

General Aspects Regarding the Evolution of the Main Macroeconomic Indicators in Romania

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Abstract

The authors of the paper focused on the analysis of the evolution of macroeconomic indicators and emphasized the dynamics of GDP, the contribution of the main components of GDP to economic growth, the inflation rate and the level of the labor market (average number of employees, unemployment rate, average net wage). Gross domestic product, being the representative indicator of results, is analyzed in accordance with resources and uses. In the quantitative analysis, the period 2014-2023 was taken into account.

The Romanian economy has been marked by transformations in the last 30 years. GDP followed an increasing trend, reaching 357 billion euros in 2024. As a result of structural changes in the economy, foreign investments and accession to the European Union, the Romanian economy is marked by accelerated economic growth.

Keywords: Gross Domestic Product (GDP), labor market, inflation rate

1. Introduction

The Romanian economy has followed an evolution process since 2000, based on economic growth, namely the advance of GDP, the decrease of unemployment and the increase of the standard of living of the population. Romania must make additional efforts to ensure a balance between social objectives and fiscal objectives [1, 2].

Anghel, Anghelache and Dumbava made an analysis of the main economic indicators, appreciating that the economic evolution of the countries is based on the result indicators [3].

Some aspects related to the activity carried out by those who have concerns regarding macroeconomic forecasts were addressed by Andreou, Ghysels and Kourtellos [4].

A presentation of the main economic indicators specific to macroeconomic analyses belongs to Anghelache and Anghel [5].

Also Anghelache and Sacală [6] are the authors who created a theoretical model that can be applied in macroeconomic analysis. Carroll [7] addressed aspects regarding the expectations of households at the macroeconomic level. Clark and Ravazzolo brought the aspects of performance to the forefront in macroeconomic forecasts [8]. Macroeconomic indicators are considered representative indicators to correlate the growth of the Romanian economy with the European one, implicitly the impact of the evolution on the economy [9, 10].

Various economic and social analyses consider that GDP has the role of an indicator of the development of society at a global level, but also of progress in general [11, 12].

Some authors believe that an increase in employment will determine an increase in GDP. Also, a high level of training of the population, the integration of graduates (especially those with secondary and higher education) on the labor market and a decrease in migration will also determine an increase in investments and high

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efficiency and competitiveness on foreign markets, therefore a higher growth in GDP [13]. The analysis focuses on the shock caused by the COVID-19 Pandemic, which affected some economic and social indicators, for example economic growth, total and per capita GDP, unemployment rate and other categories of economic indicators.

2. Material and method

In the specialized literature, macroeconomic indicators are considered statistical data that indicate the current state of a state's economy. This information is collected and published by the National Institute of Statistics (INS). Through these data, it is possible to follow the pulse of the economy, the state at a given moment and the evolution following the impact of a series of external factors.

The results at the macroeconomic level can be expressed quantitatively, based on physical indicators or in value form, resulting in a total size that will express the results at the level of the entire national economy in a certain period of time.

The paper aims to identify and analyze macroeconomic developments against the backdrop of uncertainties, pressures created by the increase in energy prices and the erosion of the purchasing power of the population.

Regarding risks, the forecasts at this macroeconomic level also advance a negative evolution for 2025, following the delays in the implementation of Romania's recovery and resilience plan which would also have a negative influence on investments and economic growth.

The data presented in this paper were largely obtained from the statistics of the National Institute of Statistics of Romania and Eurostat. Based on these data, we performed our own calculations, analyses and interpretations and created tables and figures based on the MS Excel package.

3. Results and discussion

Romania's economy continued to grow after 2000 (Figure 1 and 2), recording an advance in GDP from current US\$38.08 million to current US\$350.78 million in 2023. We also witnessed a decrease in unemployment and an increase in the population's standard of living (Figure 3).

The Gross Domestic Product (table 1 and 2, figure 1 and 2) is the important synthetic indicator for Romania, regarding the results recorded in the period 2014-2023, which was 666,637.3 million lei, expressed in current prices in 2014. In 2015, GDP increased by 0.5% compared to 2014, which highlights the value of 712,587.8 million lei. The year 2016 showed a 0.9% increase in GDP compared to 2015, reaching 765135.4 million lei in current prices. In 2017, in real terms, there was an annual increase of 7.0% in GDP compared to 2016. In absolute terms, the value of GDP in 2017 was 856726.6 million lei in current prices. In 2018-2020, the GDP evolution registered decreases. In 2020, macroeconomic indicators recorded a negative trend due to the effects of the Covid 19 health crisis.

