

NEW ECONOMY Section

EURO ADOPTION IN ROMANIA. THE STATE OF THE NOMINAL AND REAL CONVERGENCE

Andrei Silviu DOSPINESCU

***Abstract.** A sustainable convergence is one of the essential requirements for states that want to adopt a common currency. The convergence process helps to increase the structural similarity between economies, which reduces the probability of asymmetric shocks. In this context, the paper investigates the extent to which Romania meets the Maastricht criteria. On top of previous challenges, the COVID-19 pandemic added additional pressures. The analysis examines how these additional pressures were reflected in Romania's performance in respect to the Maastricht criteria. The Maastricht Treaty does not contain specific provisions to ensure real convergence. However, the experience of the countries that have joined the Euro Area has indicated the dangers associated with a lack of real convergence. In this context, the paper also investigates the real convergence of Romania with the Euro Area.*

***Keywords:** euro adoption, Maastricht criteria, real convergence, GDP per capita*

1. Introduction

The experience of the countries that have joined the Euro Area has indicated the important role played by meeting the criteria of nominal and real convergence in ensuring the economic sustainability of these states. The Maastricht Treaty does not contain specific provisions to ensure real convergence. However, the experience of the countries that have joined the Euro Area has indicated the dangers associated with a lack of real convergence. Real convergence means the process of reducing economic development gaps and is measured using indicators such as GDP per capita, productivity. In a broader sense, convergence involves adjusting and reconciling the social, political and economic structures of the states, members of a common monetary area.

The paper is structured in three parts. The first part investigates the degree to which Romania is meeting the Maastricht criteria. The second

part analysis Romania's real convergence processes based on the GDP per capita in PPS. The third part is reserved for the conclusions of the paper.

2. Degree of fulfillment of the Maastricht criteria

The accession to a common monetary area requires a complex process of convergence between the participating states. The 1991 Maastricht Treaty defines a set of five economic and legal indicators designed to ensure economic convergence between states intending to join the Euro Area. The presentation of the Maastricht criteria will follow the structure indicated in the European Commission's Convergence Report (European Commission 2020).

Legal compatibility

Regarding the independence of the Central Bank, several incompatibilities have been identified in relation to the Statute of the European Bank and the Treaty on the Functioning of the European Union (European Commission 2020).

The incompatibilities identified by the European Commission in the Convergence Report (European Commission 2020) relate to: (i) the independence of the Central Bank; ii) the procedures for revoking the Governor or the members of the NBR Council; (iii) lending and primary market operations; (iv) integration into the European System of Central Banks.

Price stability

The criterion of price stability is defined in the Treaty on the Functioning of the European Union by reference to the lowest rate of inflation recorded in the Member States of the Euro Area. In this respect, a Member State fulfills this criterion if it "has a lasting price stability and an average inflation rate one year before the examination which may not exceed by more than 1.5 percentage points the inflation rate of the top three Member States with the best results in the area of price stability" (ECB, Convergence Report, 2016).

Targeting a narrow path of price fluctuations contributes to reducing shocks and increasing the degree of synchronization of Euro Area economies to inflationary shocks. The inflation rate in Romania is higher compared to the reference value indicated by the Treaty on the Functioning of the European Union. Procyclical fiscal policy in the context of gross domestic product above potential has contributed to heightened inflationary pressures. Against the background of the economic shock

induced by COVID-19, the inflation rate decreased in Romania, but the deviation from the reference values remained (Figure 1).

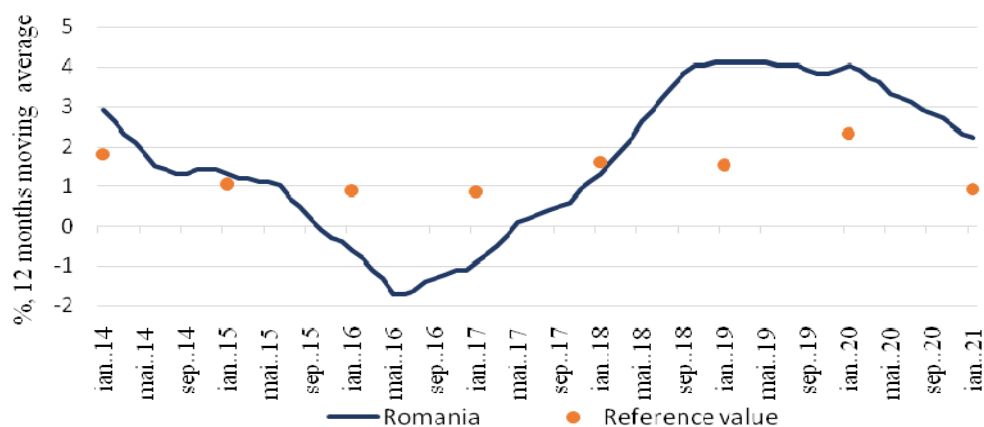


Figure 1. Inflation rate in Romania compared to reference values.

