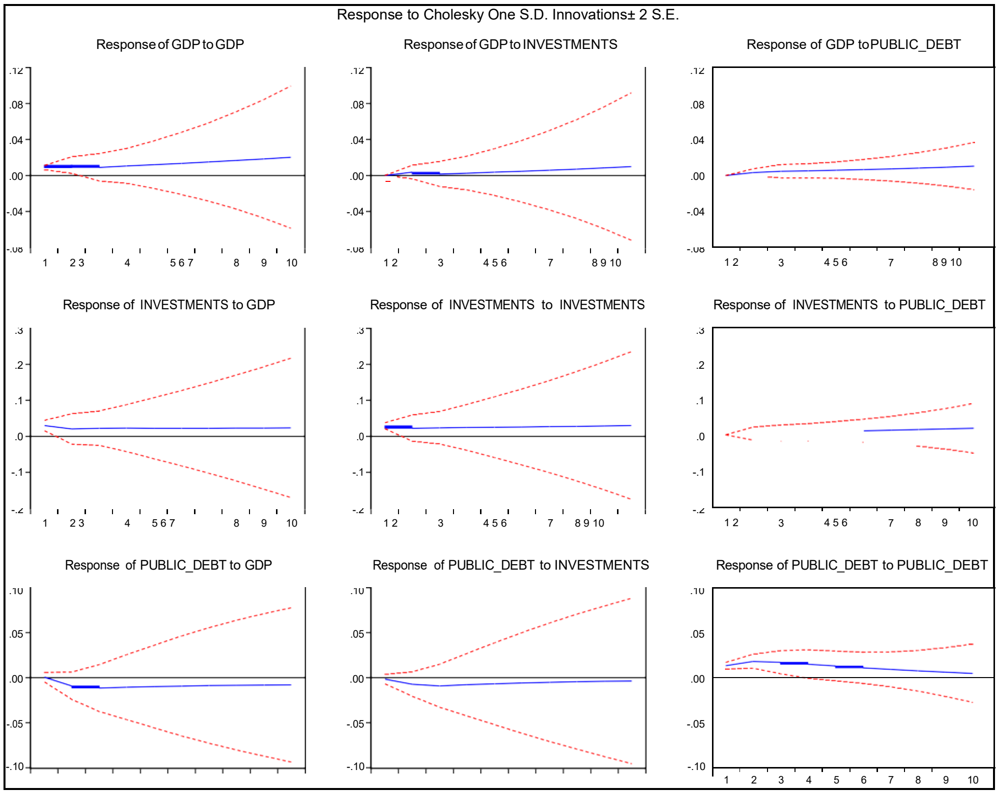
Figure 8 Variance decomposition (Bulgaria)



Source: author`s calculations, with Eviewssoftware

The analysis of the "variance decomposition" indicates that, on the one hand, the public debt variance is explained in proportion to approx. 20% of the GDP variation in the first two quarters, and starting from the third quarter the proportion increases to 35-40%. On the other hand, the variation of the public debt is explained by its own variation in the proportion of approx. 80% in the first two quarters, and starting from the third quarter the proportion drops to 55%. Regarding investments, their evolution influences the public debt, in a proportion of approximately 15% in the first 3 quarters, the trend being maintained until the end of the analyzed period.

Figure 9 Impulse response functions (Bulgaria)



Source: author`s calculations, with Eviews software

According to the graphs above, the following can be concluded:

There is an effect of inertia in the evolution of GDP and public debt, a fact reflected, especially by the way politics and the governments manage the funds, maturities and revenues obtained at the national level, with a special emphasis on their redistribution in the territory.

There is a constant trend regarding the evolution of investments, which is pleasing, on the one hand, and on the other hand, due to the dynamics of events, they (investments) are unpredictable, and investors, more recently, are looking for profit, not equally significant perhaps, but certainly in the short and medium term.

There is an opposite effect regarding the evolution of the public debt when changing the GDP. Thus, an increase in the GDP determines the decrease of the public debt, as well as a boost in investments, a fact also validated in the economic reality, which is wanted/wanted to be carried out over a longer period of time.

The period under analysis was marked by events with a particular impact on economic development as a whole, whether we are talking about the acute lack of liquidity and implicitly the global financial crisis (2008 - 2012), or whether we are referring to social events with a strong impact on economies that had recovered from the mentioned crisis; to the turbulence in terms of the policies and measures instituted in the period 2016 - 2018, the case of Bulgaria, whether we refer to the COVID 19 pandemic, the impact of which is still not fully known, but which made many victims among people of the age of III - a.