In 2021, GDP increased, compared to 2020, to 1,192,284.86 million lei, current prices, and 1,604,554.0 million lei, current prices in 2023.

Related to demand (table 1), a main contribution to economic growth, recorded in 2019, came from household final consumption expenditure and gross fixed capital formation, which had a positive impact on the economy's progress. While household consumption expenditure was the main driver of growth in the period 2015-2018 (6.3% in 2017, respectively 6.4% in 2018), in the period 2020-2023, an oscillating evolution of decreases and increases followed. It is worth noting the significant recovery of gross fixed capital formation, after the negative contribution of -0.4% to economic growth in 2018. It is worth noting the historical evolution of investments, which shows rather inconsistency, and their contribution to economic growth has fluctuated, although investments should have followed an upward trend through the progress of the implementation of projects financed from European funds. A positive impact was also exerted by government consumption in 2023, with a contribution of 1.1% to GDP growth (real growth of 6.4pp compared to 2022), being a positive contribution of this factor to economic growth, a similar value being recorded in 2012.

Regarding demand (Table 1 and Figure 2), gross fixed capital formation in 2023 recorded the largest contribution to the development of economic activity, respectively 3.6%, then household consumption was 1.9%, along with government consumption of 1.1%. The positive contributions were partially offset by the significant negative impact of the change in

inventories, of -4.4%. The change in inventories, characterized by a negative contribution to economic growth (-4.4%), historically represented the second highest negative contribution to GDP growth in the period 2014-2023, after the 2007 value of 6.1%.

The comparison of 2022 with 2023 regarding the contribution of household consumption to GDP

growth exceeded by approximately 1.5% in 2022, even though, under the conditions of the disinflationary trend, the inflation rate remained high, above initial estimates, in the components of non-food goods and services, and interest rates remained high.

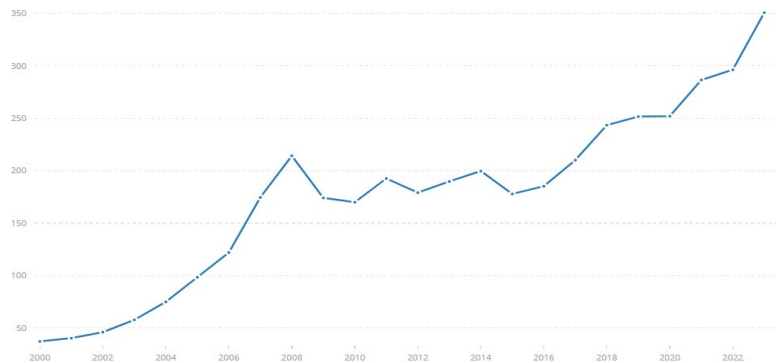


Figure 1. GDP evolution during the period 2000-2023 (current US billions)
Sources: <https://data.worldbank.org/country/romania?locale=ro>[14]

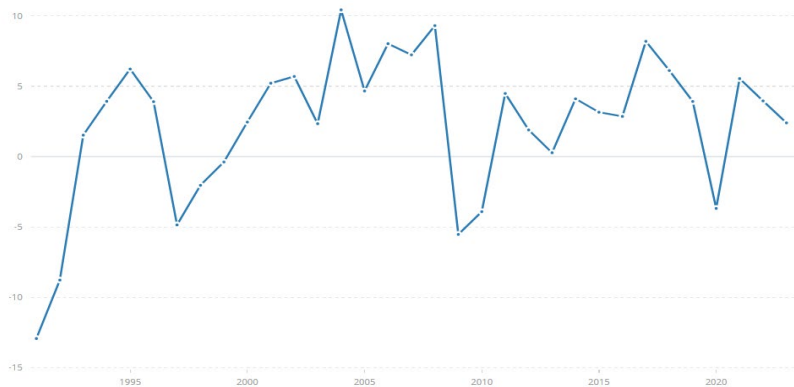


Figure 2. Real GDP growth rate between 2000-2023 (%)
Sources: <https://data.worldbank.org/country/romania?locale=ro>[14]