Source: Eurostat. Harmonised index of consumer prices (prc_hicp_mv12r).

The inflation rate increased significantly reaching 4.1% in 2018 in the context of rising prices of imported goods, and the fading effect of the VAT cuts (see Table 1). In 2019, the inflation rate decreased due to the decrease of the energy component of the HIPC. However, core inflation calculated as HIPC excluding energy and unprocessed food has risen sharply. This was mainly due to wage increases in 2019. The raw food component increased significantly even though the VAT on food decreased. The increase cannot be fully explained by the fading of the basic effect, induced by the VAT adjustment in 2018. In 2020, inflation was lower across the board, with some components as energy recording significant price drops.

Tabel 1
HIPC inflation components for Romania.

%	2014	2015	2016	2017	2018	2019	2020	Component weights 2020
HIPC	1.4	-0.4	-1.1	1.1	4.1	3.9	2.3	1000
Industrial goods	1.8	-0.3	-1.9	0.8	4.9	2.5	-0.4	288
Energy	2.3	-2.7	-4.4	0.4	12.2	2.7	-7.4	109
Unprocessed food	-0.7	-3.4	-2.5	3.9	5.3	6.2	5.3	117

Processed food including alcohol and tobacco	0.2	-1.6	-0.9	2.2	3.7	5.5	5.0	246
Services	3.1	2.2	0.7	-0.5	2.7	3.6	2.7	241
Overall index excluding energy and unprocessed food	1.7	0.7	-0.2	0.9	2.7	3.8	3.3	775
Administered prices	2.0	1.6	-2.5	0.5	4.2	2.6	1.2	114

Source: Eurostat. Harmonised index of consumer prices (prc_hicp_mv12r)

Note: Calculated as the ratio of the arithmetic averages of the monthly values for 2 consecutive years

Figure 2 shows that the inflation rate in Romania exceeded the inflation rate in the Euro Area at the end of 2017. The gap remained relatively stable in 2018 to 2020. Inflation volatility is higher in Romania compared to the Euro Area indicating the impact of discretionary economic policies.

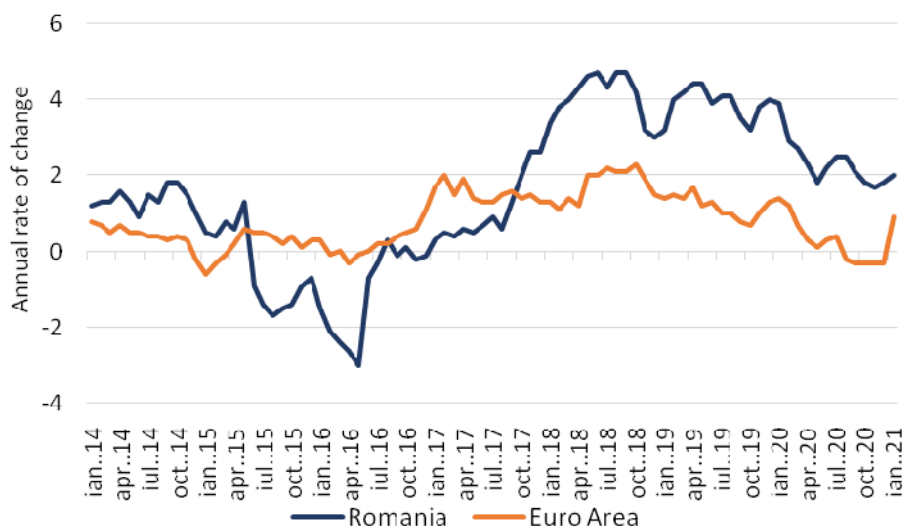


Figure 2. Inflation rate in Romania compared to the Euro Area.

Source: Eurostat. Harmonised index of consumer prices (prc_hicp_manr).

