BUDGET DEFICITS AND LABOUR MARKET DYNAMICS: AN INVESTIGATION

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Abstract:

The paper addresses **the concept of budget deficits and labour market dynamics** to delve the complicated relationship between them. The research seeks to elucidate how **government budget deficits, driven by fiscal policies, reverberate through the labour market landscape.** It examines their multifaceted impact on **employment levels, wage growth and labour force participation rates**. A focal point of this work is to examine how **government spending, financed by budget deficits, influences job creation or job losses in different economic sectors**. It aims to distinguish between **sectors most sensitive to deficits** and those where **fiscal deficits can have an incentive or dampening effect on employment opportunities.** Research aims to assess **the effectiveness of specific employment policies** aimed at mitigating the negative repercussions of budget deficits on the labour market.

Keywords: budget deficits, labour market, employment, government spending, employment policies

JEL classification: *E24, H62, J68*

Introduction

The argument for choosing the theme consist in the need for stability and predictability that continues to be present in Romania's economy in a context quite troubled by multiple crises. How can the repercussions of budget deficits on the Romanian labour market be managed? This is one of the components of the set of questions regarding the sustainability of economic policies and the evolution of the national economy, a topical topic in a heated debate both in the academic environment and in that of public policy makers.

The assessment of the budget deficit involves the analysis of the structure of government expenditures and revenues, as well as the impact on macroeconomic indicators specific to an economy. Deficit management is a central concern for fiscal policy, and decisions taken in this regard can influence the direction and extent of the country's economic development.

The concept of budget deficit is essential within the economy and public finances, having significant implications for macroeconomic stability because traditionally, the budget deficit is financed by loans, which leads to an increase in government debt. Excessive public debt can negatively affect both the government's ability to respond to unexpected financial challenges and economic stability, raising concerns about fiscal and monetary sustainability.

An impact of budget and macroeconomic deficits may be felt in the labour market, with possible effects on unemployment and employment levels. The state budget can influence employment policy and investments in programs to stimulate the labour market.

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Labour market dynamics are reflected by changes and developments taking place in the labour market over a given period of time. Analysis of labour market dynamics involves studying influences on labour supply and demand, adapting employees' skills to technological and economic changes, and assessing the impact of macroeconomic factors on employment. It is also necessary to analyse trends in wage developments, changes in employment structure, and the effects of government policies on the labour market.

A scientific approach investigates factors such as employment, unemployment, mobility and other aspects of the relationship between employers and employees drawing on empirical research, economic statistics and economic models to understand the complex dynamics of industrial relations and to develop effective strategies for managing the labour market in the context of a constantly changing economy.

Description of the problem

As the literature shows, in-depth investigation of the complicated relationship between budget deficits, economic policies and the labour market requires a two-way approach, as shown in Figure no. 1.

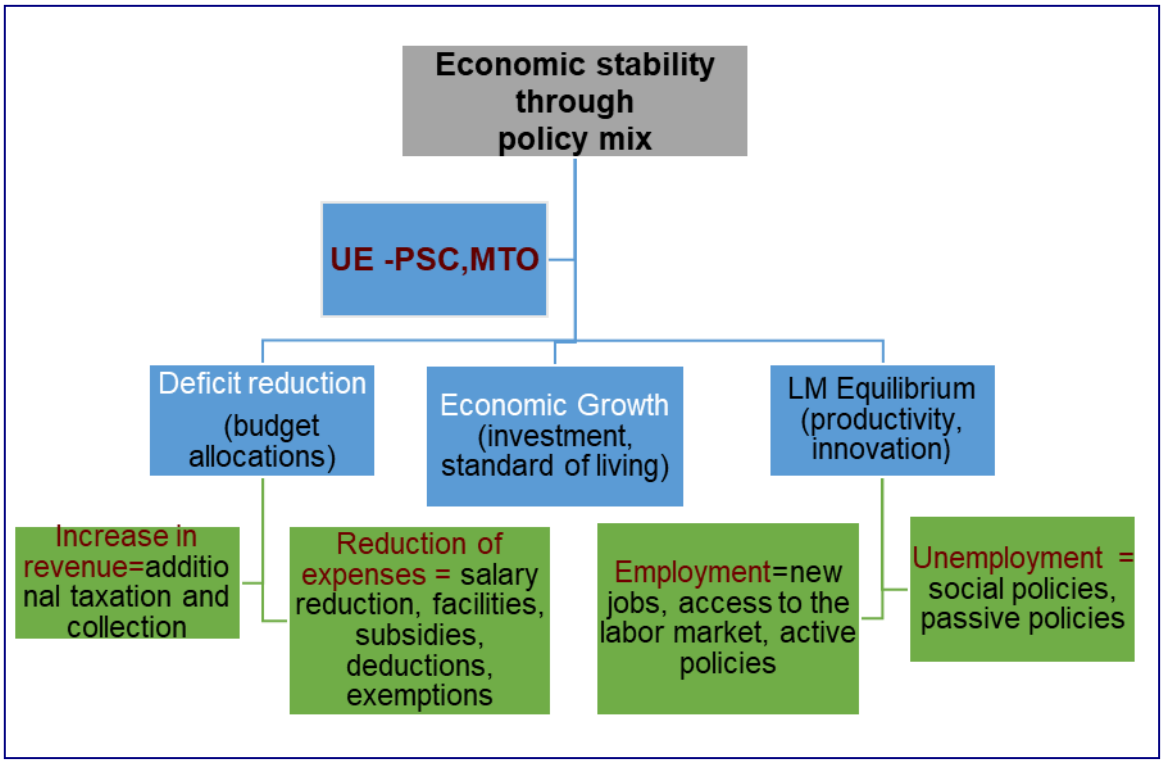

Figure 1 Analytical framework of the investigation

Source: author

The 2 meanings contained in figure 1:

1. Budget deficit and impact on the labour market:

    1.1. Economic policies and employment

Fiscal measures taken to manage the deficit may include tax cuts or increases and public spending. These, in turn, can influence employment levels and job distribution in key sectors of the economy, as well as labour market flexibility.

    1.2. Effects on investment in human capital

Budget deficits can affect budget allocations to education and training. A reduction in investment in human capital may lead to a decrease in the qualifications available on the labour market, which may affect the competitiveness of the workforce and adaptability to technological change.

2. Labour market dynamics and implications for budget deficits

2.1 Innovation and productivity

Changes in demand for skills and technology can affect the overall productivity of the economy. An increase in productivity can lead to higher tax revenues, thereby reducing the budget deficit, but it can also affect certain segments of the workforce that do not adapt quickly to technological change.

2.2 Demographic change and social security: An ageing population can put pressure on social security systems such as pensions and healthcare. These changes may contribute to increased government spending, causing the budget deficit to increase.

A theoretical and empirical perspective on some of these aspects in Romania is presented in the content of this article

Methodology and data

The methodology used in carrying out the study consisted of combining several types of analysis:

• theoretical, logical analysis on the concepts of economic growth, resources, capital, wages, public budget, budget deficit, macroeconomic imbalance, economic shocks, etc. from the specialized literature, the result being a literature magazine, in a specific structure.

• statistical analysis and interpretation of the economic significance of statistical indicators specific to the national public budget, the system of national accounts (SNA), documents and analyses on the perspective of the national economy in the European and global context, the National Recovery and Resilience Plan of Romania (PNRR) approved by the EU Council, the opinions of the Fiscal Council, etc. in order to synthesize several proposals for measures.

The statistical data used are from primary sources or compilations made either by international organizations (ILO Department of Statistics (ILOSTAT), Organization for Economic Cooperation and Development (OECD), Statistical Office of the European Union (Eurostat), World Bank (WB), International Monetary Fund (IMF), National Institute of Statistics (INS), National Bank of Romania (NBR)) or own. The institutional responsibilities in developing and reporting to the European Commission the Notification of government deficit and debt under the Excessive Deficit Procedure were established by the Cooperation Protocol on the development of the National System for Government Finance Statistics, concluded between the Ministry of Finance, the National Institute of Statistics (with the role of coordinator at national level), the National Bank of Romania and the National Prognosis Commission, so some data has been recalculated as required.

