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## THE IMPORTANCE OF THE SUSTAINABILITY OF THE ROMANIAN CONVERGENCE PROCESS TO THE EURO ZONE

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### **Abstract:**

*Since 2007, Romania has been under the under the glance of experts in the European Union, but also under the strict monitoring of the NBR and also under the pressure of citizens and investors' expectations about the moment of euro adoption. My research concerns have also been channeled to this point of maximum interest, impact and timeliness, which is why I have proposed through this paper to highlight a synthetic situation regarding the fulfillment of the convergence criteria from the moment of accession to the European Union, to the present. The objective of this paper is to reflect, in dynamics and correlation, the degree of fulfillment of the nominal and real convergence criteria, the sustainability of the levels achieved for certain indicators, so necessary for joining the single currency, without shocks. Romania is a country subject to frequent fluctuations at all levels: economic, political, legislative, also reflected in the fluctuations in meeting the convergence criteria. The lack of medium and long-term sustainability of the criteria considered necessary for joining the euro area will make this desiderate ever more remote.*

**Key words:** *convergence, euro, sustainability*

### **1. Introduction**

Romania's accession to the European Union was a moment of great importance in the historical evolution of our country, with a beneficial impact on the Romanian economy, but it also came with responsibilities regarding the necessity of joining the single currency, a condition that must be fulfilled, according to the accession treaty, when the Romanian economy will be ready. This process consists of fulfilling a set of conditions, known as convergence criteria, some of which are precisely stipulated in the Maastricht Treaty. In addition, however, a country wishing to join the eurozone must demonstrate that there is real convergence at the level of the economy as demonstrated by the convergent evolution of indicators that show more concretely the situation of the economy. With this paper, I have proposed to analyze these criteria

from the moment of joining the EU to the present, in order to reveal what I consider to be Romania's major problem, namely the ability to ensure sustainability in fulfilling these criteria. Fulfilling these criteria only under certain circumstances, or only partially fulfilling them, or treating superfluously the real convergence criteria, will only lead to postponing the moment of the adoption of the euro, which will decrease the confidence in Romania's ability to achieve this objective.

The paper will contain a brief analysis of the specialty literature regarding both nominal and real convergence criteria, and then a case study that reflects the evolutionary situation since Romania's accession to the EU and so far, in the light of these criteria, with the aim of highlighting the issue that I believe will also prevent the adoption of the single currency in the future, namely the sustainability of convergence in Romania.

## **2. Literature review**

The issue of convergence in the euro area has long been debated both among researchers, especially at the level of European and national monetary authorities. Thus, at the level of the European Central Bank, as well as at the level of the National Bank of Romania, there are periodic analyzes regarding the degree of fulfillment of the convergence criteria, these official sources being the main ones underlying my research.

Thus, the Treaty of Maastricht - the Treaty on European Union signed in 1992, also contains a Protocol on the criteria for convergence in the euro area referred to in Article 109j of the Treaty establishing the European Union. The Treaty can be found on the official website of the European Central Bank, and summarizing the issues that need to be met by the member countries for joining the euro area, the convergence criteria can be divided into two categories, namely the monetary criteria (the inflation rate criterion, long-term interest rate criterion and exchange rate criterion) and budgetary criteria (budget deficit and public debt criterion) ([https://www.ecb.europa.eu/ecb/legal/pdf/maastricht\\_en.pdf](https://www.ecb.europa.eu/ecb/legal/pdf/maastricht_en.pdf) - pg. 85). These are known as nominal convergence criteria.

Thus, **the inflation rate** should not exceed by more than 1.5% the average inflation rate in the first 3 countries of the European Union, with the lowest inflation rate. Therefore, this criterion is a mobile one, the benchmark changes every year, being influenced by the general macroeconomic context.

Then there is the condition related to **the exchange rate** of the national currency, which must be part of the II Exchange Rate Mechanism, at least 2 years before the adoption of the single currency. This pre-stage is necessary because it is not just the fluctuation of the exchange rate against the euro that should not exceed +/- 15%, but also the sustainability of all other criteria that is had in view. Even if none of the EU Member States is part of this Mechanism, the exchange rate fluctuation in the last two years is taken into consideration.

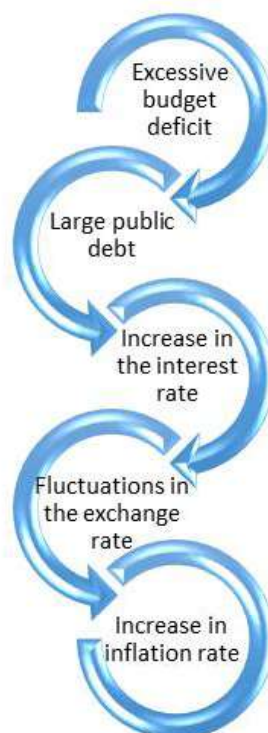
As far as **the long-term interest rate** is concerned, it should not exceed by more than 2% the average long-term interest rate recorded in the first three countries with the highest inflation rate. The Treaty makes a concrete statement about these long-term interest rates in order not to be confused with others, so they must be measured for long-term government bonds and comparable securities, taking into account specific national definitions (according to article 4 of the Protocol).