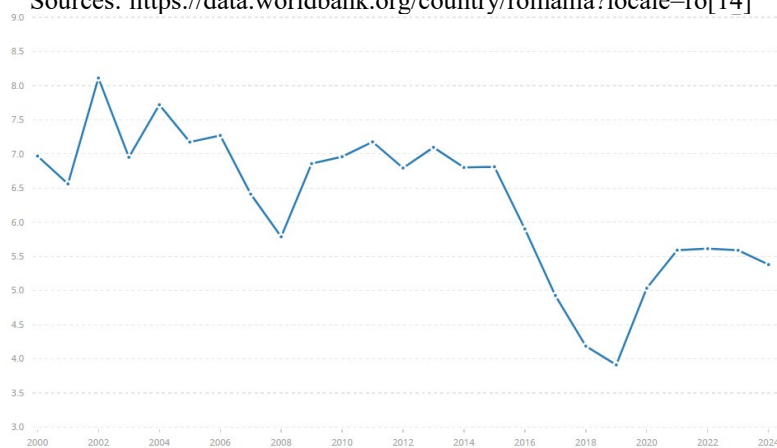


Figure 3. Unemployment rate (% of total labor force) in the period 2000-2023 (%)
Sources: <https://data.worldbank.org/country/romania?locale=ro>[14]

Table 1. Contributions to real growth of gross domestic product, by use categories (%)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross domestic product	3.4	3.9	4.8	7.0	3.9	3.9	-3.7	5.5	4.0	2.4
Effective individual final consumption of households	2.9	3.7	5.1	6.3	6.4	2.7	-2.4	4.4	3.4	1.9
Effective collective final consumption of general government	0.5	-0.1	0.1	0.4	0.8	0.4	0.5	-0.2	-0.5	1.1
Gross fixed capital formation	0.8	1.8	-0.1	0.8	-0.4	3.2	-0.1	0.9	1.3	3.6
Inventory change	-0.4	-0.1	0.0	0.2	1.1	-0.6	-0.2	1.8	0.3	-4.4
Net exports	-0.4	-1.4	-0.3	-0.7	-1.8	-1.8	-1.5	-1.4	-0.5	0.2

Source: National Institute of Statistics (INS), Statistical Yearbook of Romania, 2015-2024, Annual report, 2014-2023, Fiscal Council [15, 16]

Table 2. Main macroeconomic indicators 2014-2023

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Domestic Product										
Gross domestic product (mil. lei)	668590.1	712587.8	765135.4	856726.6	951728.5	1058973.2	1058926.1	1192284.8	1389450.0	1604554.0
Real gross domestic product	3.4	3.9	4.8	7.0	3.9	3.9	-3.7	5.5	4.0	2.4
GDP deflator	1.8	2.9	2.2	5.3	5.9	6.9	3.8	5.4	13.4	12.2
GDP usage										
Final consumption	6.0	5.2	6.9	8.5	4.7	6.0	-4.0	6.6	5.2	3.5
-Private consumption expenditure	6.2	6.1	7.3	10.1	5.2	5.9	-5.2	7.9	5.5	2.8
-Public consumption expenditure	5.0	1.6	3.3	0.7	1.8	6.4	2.0	0.4	4.3	6.0
Gross fixed capital formation	-7.2	8.8	-0.8	4.7	-3.2	18.2	6.8	2.3	8.2	14.4
Exports of goods and services (volume)	8.1	5.5	8.3	9.7	5.4	4.6	-9.7	12.5	9.6	-1.4
Imports of goods and services (volume)	7.4	9.1	9.8	11.2	9.1	8.0	-5.1	14.6	9.9	-1.4
Inflation rate										
December	0.83	-0.9	-0.5	3.3	3.3	4.0	2.1	8.2	16.4	6.6
Annual average	1.1	-0.6	-1.55	1.3	4.6	3.8	2.6	5.1	13.8	10.4
Labor market										
ILO unemployment rate	5.29	6.8	4.8	4.9	3.3	3.9	5.0	5.6	5.6	5.6
Average number of employees	1.3	2.5	3.14	3.5	3.3	1.7	-1.4	1.5	1.5	1.1
Average net wage	5.3	8.5	12.8	15.9	14.8	13.0	6.8	7.2	11.3	14.5

Sources: National Institute of Statistics (INS), Statistical Yearbook of Romania, 2015-2024, Annual report, 2014-2023, Fiscal Council, [15, 16]

Regarding the evolution of the value of the Gross Domestic Product (table 2), it increased in 2014 compared to 2013, reaching 668590.1 million lei in current prices, even though domestically and internationally economic growth was affected by the crisis. In the following years, 2015, 2016 and until 2023, higher increases were recorded, so that Romania ranked first in this indicator in the European Union.