Results

A brief literature review is useful because it provides an overview of existing studies and the different conclusions they have drawn, highlighting the importance of empirical analysis to better understand the evolution of economic factors, the relationship between imbalances (budgetary and labour market), and mutual impact.

Relevant theories – short literature review

In recent years, especially after the COVID_19 pandemic and under the influence of the multiple crises that followed, probably a large number of opinions, reports, studies have been written addressing the concepts included in the research of this topic, but, in general, the academic environment agrees that the field is still very fertile and topical.

To explain the steady state or long-term growth of an economy, most often measured by percentage increase in national income or by a measure of living standards, quality of life, well-being of the population or a composite index such as HDI (Human Development Index), we have at our disposal

a number of theories of economic growth or factors of economic growth. The same schools of thought also opine on the effects of the budget deficit on economic growth and development.

The classical theory of economics, which had roots in the works of economists such as Turgot, A.P.J. (1766), A. Smith (1776), and Mill, J. St. (1848), initiated significant ideas about the factors of economic growth, namely what we call traditional factors of economic growth. Many recent works revalue their established texts because the principles enunciated seem to remain topical (Turgot – inequality in the division of property, Smith – personal interests, capital – form of wealth and power, Rousseau, Sen – distribution justice, Keynes – macroeconomic issues).

Since the beginning of the classical economy, capital has been identified as having the role of bringing profit. Turgot, even before Adam Smith, identifies 5 methods of using this in this regard: "i) acquisition of land..., ii) placement in agricultural activities, iii) placement in manufacturing activities, iv) placement in commercial activities; (v) the granting of loans at interest to those who wish them.' Turgot, A.P.J. (1766, pp. 103-104).

Mill, J.S. (1848) summarizes the works of his predecessors and the few principles underlying classical theory: i) the existence of perfect competition; ii) labour market equilibrium, which denies the possibility of unemployment; iii) price flexibility (implicitly wages) does not produce inflation; iv) saving (interest rate on savings) supports investment; v) imbalances of any kind are self-regulated without state intervention (without public policies); vi) Economic freedom is vital for the development of production and economic growth. The future of the working class is conditioned by a relationship of equity and morality between employees and employers at the current level of progress and equality between social classes.

William Petty (1662; 1690), pioneer of scientific knowledge in economics, captures qualitative but especially quantitative relationships between two factors of production, labour and land, capital being from his point of view an accumulated labour. Moreover, he is also concerned with the importance of labour for economic growth and speaks out against non-productive activities, the value of goods being given by the labour time used to produce them. Petty, W. refers to fair taxation solutions, necessary to increase national wealth, distributed proportionately, but to a sufficient extent for the state to be able to carry out a series of public expenditures such as those for education, infrastructure and helping the needy, arguing that public works can control and reduce unemployment (proving to be Keynes's precursor), thus laying the foundations for a fiscal policy. Let the tax never be so great, if it is proportional to all, then no one suffers the loss of any wealth by it," Petty argues (1662).

Some classical economists are convinced of the importance and benefits of freedom, including freedom of labour, calling it "the first form of property, sacred and imprescriptible" (Turgot, AP.J. 1875). Turgot A.RJ presents in a letter to King Louis XVI a government program with 3 objectives, which is surprisingly current even for our society and economy.

"No bankruptcy, neither accepted nor disguised by forced cuts;

No tax increases: the reason lies in the situation of the people and, moreover, in the soul of Your Majesty;

No loans, because any loan always reduces the size of free income, as it leads, after a while, either to bankruptcy or to increased taxes. Loans are made only in peacetime to liquidate old debts or to repay other loans made on more onerous terms.

For these three objectives to be met, there is only one means, which is to reduce expenditure below revenue...

We wonder where exactly we need to cut, and every authorising officer argues that almost all private expenditure is indispensable. They can provide very solid reasons; But since there is no one who can do the impossible, all these reasons must give way to the absolute necessity of saving..." (Turgot, AP.J. 1874)

Ricardo (1817), cuts between value and wealth, emphasizing that value is the result of labour and wealth alone, while wealth sums up the values of use. David Ricardo, assuming full employment of resources, argues that the budget deficit increases current consumption as individuals transfer taxes to future generations. To keep their consumption patterns stable, taxpayers will reduce consumption

and increase their savings to offset the cost of this future tax increase. An increase in savings will lead to lower consumption and prevent interest rates from rising. This will tend to offset the macroeconomic effects of increased government spending. Thus, government deficit expenditure is equivalent to current tax expenditure, which is known as "Ricardian equivalence."

Ricardo's theory postulates that deficits are not determined by any macroeconomic factors, nor do they precipitate any long-term macroeconomic consequences (Seater, 1993).

Barro (1979) completed David Ricardo's model by adding requirements so that this rate (tax/debt ratio) does not produce the stated effects. His hypotheses refined the initial model and implied: an intergenerational altruism, families passing from generation to generation their accumulated wealth in the form of inheritance; markets are perfect; the government consumption pattern should not change. This theorem starts from the assumption that the government consumption model assumes only good, justified and correctly allocated spending, and the current account deficit and the budget are not interdependent. Most critics of this theory have argued that the assumptions are unrealistic about the functioning of markets, the ability of individuals to save or borrow, and their willingness to save in order to pay higher future taxes. Barro, later (Barro, 1989) remarks on Ricardian equivalence that it inadvertently assumes full employment, which is contrary to standard Keynesian theory.

J.M. Keynes, interested in linking the use of available resources to economic growth, as well as employment and unemployment, questions full employment. Unemployment and liquidity constraints are fundamental attributes of Keynesian theory.

Keynesian doctrine, although based on criticism of the "invisible hand" and other classical theories, supports the principles of a free-market economy and capitalism, with the conviction that state intervention in the economy is a preferable solution to previous approaches (laissez-faire) because:

- there is a permanent solvent demand not satisfied by the growing aggregate supply, which has undesirable effects on factors of production, including labour;

- the supply-demand balance can be restored only to a full use of available resources, because this would mean a long and expensive process, but also in conditions of saving to the detriment of consumption; The saving-consumption-investment ratio can be decisive for economic growth.

With regard to budget deficits, Keynes considered that in times of economic crisis the accumulation of budget deficits was justified. His argument was that through increased public spending, the government can stimulate growth and employment, which will eventually lead to an increase in tax revenues and a return to budget balance in the future. This concept is known as a "fiscal multiplier," which describes how government spending can have a greater impact on output and employment than its direct value.

The main criticisms of this Keynesian theory are for its assumptions about not achieving market failures in environments where government policy interacts with factors that generate market failures (Lucas 1973; Yotsuzuka 1987)

Diamond (1965) provided the first theoretical insights into the neoclassical paradigm of budget deficit, showing that persistent budget deficits exclude the accumulation of private capital by decreasing the capital/labour ratio. It could also be the case that budget deficits arise from current account deficits, in what has come to be known as the double divergence hypothesis (Kim and Roubini 2008). Bernheim (1989) shows that in the model of neoclassical theory, budget deficits increase lifetime consumption, reduce the saving rate, raise interest rates, and exclude private investment.

Minsky, H. (2008) An alternative analysis to Keynes through the two-price system (for current output and assets) and lender of last resort. It disapproves of state aid because it encourages unemployment and supports inflation. Minsky used Kalecki's equation for the proposed reform agenda, which concerns the Big State, a balanced budget, an employment strategy and tax reform.

Empirical studies tend to focus on the effects of deficits on some macroeconomic variables, with less focus on the causes of the deficit. Maltritz and Wüste (2015) used panel data methods to analyse the determinants of the primary budget balance in a group of 27 EU countries. While they were mostly interested in discovering the importance of fscale rules, fscale councils, governance, and the

impact of electoral pressures, they also controlled for other macroeconomic variables that included debt, GDP growth, and the unemployment rate.

They find that higher debt improves budget balance and reduces deficits. They also find that deficit spending is higher for higher unemployment rates and in election years. Moreover, they show that the existence of fiscal rules significantly reduces deficits. However, they do not find significant effects of GDP growth, bond yields, and political stance on the budget balance.