In the context of COVID-19 induced disinflationary pressures, the National Bank of Romania (NBR) pursued a policy of quantitative easing, reducing the monetary policy interest rate during 2020 from 2.5 percent to 1.5 percent. NBR further reduced the monetary policy rate to 1.25 percent in January 2021. Successive reductions in monetary policy interest rates have sought to mitigate the economic impact of the pandemic and strengthen liquidity in the banking system.

Labor costs have significantly exacerbated inflationary pressures in recent years. The decline in the working age population, amid massive migration, as well as the skills shortage have led to high wage increases. The dynamic was accentuated by significant wage increases in the public sector as well as by repeated increases in the minimum wage (Figure 3).

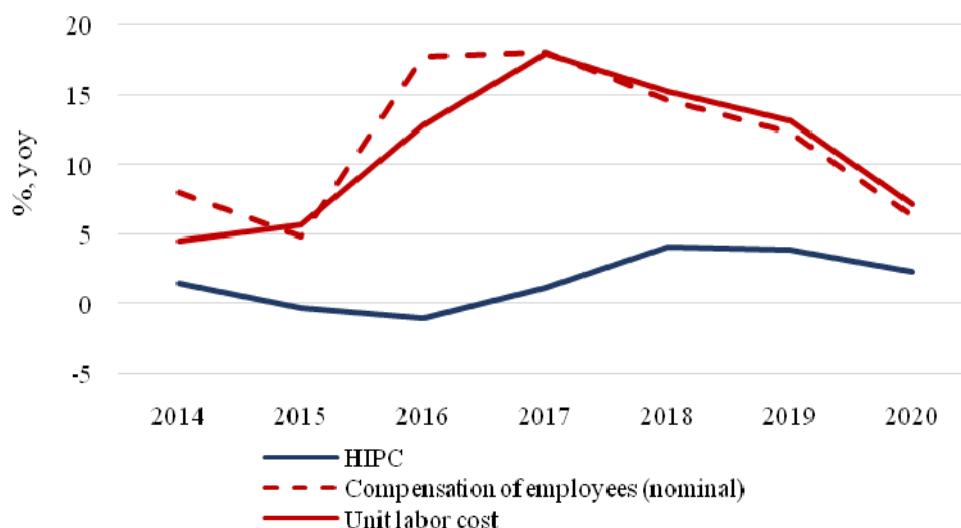


Figure 3. Inflation rate in Romania and the evolution of labor costs.

Source: Eurostat. Harmonised index of consumer prices (prc_hicp_a) and unit labor cost (lc_lci_r2_a).

Fiscal evolution and public debt

The cohabitation of a supranational monetary authority with the national tax authorities may induce the risk of moral hazard which results in the danger of over-indebtedness of the Member States of a common monetary area. In this context, ensuring a consistent fiscal policy between Member States is important. Recognizing this, the Treaty on the Functioning of the European Union legislated the creation of the excessive deficit procedure according to which the European Commission draws up a deficit report when a Member State does not meet specific fiscal conditions, namely: (i) the share of planned or actual government deficit in gross domestic product exceeds a reference value of 3% and (ii) the share of government debt in gross domestic product exceeds a reference value of 60%.

Although the impact and credibility of a common monetary policy is greatly diminished by the lack of a common fiscal policy and the existence of fiscal slippages, all Euro Area states have violated the public deficit criterion at least once (Figure 4).