The strategies thought out, based on solid analyses, sought to mitigate, as much as possible, the impact of the events mentioned above. Investments were a defining element and the way these funds, attracted or granted by investors/financial institutions, were fruitful made the economy and then the incomes of the population not suffer even more.
It is true that they must be encouraged, so that on the one hand they lead to the development of infrastructure, technology, innovation, and on the other hand - taking into account the estimated amortization period - to generate additional income and even profit, whether it was reinvested or not. The way these measures were implemented was also reflected in the evolution of the macroeconomic indicators analyzed, used in estimates, forecasts that required/imposed updates and decisions taken, which most of the time turned out to be taken under huge pressure, if considers the periods 2008 - 2012, respectively 2020 - 2022.

Results and proposals

The mediatized globalization, as a phenomenon, through its effects, should generate, among other things, a certain homogeneity of the measures, policies instituted at the regional and even community level. The political factor and the misunderstandings that followed led to the outbreak of a conflict that affects not only the economies of the countries under analysis, but also the other countries in Europe and even more. Moreover, it is considered that the measures regarding social, cultural and political cohesion should be received in the coming years, in order to generate much-needed stability in the area.
Also, its must be able to implement those directives aimed at good management of the funds that would come from specialized institutions, able to further encourage economic activity through diversification. Moreover, at the same time it is expected to increase the quality of the resulting products, which would make them much more competitive, on a dynamic European market - where a very important aspect , worthy of consideration concerns the allocation, with priority of funds intended for research and especially innovation.
Reimbursable / non-reimbursable funds intended for development, innovation, education / research, are allocated either through P.N.R.R., which must be implemented with priority, or through RePowerEu which refers to a problem that is as current as it is necessary - in all this amalgam of events - what concerns the field of energy; moreover, an area of interest for both manufacturing companies and the population.
In other words, the achievement of any proposed objectives takes into account the compliance and/or successful implementation of the following aspects of interest, at the level of the region and countries studied, as follows:
Rigorous management implementation in terms of managing and allocating available funds.
Development of mechanisms for supervision and control of these funds, originating from international institutions.
Reducing, as far as possible, the harmful effects generated by the fluctuation of macroeconomic indicators.
Measures, with a high degree of flexibility / adaptability, useful and so necessary to support the economic environment.
Decision-making transparency, at the level of institutions, of the state and even their depoliticization.

Priority support of research-innovation projects capable of producing long-term beneficial effects, both for companies and for the population.
Fruiting, to the maximum, of the agricultural potential, taking into account the supply difficulties, from the conflict zone.
Improving the way of communication/relationship with citizens etc.

Conclusions

The reality in which the economic, socio-cultural, but also political activity is carried out, as could be observed, was not conducive to sustainable development and, in this sense, at the level of the European Union and implicitly of the analyzed countries, those measures were accepted, based on some analyzes developed by various specialists, which mitigated the unwanted effects of the events rather than generating viable solutions for growth, harmonious development in all its components. Thus, how all these ideas, plans and strategies will be implemented, with an applicability, not only in the short term, but in the medium and long term. Its will make a difference in terms of drawing up future strategies for economic growth and development.
These aim, among other things, at the introduction of the single currency both at the level of Bulgaria (predicted for 2024) and at the level of Romania, the acceptance, by vote as a state/(s) members of the Schengen area, the reduction of the level of public debt - through those strategies / viable measures with a rather long-term vision. And not least, another condition is improving the outlook from the country rating point of view, which has a most direct effect on investors and their decisions to invest, especially in those vital sectors of the state, able of providing economic stability, for sustainable development. Of course, investments are very important, as the study in question shows, but the way they are capitalized can make the difference between an economy with real growth prospects and an economy that only knows how to cover, for the most part, its expenses. Thus, it is becoming more and more important how the government succeeds or will succeed in balancing the balance between revenues and expenses, on the one hand in order to no longer have a deficit greater than 3% of GDP, and on the other hand, for to make even better use of the opportunities that have arisen, also given by European funds, from the financial institutions.
All these considerations, which involve the main macroeconomic indicators analyzed, create a real perspective of growth, which is desired to be in the medium and long term, and in this environment, characterized by turmoil, conflicts and pandemics, the ability to adapt economies to situations becomes paramount . ivited, what compels, the decisive factors for decisions/measures that must be supported by much more rigorous analyses, based on an accuracy and stationarity of data, simultaneously with the assumption of decisions.

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