Roubini and Sachs (1989a, b) used time series and descriptive analyses to examine trends and developments in government size and budget deficits in OECD economies. They show that the increase in budget deficits in the early 1970s was associated with a slowdown in production growth. In addition, they also showed that much of the change in budget deficits can be explained by cycles, factors, including unemployment, and countries' political and economic characteristics. They concluded that reducing budget deficits would require building political consensus, at least among the ruling government coalitions.

In Romania, Georgescu, F. (2018), "Capital in post-communist Romania" Bases the work from a theoretical point of view on Pareto's optimum and general equilibrium, An analysis and interpretation of Romanian statistics considering the relationship between capital and labour factors, expression of the relationship effectiveness – equity. He argues that, in Romania:

- the state has benefited capital and weakened the bargaining power of labour

- instead of "making work more flexible" there was precariousness of work and consolidation of capital power

- labour income is highly polarised

- Since 2005, social disparities have widened significantly.

- the evolution of the wage-to-GDP ratio is declining

- Tax policy is an essential lever to ensure a sustainable balance between remuneration of labour and capital, in particular through progressive taxation of overall income.

- points out that the level of tax revenues and total budget revenues is very low in Romania.

EU fiscal rules, including the Stability and Growth Pact, set limits on budget deficits and public debt levels for member states. Compliance with these rules is a central concern of economic policies.

Under the Maastricht Treaty of the European Union, Member States are bound by budgetary discipline by fulfilling two criteria: a *deficit of no more than 3% of GDP* and a debt not exceeding 60% of GDP. These benchmarks are based on concepts defined in the methodology of the European System of National and Regional Accounts in the Community (ESA) 2010 edition.

Analysis and interpretation of economic indicators

For reasons of economy of the published work, a series of statistical data that were the basis for obtaining the results of the investigation are presented in Annex 1 for budget deficits and Annex 2 for labour market.

Budget deficits underline the importance of prudent management of public finances and careful assessment of the consequences of fiscal policy on the economy.

In Romania, progress towards fiscal consolidation has been made since 2013 and has been found, in particular, in the favourable adjustment of the conventional balance sheet, a situation that is maintained until the end of 2018. However, an important contribution to this favourable adjustment was the reduction in investment expenditure.

Also, in 2018 and 2019 there were unfavourable situations, amid the simultaneous implementation of legislative changes[12], with incidences on the increase in expenditures, and fiscal relaxation[13], with effects on the reduction of tax revenues, a situation that progressively accentuated the deficit.

The excessive deterioration of the conventional balance sheet, reaching -4.64% of GDP, in 2019, led to the opening of an excessive deficit procedure for Romania, whose actions were suspended, along with other fiscal rules, in 2020 under the impact of the economic crisis generated by the health crisis caused by the COVID-19 pandemic. The general escape clause remained active in 2021 as fiscal sustainability risks could not be removed due to the adverse evolution of the pandemic and its socio-economic consequences. The EC recommendation aimed to ensure that Member States avoid introducing measures with a permanent negative impact on budget balances. Throughout 2021, uncertainty prevailed regarding the evolution of the pandemic, so that the measures were adapted to the specific situation of the country and, by extending the alert states, some temporary actions became continuous.

The difficulties of the third sub-period 2020-2022 put a great pressure on the resources needed for the public budget, requiring reconsiderations of national fiscal policy.

Romania has adopted budgetary measures to strengthen the capacity of its health system, contain the pandemic and provide social assistance to citizens and businesses, especially to the most affected sectors, which are included in the 2020 Convergence Programme. In 2021, attention was focused on the National Recovery and Resilience Program under the umbrella of the Recovery and Resilience Facility, It is relevant that measures to combat the negative economic effects generated by the COVID-19 pandemic continue, generating an estimated cost of 3.81% of GDP. At the same time, a gradual recovery of fiscal consolidation is underway, taking the first steps to return to the budget deficit target of 3% of MT expected for 2024, which will allow exit from the Excessive Deficit Procedure. Moreover, for Romania, the country-specific recommendations according to SE, in 2021, targeted only the fiscal-budgetary area and a gradual adjustment of the budget deficit was foreseen in ESA 2010 standards, respectively: 8% in 2021, 6.2% in 2022, 4.4% in 2023 and 2.9% in 2024 (% of GDP). The budget plan for 2022 was built on the basis of fiscal policy oriented towards fiscal measures for economic recovery, but also preparation for achieving the objectives of transition to a green and digital economy.

The evolution of general consolidated budget expenditures in the period 2007-2022 varied around 82.7% of the expenditures of the unconsolidated general budget, reflecting the existence of significant transfers between component budgets.

The size of transfers between budgets in case of expenditure, on average approx. 17.3% annually, for the period 2007 - 2022, means, on the one hand, deficits among the component budgets of the general budget that require transfers, but also the need to identify new revenue resources, a situation reflected in the size of the budget deficit at BGC level, registered during the analysed period. After 2020, we observe a gradual trend of reducing transfers between budgets, amid the improvement of the economic situation, as a result of reducing the effects of the COVID-19 crisis. The budgetary consolidation process, the observance of the fiscal consolidation schedule, the implementation of the public administration reform and the other reforms of the NRRPs are of great importance in the conditions of risks and vulnerabilities of the economy generated by the international context (war in Ukraine, energy crisis, etc.). In 2022, the challenges faced by the Romanian economy increased with the outbreak of the Russian-Ukrainian conflict. This conflict triggered right at Romania's eastern border aggravated problems that had begun to manifest in the economy since 2021, the accelerated increase in prices, problems in supply chains, the energy crisis, etc. even if the economic activity was carried out in normal conditions in all fields of activity

[12] Law nr. Government Emergency Ordinance no. 153/2017 of 28 June 2017 on the remuneration of staff paid from public funds and GEO no. 70/2017 amending and supplementing Law no. 227/2015 regarding the Fiscal Code.

[13] Changes in legal rates (from 16% to 10% for personal income taxation; reduction of social contributions by 2 percentage points, from 39.25% to 37.25%).

The main labour market indicators are presented in the first 3 tables of Annex 2.

The employment rate for the population 20-64 years indicates an increase of 7.3 percentage points in Romania in 2009-2020 at 70.8%, above the target level of 70%. In the EU, the indicator rose by 4.3 percentage points between 2009 and 2020 to 72.5%, below the target level of 75%.

Romania is better positioned compared to the EU average in terms of unemployment rate, 4.8% in 2020 in Romania, well below that recorded in the European Union (7.4%).

The extracted statistics do not accurately reflect, but the structural component of the unemployment rate in Romania was permanently below the EU level, an expression of a higher degree of flexibility on the internal labour market.

From the category of convergence indicators with EU policies, we selected the ratio between women and men in terms of labour market participation rate.

Romania ranks below the EU average in terms of the ratio of women / men on the labour market participation rate indicator.

In terms of indicators in the field of education, it is the decrease of the school dropout rate for the population aged 18-24 by 4.1 percentage points between 2009 and 2019 to 9.9% in the EU.

In Romania, the school graduation rate adjusted by only one percentage point between 2009 and 2020 to 15.6%, well above the target of 11.3% of the Europe 2020 strategy.

On the other hand, the share of the population aged 30-34 with tertiary education increased in Romania at a slower pace compared to that in the EU between 2009 and 2020 (9.6 percentage points vs. 9.9 percentage points), as can be seen in the graph below.

Romania's population has declined due to aging and emigration, and the working-age population (20-64 years) will decrease by about 7.5 percent by 2025 compared to 2019 levels, with a further decrease of 3 percent between 2025 and 2030. At the same time, labour force participation rates among women and young people are among the lowest in the EU.

The combination of a rapidly growing economy, one of the highest emigration rates in the EU and a lagging education system has made skills shortages the main obstacle to private sector development.