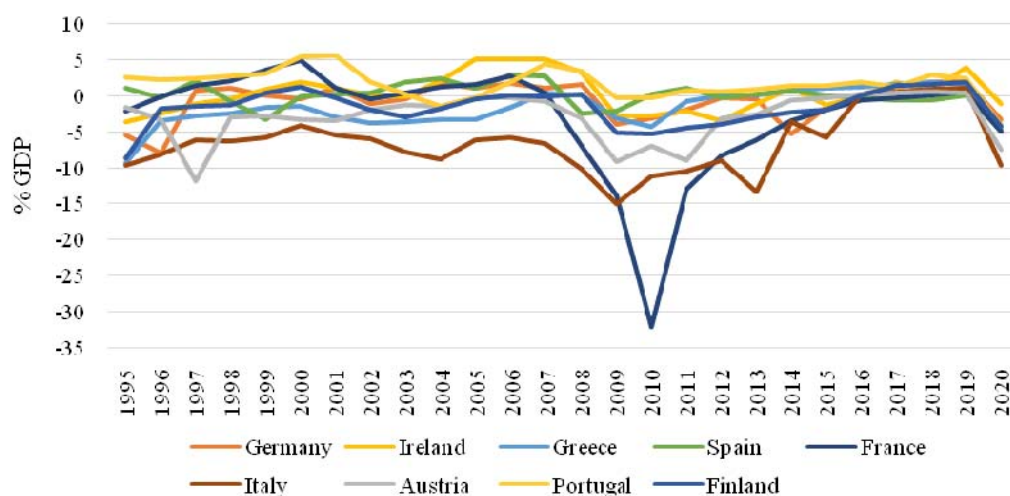


Figure 4. Fiscal deficit in euro area states

Source: Eurostat. Government revenue, expenditure and main aggregates (gov_ 10a_ main)

Note: Selection of Euro Area states based on economy size and fiscal deficit. Fiscal deficit expressed in ESA

Since 2016, the fiscal deficit has been increasing, even if Romania has registered some of the highest economic growth in the EU27 (see Table 2). This highlights the strong pro-cyclical nature of fiscal policy. In 2019, Romania exceeded the 3 percent threshold, triggering the excessive deficit procedure protocol.

Tabel 2

Evolutions of the General Consolidated Budget components in Romania.

	2014	2015	2016	2017	2018	2019	2020	2021
Fiscal deficit	-1.2	-0.6	-2.6	-2.6	-2.9	-4.4	-9.2	-8.0
Total fiscal revenues	34.1	35.5	32.0	30.8	31.9	31.8	33.1	33.0
Total fiscal expenditure	35.3	36.1	34.6	33.5	34.9	36.1	42.4	41.0
Primary deficit	0.5	1	-1.1	-1.4	-1.8	-3.1	-7.8	-6.3
Structural deficit	-0.8	-0.4	-1.9	-3.0	-3.2	-4.7	-7.5	-6.9

Source: Eurostat, Government revenue, expenditure and main aggregates (gov_10a_ main), AMECO.

The triggering of the COVID-19 pandemic led to the suspension of the excessive deficit procedure protocol for Romania, in the context in

which the EU27 countries were allowed to post fiscal deficits exceeding the 3 percent threshold. Romania's fiscal position worsen significantly in 2020, as the fiscal deficit surged to 9.2 percent. The European Commission estimates Romania will have difficulties to curve down the deficit which will remain high at around 8 percent of GDP in 2021. The structural deficit remains significant at around 6.9 percent indicating the high share of the structural component in the deficit.

Romania's public debt is one of the lowest in the EU27 in terms of share in gross domestic product (see Figure 5). However, historical developments illustrate the accelerated dynamics of debt in the context of economic crises. For example, in 2008 the public debt in Romania was 12.3% of GDP. In 2012, in just four years, public debt reached 37.1% of GDP.

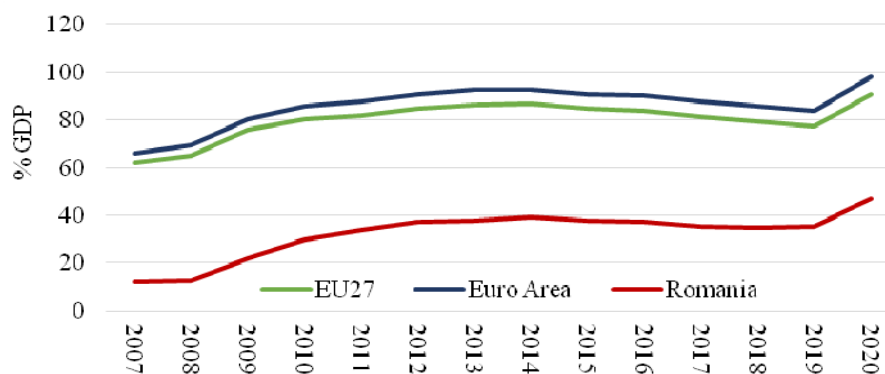


Figure 5. Public debt in Romania, the euro area and the EU28.