As we can see, monetary criteria are somewhat more flexible, there are no precisely stipulated values in the Treaty, and rather some margins within which these indicators have to fit. However, the situation is much more precise in terms of budgetary criteria, so the **budget deficit** should not exceed 3% of GDP and the **public debt** may not exceed 60% of GDP.

Although these criteria were clear in the Treaty, there were exceptions that were also stipulated in the treaty, namely protocols specifically made for those countries which have maintained their position of non-adherence to the euro area (UK, Denmark and Sweden) but also exceptions with long-term implications, namely the acceptance of countries that, although not meeting all the criteria, were accepted in the euro area. Thus, Spain, Italy, Belgium had public debt above 60% of GDP, and Greece had problems with both the public debt and the budget deficit, which is why it joined the eurozone two years later. The problems of these countries have been resolved more skeptically than factually, a situation later revealed by the 2008 crisis.

Returning to the convergence criteria, however, we can see a close connection between them and the inflation rate as a first criterion. This is related to how the failure to meet criteria may affect the price stability criterion, which is why we also notice that most of the world's central banks are setting their goal of keeping inflation stable at a low level. The explanation is related to the fact that stable inflation contributes to a stable evolution of the economy in the medium and long term, as the accumulation of imbalances in an economy will affect price stability (Figure no. 1).

If the nominal convergence criteria are clearly stipulated and the levels to be met are well-known, **the real convergence criteria** become the subject of public debates and scientific research, especially since the 2008 crisis, which has severely affected European countries, questioning the opportunity for eurozone enlargement over the next period. Real convergence is assimilated according to NBR specialists, to the process of GDP growth per capita to the level closest to the euro area level (Isărescu, 2015). The NBR analysis reveals that this convergence of GDP / capita to a desired level should not be seen as an objective to be met in real terms, and rather as a consequence of the investments made in the Romanian infrastructure and economy that will lead to the desired desideratum in a sustainable manner. Another highlighted aspect is related to the significant disparities that exist between different areas of Romania in terms of living standards and development, which may cause asymmetric shocks in the event of meeting this criterion at aggregate level.



**Figure 1. Interconnection between the nominal convergence criteria**

The same aspect is highlighted by the National Forecast Commission regarding the discrepancy between the levels of regional development in Romania, as Romania approaches the share of 60% GDP / capita compared to GDP per capita of the euro zone and the level recorded is comparable to that of the last countries that have adopted the euro (Estonia, Latvia, Slovakia) (National Commission for Prognosis, Economic Programming Council - Real Convergence, Bucharest, February 23, 2018).

Other research in the field extends the criteria reflecting real convergence and indicators related to GDP trend, private sector debt, labor productivity, labor costs, share of economic sectors in GDP, and addressing these criteria should be seen on larger time horizons to reflect their sustainability. (Juan Luis Diaz del Hoyo, Ettore Dorrucci, Frigyes Ferdinand Heinz, Sona Muzikarova, 2017).

In addition, an article published in the ECB's Bulletin concludes that although the European Union needs to support the member countries' efforts to join the euro area, effective convergence and, above all, the sustainability of convergence is a matter of national accountability. (ECB Economic Bulletin, Issue 5/2015). This is an essential point because cooperation between all state structures to ensure integrated and sustainable convergence is the only way to achieve this goal. Any link that acts independently of this goal can cancel out the efforts of other components in this direction. I believe that this is also the reason why, in Romania, 11 years after joining the EU, there is a moving away from the moment when the single currency will be adopted, and not a closeness, as would be normal.

### 3. Case study

For the present research, I have proposed to analyze the degree of fulfillment of the convergence criteria in Romania from 2006 to the present, the purpose of the analysis being to reflect the sustainability of this degree of convergence.

Starting from the analysis of the situations related to the convergence criteria in the Periodic Convergence Reports and the presentations made by the NBR management specialists, we synthesized this information in table no. 1.