Weaknesses in the education system, unfavourable attitudes towards lifelong learning, as well as ineffective vocational training policies and active labour market policies combine with brain drain to cause skills shortages and mismatches, which reduces innovation capacity as well as growth and earnings potential (see SDR update for Romania, 2023). A large proportion of people with higher education are either over-trained for their occupation or work in a sector that does not correspond to their studies Romania has the lowest score in the EU in terms of human capital index (HCI): 0.58, which means that the future productivity of children born today in Romania will be only 58 percent of what it could have been if they had received full education and healthcare. In addition, Romania has the lowest participation rate in lifelong learning in the EU, due to cultural and systemic barriers, while the country's workforce has lower levels of digital skills and soft skills compared to EU standards. At sectoral level, 51 percent of industrial companies suffer from skills shortages, compared to 40 percent of companies in agriculture and services. Greener jobs, which will parallel the ecological transition to achieve Romania's climate goals, require more higher skills, which are already lacking in Romania – a factor that could deepen skills shortages and hamper the green and digital transition, unless education systems and social protection policies are fundamentally rethought (for more details, see CCDR Romania and other recent analytical work).

The investigation highlights priorities for Romanian labour market policy:

- reform in education, necessary to reduce the school dropout rate and increase the share of the population with higher education in the age segment 30-34 years;
- R&D funding.

Conclusions

In Romania, during the analysed period, solving the budget deficit problem was tried through different solutions, but it was a constant of the government, at least in the following aspects:

- Impact of the COVID-19 pandemic: Like many countries, Romania has faced economic challenges and an increased budget deficit due to the COVID-19 pandemic. The government implemented various measures to support businesses, individuals and health services during the crisis, which led to higher spending.

- Structural deficit: Romania faced structural budget deficit problems even before the pandemic. These problems stemmed from factors such as high public spending, inefficient state-owned enterprises and tax evasion. Addressing these structural deficits has remained a long-term challenge.

- Public debt level: The government was concerned about the increase in public debt levels, which was exacerbated by the need to borrow to cover budget deficits. Managing and servicing this debt while preventing further escalation was a priority.

- EU accession and fiscal rules: Romania is a member of the European Union (EU) and must adhere to EU fiscal rules, including the Stability and Growth Pact. Meeting these requirements was important to maintain fiscal discipline and avoid sanctions.

- Social spending: Romania has increased social spending to meet various challenges, including healthcare and education. Balancing this social spending with the need for fiscal responsibility was a policy dilemma.

- Economic growth: Economic growth in Romania was relatively strong in the years leading up to 2020, which contributed to increased government revenues. However, the pandemic has disrupted this growth trajectory, making budget management more difficult.

- Efforts to address deficits: The Romanian Government has undertaken efforts to address budget deficits, including fiscal consolidation measures and reform of state-owned enterprises. These measures aimed to reduce the structural deficit and improve fiscal sustainability. The overall objective of medium-term fiscal policy is to gradually reduce the deficit without jeopardising the outlook for economic stability.

Stability is necessary and depends on the size of imbalances in the national budget, which require new, courageous but realistic approaches.

Taking a balanced approach to fiscal policy may involve adjusting taxes and expenditure in a way that stimulates growth and maintains employment. The measures need to be adapted to the country's economic specificities and the stage of the economic cycle. The budgetary consolidation process, the observance of the fiscal consolidation schedule, the implementation of the public administration reform and the other reforms of the NRRPs are of great importance in the conditions of risks and vulnerabilities of the economy generated by the international context (war in Ukraine, energy crisis, etc.)

Promoting investment in education, training and skills development can help prepare the workforce for current and future market demands. It can facilitate adaptation to technological change and support a more skilled and competitive workforce.

Careful integration of fiscal and labour market policies is essential for the balanced management of the economy in the European Union and Romania. Addressing these issues in a coherent manner can contribute to fiscal stability, growth and the overall well-being of society

EU fiscal rules, including the Stability and Growth Pact, set limits on budget deficits and debt levels for member states. Compliance with these rules is a central political concern.

Future budgets must integrate the pressures coming from education and public health systems, the only ones that through their results can contribute to a human capital formation adequate to the sustainability of the labour market.

Scientific research cannot be underestimated as an allocation from the public budget because it is extremely valuable in managing the major threats coming from climate problems, wars, the disruptions produced by technologies in people's way of life and finally in the balance of the labour market.

Recalibrating the economic policy mix to include labour market policies would bring more confidence to fiscal consolidation without unrealistic expectations.

Future directions

A future research direction can be to compare the experience of countries with different approaches, based on practical examples and case studies, such as the flexicurity model in Sweden, the dual vocational training system in Germany, collective bargaining in Denmark, active employment policies in the Netherlands, extended social protection in Norway. Countries that have adopted innovative fiscal and social policies to manage deficits and promote employment can offer valuable lessons, examples of good practice, successes which, together with lessons of failure, will contribute with more knowledge and preparedness for the challenges that economic imbalances pose to each European Member State.

As valuable as future research, it can be an analysis of historical cases of efforts to reduce the budget deficit and their results in certain EU countries.

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APPENDIX NO I STATISTICS OF DEFICITS