Source: Eurostat. Government deficit/surplus, debt and associated data (gov_10dd_edpt1)

Note: Public debt in ESA terms

The crisis triggered by the COVID-19 pandemic has led to a deterioration of the macroeconomic context and increased public spending. In this context, Romania registered significant increases in the fiscal deficit and public debt in 2020 (see Figure 6). Fiscal facilities, investments and exceptional expenditures allocated to combat the effects of the COVID-19 epidemic accounted for 46.3 billion RON, 4.45 percent of GDP, as of end-2020. Pressures stemming from rising public spending and lower fiscal revenues amid the economic contraction led to a significantly higher fiscal deficit in 2020 compared to 2019. In this context, public debt will most likely exceed the 60% threshold specified in the Maastricht Treaty over the medium term.

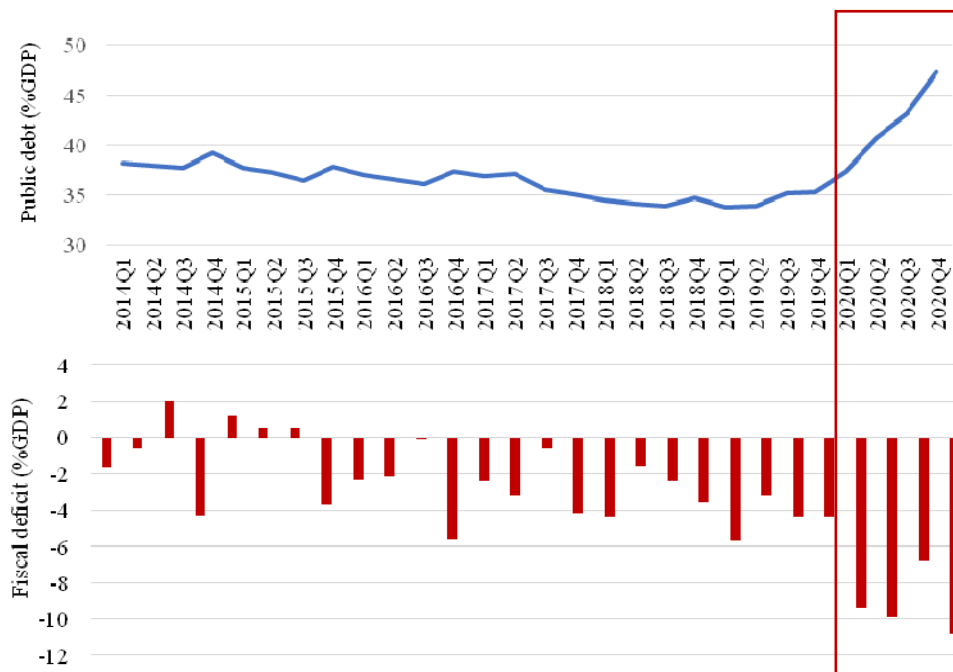


Figure 6. Evolution of public debt and fiscal deficit in the context of COVID-19.

Source: Eurostat. Quarterly government debt (gov_10q_ggdebt); Quarterly non-financial accounts for general government (gov_10q_ggnfa)

Exchange rate stability

The exchange rate regime has gradually changed from a floating exchange rate regime managed including through using administrative measures until 1997 to a more flexible exchange rate. In the context of the transition to inflation targeting, by the National Bank of Romania, the exchange rate regime became a controlled floating regime, in 2005, characterized by a flexible monetary policy response to unforeseen shocks that may affect the economy.

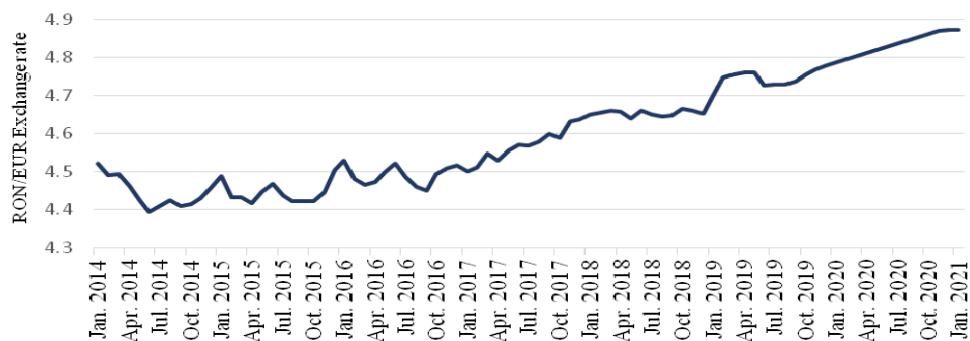


Figure 7. Evolution of the RON / EUR exchange rate.