Regarding the use of GDP, from the study of the data we found that imports increased until 2017, then decreased and in 2020 they had negative values of -5.1%. Exports increased between 2014 - 2017, because the fluctuation of the exchange rate stimulated domestic production for export.

A country's deficit, including Romania's, is not alarming if it is part of a project-based external loan program that will not affect national wealth.

The following contributed the most to GDP formation in 2019: gross fixed capital formation, net exports, final consumption of public administration and individual final consumption of households.

The analysis of the factors influencing GDP formation by categories of uses can also be presented by exploring the rate of influence of the categories of uses taken into account when obtaining GDP. Thus, an increase in the contribution of individual household consumption and collective consumption together is noted, during the period 2014-2019. [16]

Under the Government's support measures in 2020, the labor market was less affected by the COVID 19 pandemic. Thus, the average number of employees decreased slightly by -1.4% compared to 2019, to 5.1 million people, while the ILO unemployment rate increased by 1.1% to 5%. The average gross wage in the total economy was 5,164 lei in 2020, 6.4% higher than in 2019. The average net wage was 3,188 lei in the same year, 6.8% higher than in 2019, while real wage earnings advanced by 4%, in the context of average annual inflation of 2.6%. Net exports contributed negatively to the reduction in the real GDP growth rate, of -1.6%, following the 9.7 percentage point decrease in the export of services and goods and a 5.1% reduction in the import of goods and services. [16]

After the downward trajectory of annual inflation in 2020, of 2.6%, in the context of the contraction of domestic demand, the year 2021 was marked by a return of inflationary pressures, and inflation

registered 5.1%, 13.8% in 2022 and 10.4% in 2023. [16]

In 2023, nominal GDP was 1604554.0 million lei in current prices, in the context of a GDP deflator of 12.2%. Regarding the components of GDP, a contribution of final consumption of 3.5% and 14.4% of gross fixed capital formation is noted, respectively negative values of exports of goods and services -1.4% and imports of goods and services. It should be noted that the positive effect of the advance of gross fixed capital formation was reduced by the negative variation in the case of stocks. At the labor market level, the unemployment rate remained constant at 5.6%, the average number of employees decreased to 1.1%, and the net wage increased to 14.5%.

It is estimated that in 2025, GDP will register a modest increase compared to the previous year, reaching an increase of 1.5%. By categories of uses of GDP components, domestic consumption compared to 2024 will slow down significantly: the fiscal measures involved in reducing the budget deficit will also affect the population's income, and the record growth recorded in consumption in 2024 is unsustainable in the longer term. Regarding net exports, which in 2024 significantly cut economic growth, but, given the rise in population consumption, the negative contribution would also decrease in 2025. The poor performance of investments in 2024 will be saved in 2025 by investments based on European funds, which would ensure an acceleration of economic growth, with a moderate recovery [17,18].

4. Conclusions

The Romanian economy has been deeply marked by the transformations of the last 30 years. The GDP followed a growth trend, marking the value of 357 billion euros in 2024. Following structural changes in the economy, foreign investments and accession to the European Union, the Romanian economy is following a positive path of accelerated economic growth.

The conclusion drawn from this article is that the analyzed macroeconomic indicators provide an overall picture of the evolution of the Romanian economy, and the results can be used to extend the analysis to a broad, international framework, and to the sections of the evolution and development of EU countries.

The analysis focused on the evolution of macroeconomic indicators and highlighted the dynamics of GDP, the contribution of the main components of GDP to economic growth, the inflation rate and the level of the labor market (average number of employees, unemployment rate, average net salary). Also, the Gross Domestic Product, as a representative indicator of the results, was analyzed in accordance with resources and uses. Some shortcomings have also been noted as a result of measures taken at European level, but Romania occupies a good position regarding the growth rate of the economy, respectively the growth rate of the gross domestic product. We can say that investments must become a priority in the sense that they ensure sustainable development, creating new jobs, absorbing unemployment in this way, by advancing labor productivity, raising the quality of the economic environment, but also of the environment in correlation, so that we have an economic settlement characterized by sustainable growth.

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