Romania

Table Romania.1: Tax Revenue

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking 2020	Revenue 2020 (billion euros)
A. Structure by type of tax	as % of GDP														
Indirect taxes	11,4	10,3	11,9	13,2	13,3	12,8	12,8	13,4	11,4	10,4	10,5	10,7	10,5	26	22,8
VAT	7,5	6,3	7,6	8,7	8,3	8,1	7,6	8,1	6,4	6,2	6,3	6,2	6,1	24	13,4
Taxes and duties on imports excluding VAT	0,2	0,1	0,3	0,4	0,5	0,4	0,3	0,4	0,4	0,3	0,3	0,2	0,2	13	0,4
Taxes on products, except VAT and import duties	3,1	3,4	3,5	3,5	3,8	3,6	3,9	4,0	3,8	3,3	3,3	3,4	3,3	15	7,3
Other taxes on production	0,5	0,5	0,6	0,6	0,7	0,7	1,0	0,9	0,8	0,6	0,6	0,9	0,8	23	1,7
Direct taxes	6,4	5,9	5,8	6,1	5,8	5,9	6,2	6,6	6,4	6,1	4,9	4,8	4,7	27	10,3
Personal income taxes	3,2	3,3	3,2	3,3	3,4	3,4	3,5	3,7	3,7	3,6	2,4	2,3	2,4	27	5,3
Corporate income taxes	2,9	2,3	2,1	2,3	1,9	2,0	2,1	2,3	2,2	2,0	2,1	2,1	1,9	22	4,1
Other	0,3	0,4	0,5	0,5	0,5	0,5	0,5	0,6	0,6	0,5	0,4	0,5	0,4	17	0,9
Social contributions	9,0	9,0	8,7	9,1	8,8	8,6	8,5	8,1	8,0	8,4	10,6	10,5	11,1	19	24,3
Employers'	5,8	5,6	5,5	5,6	5,5	5,6	5,5	5,0	4,9	5,3	1,2	1,0	1,0	25	2,1
Households'	3,2	3,3	3,2	3,5	3,2	3,0	3,0	3,1	3,1	3,2	9,4	9,6	10,2	2	22,2
Less: capital transfers (1)	:	:	:	:	:	:	:	:	:	:	:	:	:		
Total	**26,8**	**25,2**	**26,4**	**28,3**	**27,9**	**27,4**	**27,5**	**28,1**	**25,9**	**24,9**	**26,0**	**26,0**	**26,3**	**26**	**57,5**
B. Structure by level of government	as % of total taxation														
Central government	63,0	60,9	63,2	64,0	63,6	64,0	64,5	66,7	64,9	61,9	57,3	58,1	56,7	17	32,6
State government (2)	:	:	:	:	:	:	:	:	:	:	:	:	:		
Local government	3,2	3,6	4,0	3,8	3,6	3,7	3,6	3,4	3,6	3,6	3,2	3,1	3,0	19	1,7
Social security funds	33,2	35,2	32,5	31,9	32,5	32,0	31,7	29,5	31,1	34,1	39,1	38,5	40,0	6	23,0
EU institutions	0,5	0,4	0,3	0,3	0,4	0,3	0,3	0,3	0,4	0,3	0,3	0,3	0,3	25	0,2
C. Structure by economic function	as % of GDP														
Consumption	10,7	9,7	11,3	12,5	12,7	12,2	11,9	12,6	10,8	9,9	10,1	10,2	10,0	23	21,9
Labour	11,0	11,1	11,0	11,2	11,1	11,0	10,7	10,3	10,0	10,7	12,2	12,0	13,0	24	28,3
of which on income from employment	11,0	11,0	10,8	11,0	10,9	10,8	10,5	10,1	9,8	10,6	12,1	11,9	12,8	24	28,0
Paid by employers	5,8	5,6	5,5	5,6	5,5	5,6	5,5	5,0	4,9	5,3	1,2	1,0	1,0	25	2,1
Paid by employees	5,2	5,4	5,3	5,3	5,4	5,2	5,1	5,1	4,9	5,3	10,9	11,0	11,9	6	25,9
Paid by non-employed	0,1	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,1	0,1	0,1	0,1	23	0,3
Capital	5,1	4,4	4,1	4,6	4,1	4,2	4,8	5,1	5,1	4,3	3,7	3,9	3,3	25	7,3
Income of corporations	2,9	2,3	2,1	2,3	1,9	2,0	2,1	2,3	2,2	2,0	2,1	2,1	1,9	22	4,1
Income of households	0,9	0,8	0,6	0,7	0,6	0,6	0,9	1,1	1,4	1,2	0,7	0,8	0,6	17	1,2
Income of self-employed	0,4	0,4	0,4	0,7	0,5	0,5	0,5	0,5	0,4	0,3	0,1	0,2	0,1	25	0,3
Stock of capital	1,0	0,9	1,0	1,0	1,0	1,0	1,3	1,2	1,1	0,8	0,7	0,8	0,7	24	1,6
D. Environmental taxes	as % of GDP														
Environmental taxes	1,7	1,8	2,1	2,0	2,0	2,1	2,4	2,5	2,4	1,9	2,0	2,1	1,9	23	4,2
Energy	1,3	1,5	1,8	1,7	1,7	1,8	2,1	2,2	2,2	1,8	1,8	2,0	1,8	16	3,9
of which transport fuel taxes	1,1	1,3	1,5	1,4	1,4	1,4	1,7	1,7	1,7	1,4	1,4	1,4	:		
Transport	0,3	0,3	0,3	0,2	0,3	0,3	0,3	0,3	0,2	0,1	0,1	0,1	0,1	23	0,3
Pollution and resources	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,00	0,00	0,00	24	0,0
E. Property taxes	as % of GDP														
Taxes on property	0,8	0,8	0,8	0,8	0,9	0,9	0,9	0,9	0,8	0,7	0,6	0,7	0,6	23	1,3
Recurrent taxes on immovable property	0,6	0,6	0,7	0,7	0,6	0,6	0,6	0,6	0,6	0,6	0,5	0,5	0,5	14	1,1
Other taxes on property	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,1	0,1	0,1	0,1	23	0,2
F. Implicit tax rates	%														
Consumption	15,1	14,0	16,1	18,0	18,1	18,0	17,7	18,7	15,8	14,5	14,8	15,0	15,0	25	
Labour	30,2	32,1	30,0	33,1	33,4	33,8	32,3	31,4	27,9	28,5	31,6	30,8	31,1	20	
G. Payable tax credits	as % of GDP														
Total payable tax credits	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0		0,0
Tax expenditure component	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0		0,0
Transfer component	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0		0,0
Total tax revenue adjusted for payable tax credits	*26,8*	*25,2*	*26,4*	*28,3*	*27,9*	*27,4*	*27,5*	*28,1*	*25,9*	*24,9*	*26,0*	*26,0*	*26,3*		*57,5*

(1) Representing taxes assessed but unlikely to be collected.

(2) This level refers to the *Länder* in Austria and Germany, the *gewesten and gemeenschappen / régions et communautés* in Belgium, and the *comunidades autónomas* in Spain.

Source: European Commission, DG Taxation and Customs Union, based on Eurostat data

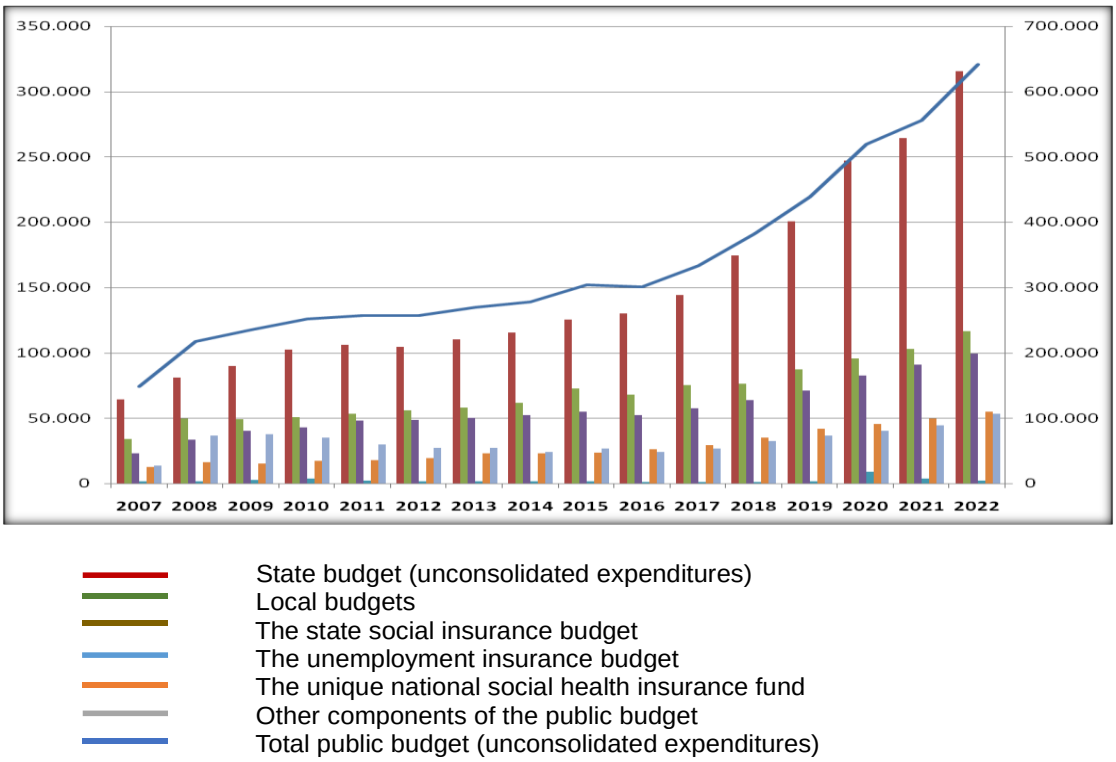


Figure 1 Total expenditures of the general budget for the period 2007-2022

Source: retrieval and recalculation according to Chapter I Financial state /2021, (unpublished work), Financial Minister Data