Source: NBR, Interactive database.

During 2014 to 2016, the RON / EUR exchange rate fluctuated around 4.5. Subsequently, the leu gradually depreciated against the euro. Between the beginning of 2018 and the end of 2019, the leu depreciated against the euro by about 3 percent (see Figure 7). During this period, the volatility of the leu's intra-day exchange rate was moderate compared to the currencies of other states with derogations. By derogation we mean states that have not fulfilled all the conditions set out in the Treaty on the Functioning of the European Union for the adoption of the euro.

The economic uncertainty induced by the COVID-19 pandemic contributed to the higher depreciation of the RON / EUR exchange rate in 2020 compared to 2019 (see Figure 7). The evolution of the exchange rate in 2021 will be influenced by the economic developments of Germany, France and Italy, Romania's main trading partners, but also by domestic economic developments, among which the foreseeable increases in the balance of payments and fiscal deficits are worth mentioning.

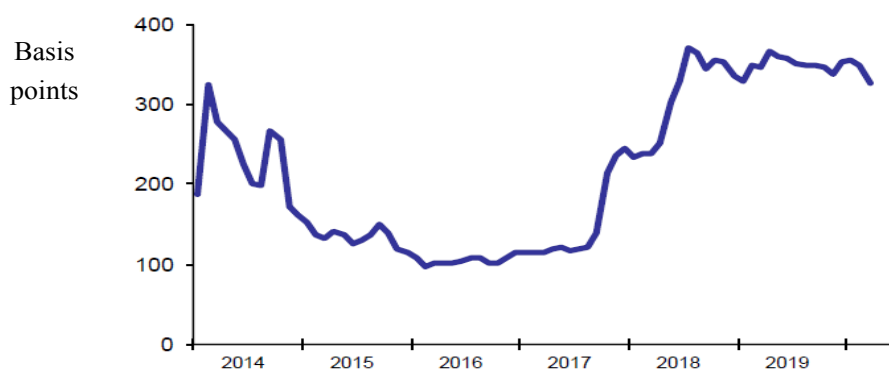


Figure 8. Variation margins between 3M Rotor and 3M Euribor.

Source: NBR, Interactive database

Short-term interest rate margins against the euro increased in 2018 reflecting increases in the NBR's monetary policy interest rates (see Figure 8). The three-month interest rate hovered around 325 basis points in March 2020 compared to its peak of 370 basis points in July 2018.

Long-term interest

Long-term interest plays an important role in the convergence process. According to the Treaty on the Functioning of the European Union, the interest rate convergence criterion refers to the fact that “the average long-term nominal interest rate may not exceed by more than 2 percentage points the rates of three Member States with the best results in the field of price stability. Interest rates are calculated on the basis of

long-term government bond yields or comparable securities, taking into account differences between national definitions”.

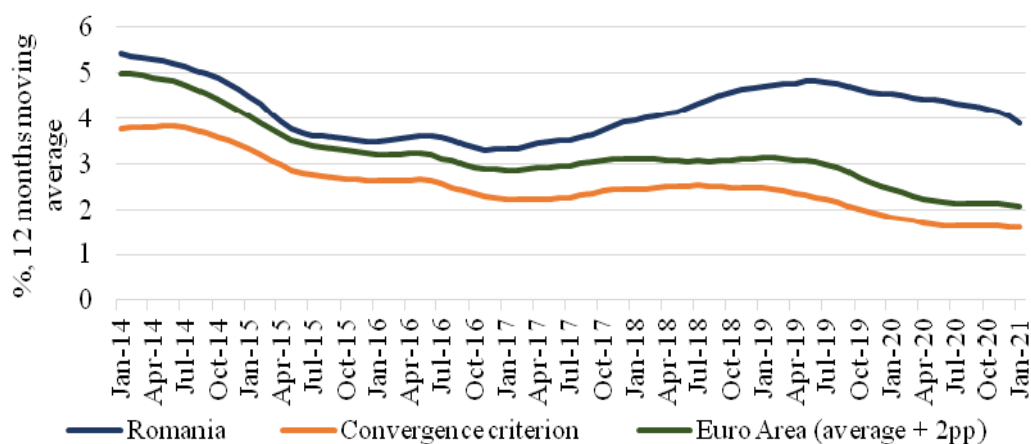


Figure 9. Interest rate convergence criterion.