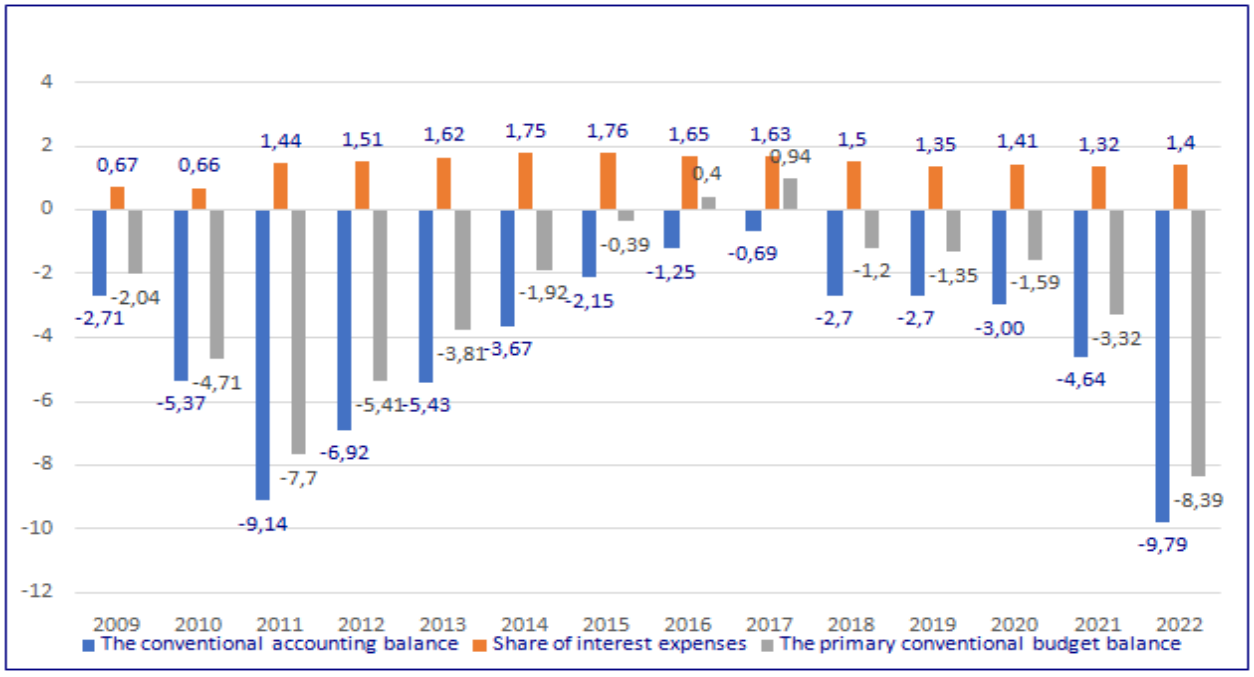


Figure 2 Conventional budget balances in Romania, 2009 – 2022 (% of GDP)

Source: retrieval and recalculation according to Chapter I Financial status/2022, (unpublished work), Financial Minister Data

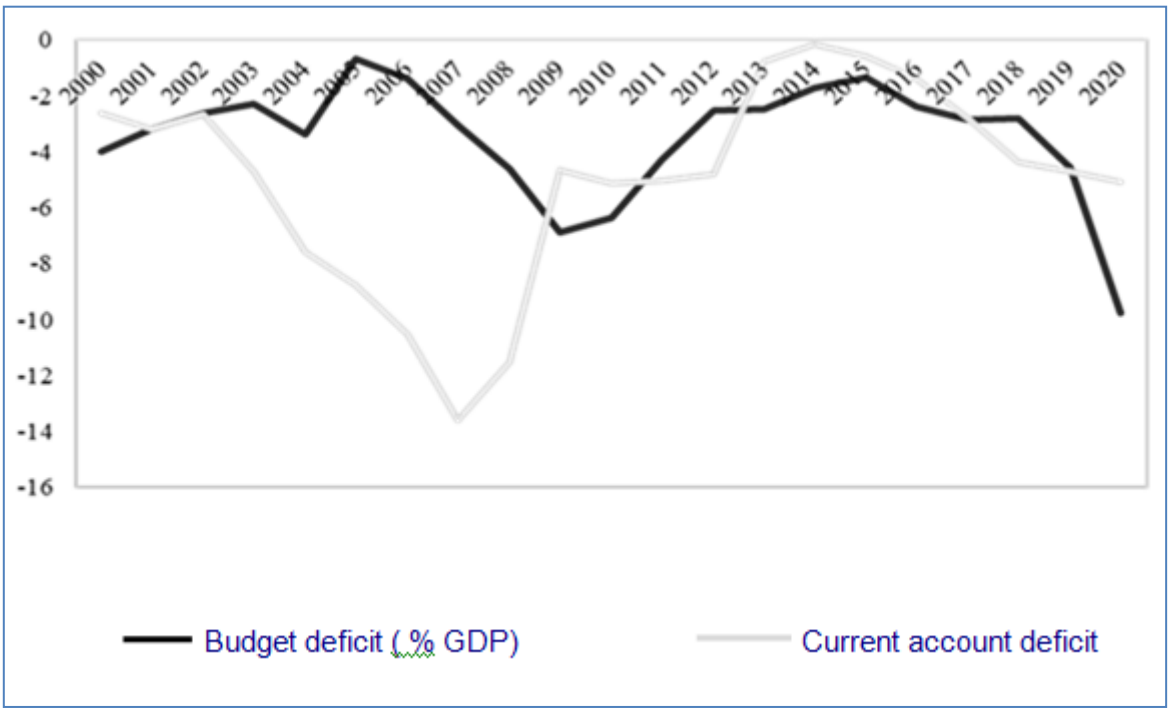


Figure 3 The evolution of the budget deficit and the current account deficit in Romania, according to the IMF

Source: (IMF), April 2023

Comparative Statistics RO_EU

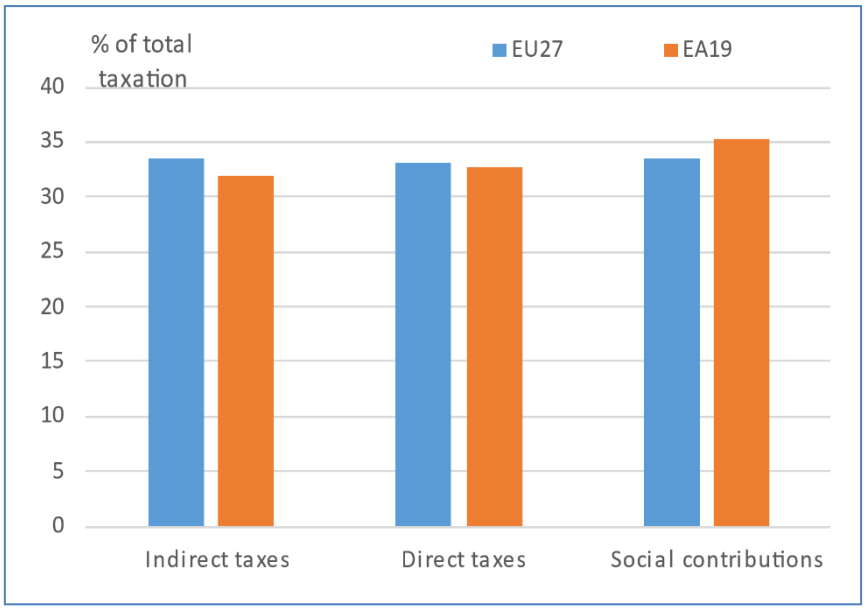
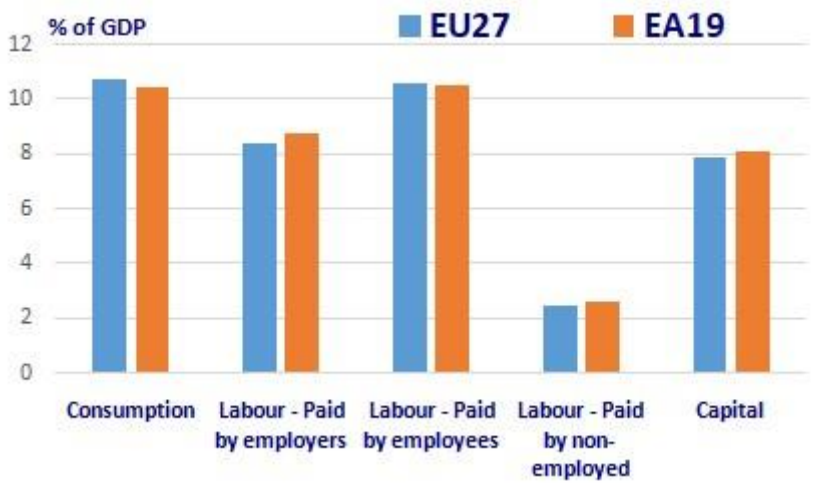


Figure 4: Tax revenues by main taxes, 2019 (in % of total taxation (above graph) and in % of GDP (down graph))



Source: Eurostat data

APPENDIX NO. 2 LABOUR MARKET STATISTICS

Table 1. **Main indicators of labour market, by gender and urban/rural area, Romania, 2022**

- % -

Indicators of labour market	Total	Gender		Urban/rural area	
		Men	Women	Urban	Rural
Employment rate of population aged 20-64 years	68,5	77,7	59,1	74,0	61,8
Unemployment rate	5,6	6,0	5,0	3,2	8,9
Long-term unemployment rate	2,2	2,3	2,0	1,5	3,1
Long-term unemployment rate for young people	12,6	12,6	12,6	9,8	14,0
Long-term unemployment incidence	38,5	38,3	38,7	45,3	35,1
Long-term unemployment incidence for young people	55,2	58,3	50,5	55,0	55,3
Underemployed persons (% in active population)	1,3	1,8	0,7	0,3	2,7
Potential additional labour force (% in active population)	2,5	1,9	3,3	1,3	4,0
Early schools leavers for young people (18-24 years)	15,6	16,2	15,0	7,6	22,5
Weight of persons aged 30-34 years with superior level of education	26,3	23,0	29,9	37,6	9,3
Young people aged 20-24 having at least medium education level	82,3	81,7	82,9	91,4	74,6
Long-life learning	5,4	5,6	5,2	7,1	3,3
Rate of young people neither in employment nor in education or training (15-	17,5	14,3	20,9	11,1	23,1

Source: National Institute of Statistics, Romania, data base Tempo

Table 2 **Population by labour status, by gender and urban/rural area, in the 2009-2022 period, Romania**

Gender Urban/rural area Period	Economically active persons			Economically inactive persons
	Total	Employed	Unemployed	
	- thousand persons -			
TOTAL				
2009	8259956	7565833	694123	12143907
2010	8038762	7314300	724462	12231978
2011	7963841	7239029	724812	12209517
2012	7994516	7299914	694602	12083573
2013	7994775	7275649	719126	12007015
2014	8069530	7376341	693189	11854235
2015	8136632	7453311	683321	11722805
2016	8082779	7501642	581137	11695207
2017	8208491	7708008	500483	11450541
2018	8174350	7745174	429176	11357848

2019	8194540	7794048	400492	11211300
2020	8187964	7690666	497298	11126410
2021	8214682	7755487	459195	10860506
2022	8270813	7806452	464360	10661973
MEN				
2009	4822162	4380417	441745	5111828
2010	4663598	4218235	445363	5204941
2011	4583525	4146400	437125	5235503
2012	4619321	4196591	422730	5154409
2013	4636367	4194760	441607	5119898
2014	4685100	4260387	424713	5043382
2015	4750213	4316373	433840	4958982
2016	4707928	4335139	372789	4951600
2017	4743067	4419299	323768	4849366
2018	4757037	4480955	276082	4788026
2019	4774846	4521203	253643	4703922
2020	4778415	4475424	302991	4665784
2021	4807057	4519761	287296	4507940
2022	4780945	4492654	288291	4453493
WOMEN				
2009	3437794	3185416	252378	7032079
2010	3375165	3096066	279099	7027037
2011	3380316	3092629	287687	6974013
2012	3375196	3103324	271872	6929164
2013	3358408	3080889	277519	6887117
2014	3384430	3115954	268476	6810853
2015	3386420	3136938	249482	6763823
2016	3374851	3166503	208348	6743607
2017	3465424	3288709	176715	6601175
2018	3417313	3264219	153094	6569822
2019	3419694	3272845	146849	6507378
2020	3409548	3215242	194306	6460625
2021	3407625	3235726	171899	6352565
2022	3489868	3313799	176070	6208479
URBAN				
2009	5052580	4663385	389195	5941284
2010	4993365	4546365	447000	5938739
2011	5015371	4578785	436586	5874830
2012	4998749	4576706	422043	5839725
2013	4987693	4550011	437682	5792589
2014	5042697	4630948	411749	5691040
2015	4960112	4604957	355155	5732639
2016	4916092	4634050	282042	5704228
2017	4938379	4708991	229388	5617569
2018	4904821	4715041	189780	5599899
2019	4910901	4740050	170851	5534886
2020	4878324	4658053	220271	5525160
2021	4746343	4584021	162322	5493449
2022	4776862	4623522	153340	5412717
RURAL				
2009	3207376	2902448	304928	6202623
2010	3045397	2767935	277462	6293238
2011	2948471	2660245	288226	6334687
2012	2995768	2723209	272559	6243848
2013	3007082	2725638	281444	6214426
2014	3026832	2745392	281440	6163195
2015	3176521	2848354	328167	5990166
2016	3166687	2867592	299095	5990979
2017	3270112	2999017	271095	5832972

2018	3269529	3030133	239396	5757949
2019	3283639	3053998	229641	5676413
2020	3309640	3032613	277027	5601250
2021	3468338	3171465	296873	5367056
2022	3493951	3182931	311020	5249256

Source: National Institute of Statistics, Romania, data base Tempo

Table 3 Relevant **Labour Market Indicators, in the 2009-2022 period, in Romania**

Gender Urban/rural area Period	Activity rate [1)]	Employment rate [2)]	Unemployment rate [3)]
	- percentages -		
TOTAL			
2009	48,1	44,0	8,4
2010	47,1	42,9	9,0
2011	46,9	42,6	9,1
2012	47,3	43,2	8,7
2013	47,4	43,1	9,0
2014	47,9	43,8	8,6
2015	48,5	44,4	8,4
2016	48,4	44,9	7,2
2017	49,4	46,4	6,1
2018	49,6	47,0	5,3
2019	50,0	47,6	4,9
2020	50,2	47,2	6,1
2021	51,1	48,2	5,6
2022	51,8	48,9	5,6

Source: National Institute of Statistics, Romania, data base Tempo

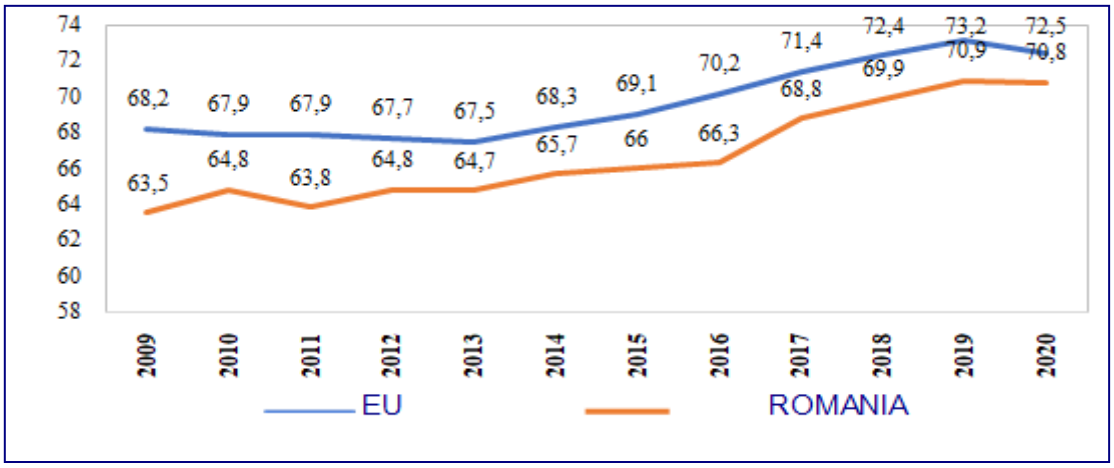


Figure 1 Employment rate for the population aged 20-64 (%), in the period 2009-2022,