Source: Eurostat. Harmonised index of consumer prices (prc_hicp_mv12r).

The average long-term interest rate was above the critical reference value. The gap widened considerably in 2018 but decreased in the context of quantitative easing in the Euro Area (see Figure 9). Romania has one of the highest long-term interest rates along with Hungary and Poland, despite relatively low inflation in Romania.

The European Central Bank has expanded its asset purchase program to ensure the financing of the economy. In the conditions of a liquidity deficit on the money market, the National Bank of Romania continued to remain active to support the economy. In the context, the gap between long-term interest rates in Romania and the Euro Area decreased.

3. Romania's real convergence with the Euro Area

GDP per capita is the main indicator used to measure real convergence. Romania has made important progress in terms of convergence with EU15 countries. Compared to the other Central and Eastern European states that have concluded a formal arrangement for accession to the Euro Area, Romania recorded in 1995 the highest gaps in terms of GDP per capita in PPS. The accession to the European Union in 2007 represented an engine of convergence for Romania (see Figure 10). In this respect, GDP per capita in PPS represents 39 percent of the EU15 average increasing significantly to 64 percent as of 2019.

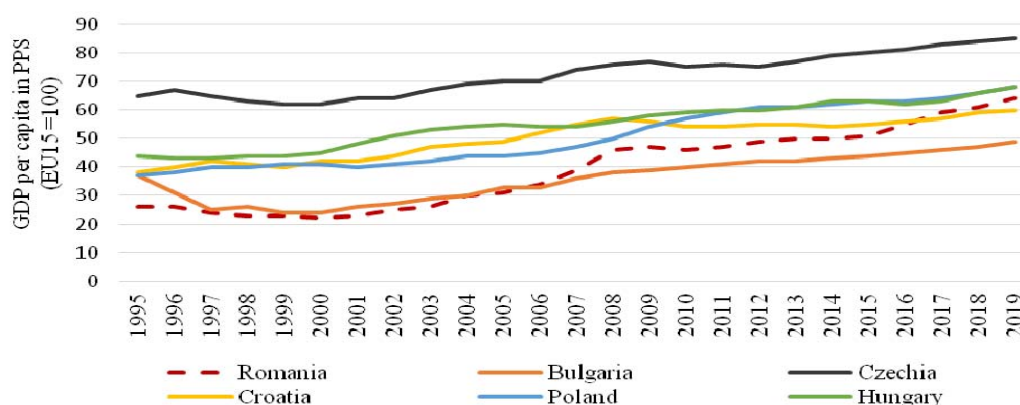


Figure 10. Convergența reală a României în termeni de PIB pe locuitor în PPS.

Source: Eurostat. Purchasing power parities (PPPs), price level indices and real expenditures for ESA 2010 aggregates (prc_ppp_ind)

Looking at the level of convergence of European states in the year before joining the Euro Area we can see that the majority had a higher GDP per capita compared to Romania (Table 3).

Tabel 3.

PIB pe capita in PPS (EU15=100) at the accession to MRS and the Euro Area

	MRS accession (previous year)	Euro Area accession (previous year)
Greece	1997 – 75%	2000 – 74%
Portugal	NA	1998 – 70%
Spain	NA	1998 – 80%
Slovenia	2003 – 73%	2006
Malta	2004 – 70%	2007 – 76%
Cyprus	2004 – 86%	2007 – 89%
Slovakia	2004 – 50%	2008 – 56%

Source: Author's synthesis based on Eurostat data.

With the exception of Slovakia, all states were much more advanced in terms of GDP per capita convergence compared to Romania. At the same time, countries such as Cyprus entered the Euro Area with a high GDP per capita, accounting for 89% of the EU15 average, subsequently declining and reaching 73% of the EU15 average in 2014.