Source: Eurostat data base

EU ROMANIA

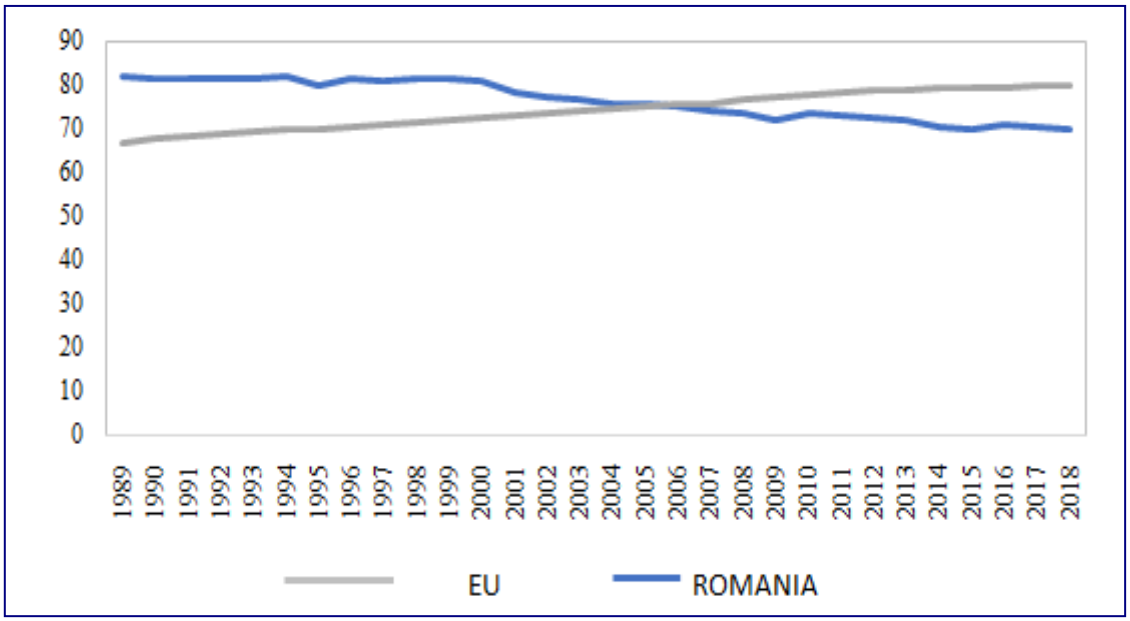


Figure 2 Labour market participation rate, by gender (%)

Source: Eurostat data base

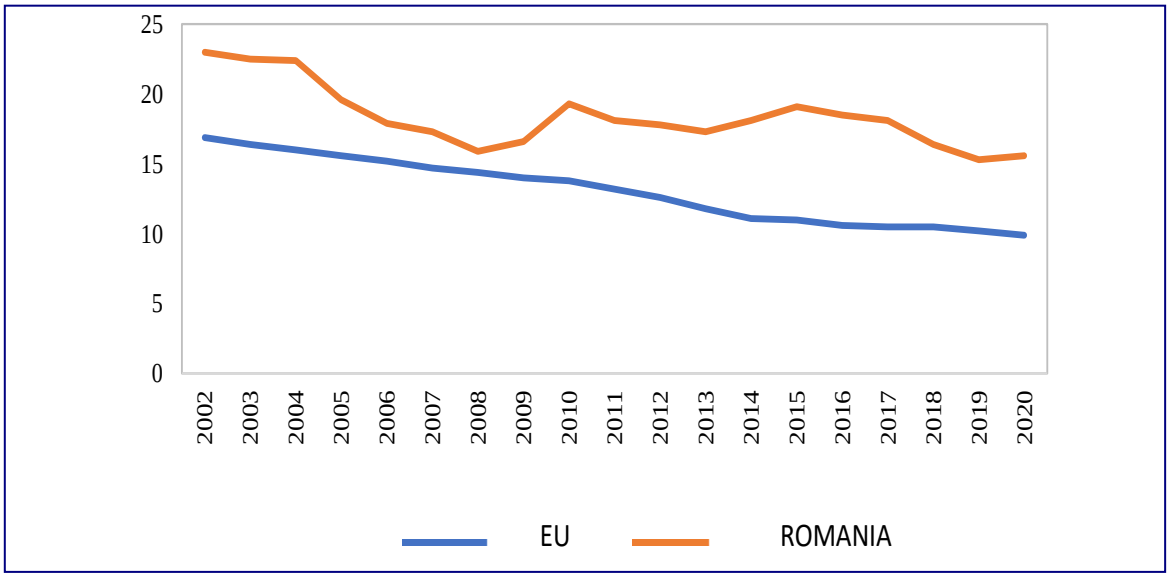


Figure 3 School dropout rate 18-24 years (%)

Source: Eurostat database

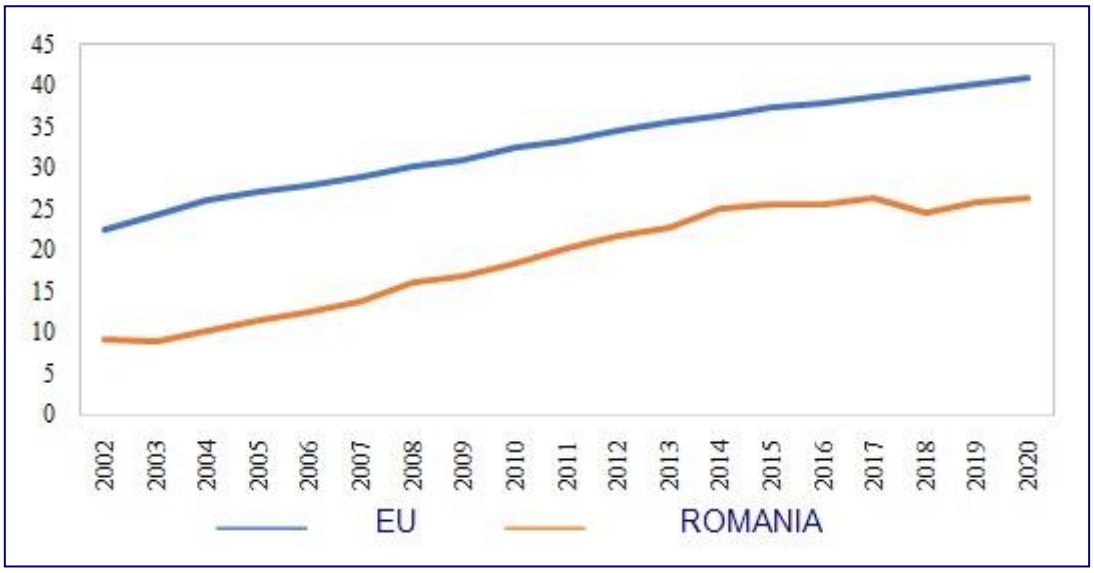


Figure 4. Share of the population 30-34 years old with higher education (%)

Source: Eurostat database

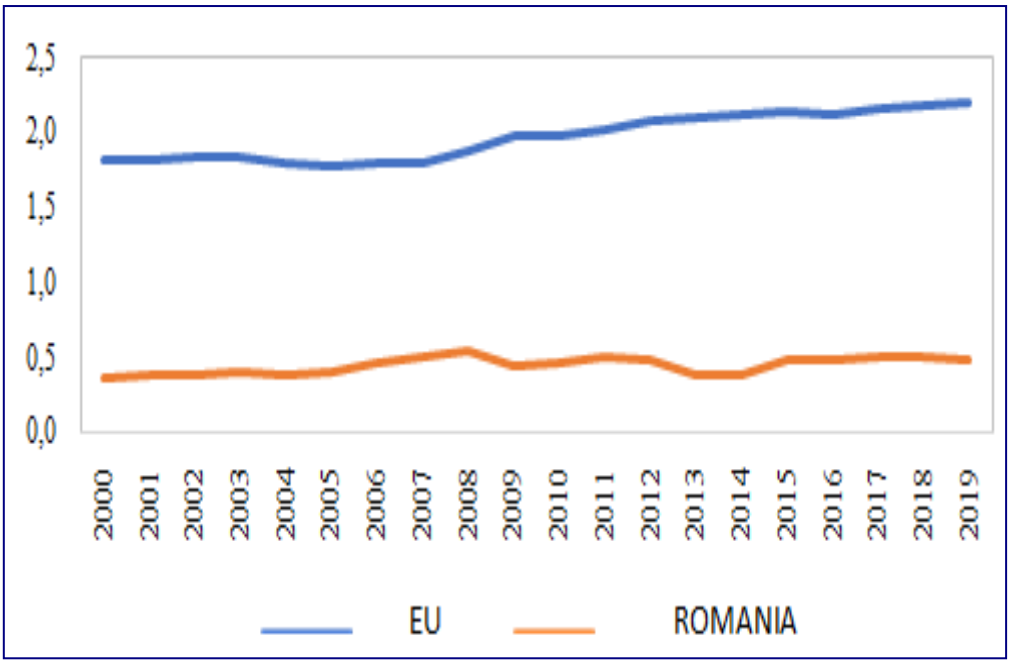


Figure 5. Research and development expenditure (% GDP)

Source: Eurostat database