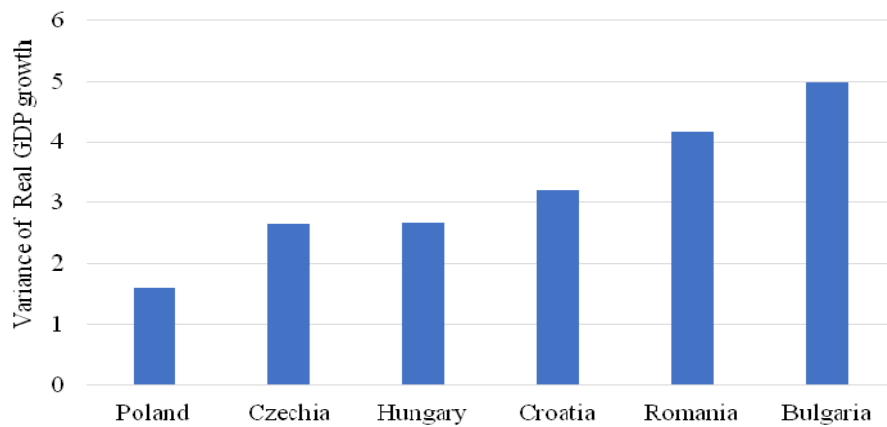


Figure 11. Economic growth volatility for selected countries.

Source: Own calculations based on Eurostat data for 1995-2020

The analysis of volatility of economic growth calculated as the variance of real GDP growth in the period between 1995 and 2020 points to higher variations in the case of Romania and Bulgaria compared to other states (see Figure 11). The volatility of economic growth underlines the need for structural and fiscal reforms in Romania shielding against the effect of economic shocks. Strong pro-cyclical fiscal policy characterized by considerable fiscal deficits during periods of economic growth has reduced Romania's available fiscal space. Poor institutional convergence also contributed to increased economic volatility. In the Global Competitiveness Report for 2019, Romania ranks 52nd out of 141 states in terms of the institutional pillar, registering low performances in terms of public sector performance, 70th place and corporate governance, 66th place.

4. Conclusions

Based on the latest European Commission report, Romania did not meet any of the Maastricht criteria, respectively: legal compatibility, price stability, public finances, exchange rate stability, and long-term interest rates. Significant progress is still needed in terms of nominal convergence. The crisis triggered by the COVID-19 pandemic has led to the deterioration of Romania's macroeconomic context and reduced Romania's ability to meet the Maastricht criteria. The main criteria affected are the fiscal deficit and public debt. Fiscal facilities, investments and exceptional expenditures allocated to combat the effects of the COVID-19 pandemic accounted for 46.3 billion RON, 4.45 percent of GDP, as of end-2020.

Increased public spending and reduced fiscal revenues will lead to considerable increases in the fiscal deficit, which will be difficult to curve down. In this context, public debt is likely to exceed the 60% threshold specified in the Maastricht Treaty over the medium term. Given these pressures, it is essential to maintain fiscal discipline and reduce the structural component of the fiscal deficit to meet the fiscal criterion specified in the Maastricht Treaty.

The analysis of Romania's real convergence to the Euro Area from the perspective of GDP per capita reflects the significant progress made from 1995 to 2019. Romania registered the highest development gap compared to the Euro Area prior to the EU admission. In this respect, GDP per capita in the PPS represented 26 percent of the EU15 average in 1995. The gap has narrowed so that by 2019, GDP per capita in PPS represented 64 percent of the EU15 average. However, if we look at the convergence of the European countries in the year prior to joining the Euro Area, most had a higher GDP per capita than Romania. This indicates the need to continue the process of real convergence to ensure economic sustainability in the context of accession to the Euro Area.

REFERENCES

- [1] Dăianu, D., Kallai, E., Mihailovici, G., & Socol, A. (2016), *România și aderarea la zona euro: întrebarea este, în ce condiții!* (Study), Retrieved from http://ier.gov.ro/wp-content/uploads/publicatii/SPOS_2016_Romania_si_aderarea_la_zona_euro.pdf.
- [2] Duhnea, C., Ghita-Mitrescu, S., & Vancea D.P.C. (2012), *Euro adoption – the illusion of the monetary integration of Romania*, CES Working Papers, IV(2), 152-163.
- [3] Dumitru, I. (2009), *Euro adoption in Romania*, MPRA Paper no. 18612.
- [4] European Central Bank (2004), *Sectoral Specialisation in the EU. A macroeconomic perspective*, Occasional Paper Series no. 19.
- [5] European Commission (2020), *Convergence Report. Institutional Paper 129*, June 2020.
- [6] Isărescu, M., 2015, *Convergența nominală versus convergența reală*, European Commission Conference on Romania's path towards euro, April 20, București, Retrieved from <http://www.bnro.ro/PublicationDocuments.aspx?icid=6885> Kenen 1969.