**Table 1. Situation of macroeconomic indicators in Romania, according to the criteria provided by the Maastricht Treaty**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018*
<b>Inflation rate (%)</b>	<b>6.6</b>	<b>4.9</b>	<b>7.85</b>	<b>5.6</b>	<b>5.5</b>	<b>5.8</b>	<b>3.4</b>	<b>3.2</b>	<b>2.5</b>	<b>-0.4</b>	<b>-1.1</b>	<b>1.1</b>	<b>1.9</b>
<b>Fluctuation of exchange rate lei / euro</b>	10 / -6.1	5.4	9.7 / -14.6	-15.1	1.71 / -14.3	-0.6	-5.2	0.9	-1.9	0	-1	-1.7	-4.6
<b>Long-term interest rate (%)</b>	<b>7.49</b>	<b>7.1</b>	<b>7.7</b>	<b>9.7</b>	<b>7.6</b>	<b>7.3</b>	<b>6.7</b>	<b>5.4</b>	<b>5.3</b>	<b>2.7</b>	<b>3.3</b>	<b>4</b>	<b>0.7</b>
<b>Budget Deficit (%)</b>	<b>-1.9</b>	<b>-2.5</b>	<b>-5.4</b>	<b>-8.3</b>	<b>-7.2</b>	<b>-5.2</b>	<b>-3</b>	<b>-2.3</b>	<b>-2.2</b>	<b>-0.7</b>	<b>-3</b>	<b>2.9</b>	<b>0.8</b>
<b>Public debt (% of GDP)</b>	<b>12.4</b>	<b>13</b>	<b>13.6</b>	<b>23.7</b>	<b>30.4</b>	<b>33.3</b>	<b>38</b>	<b>38.4</b>	<b>39.9</b>	<b>38.4</b>	<b>37.4</b>	<b>35.3</b>	<b>38</b>

Source: Processing after the Convergence Reports 2008, 2010, 2012, 2014, 2016, 2018 and the NBR specialists' presentations on convergence issues, which can be found in bibliography

Note: Marking of values in the table signifies the non-fulfillment of the convergence criterion, in line with the provisions of the Maastricht Treaty

\* The data refer to April 2017 - March 2018.

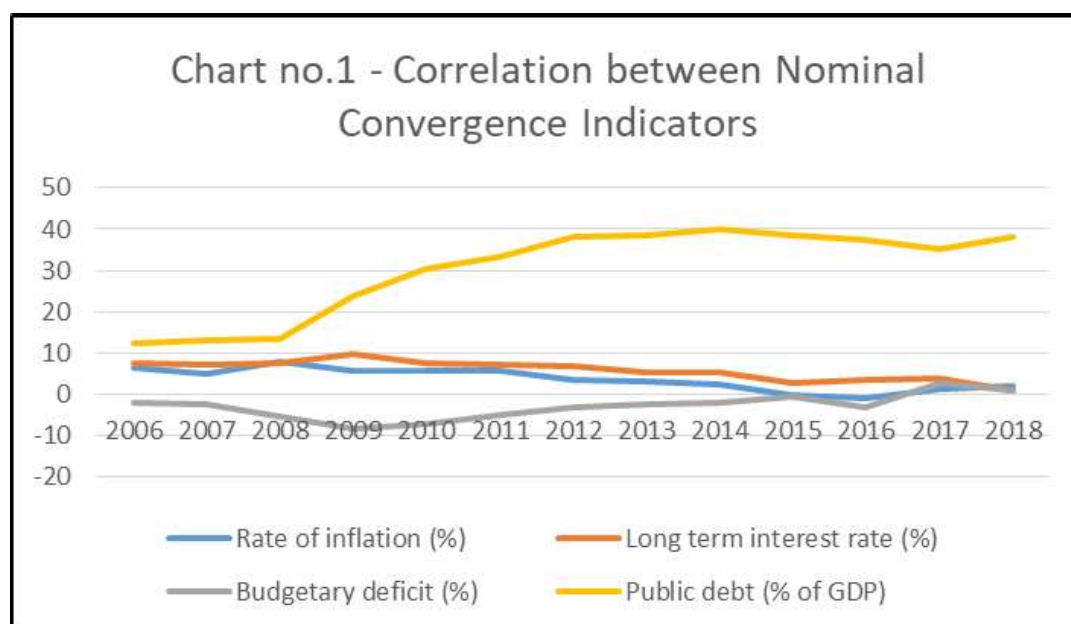
If the NBR analyzes on convergence criteria were very frequent in the first years after EU accession, and the setting of targets for adoption as well with the onset of the crisis, the priorities have changed, and the establishment of a target for adoption has become almost impossible. The frequent changes that occurred both at the fiscal and budgetary level and in the legislation, as well as the political tensions put this goal of joining the euro zone on hold, for a moment when the Romanian economy will be ready. Selection of data for analysis was made more difficult by the fact that all convergence reports were published between March and June, every two years, but they also referred to those years for which the data were related to a fraction of the year.

Analyzing the moments of non-fulfillment of the convergence criteria over the whole period, we are tempted to say that for a long time we have achieved criteria

compared to the unfulfilled criteria. And the last 4 years and the condition of meeting the criteria (except for the long-term interest rate criterion that was not met in 2017) can lead us to the question of why we are not yet in the euro area.

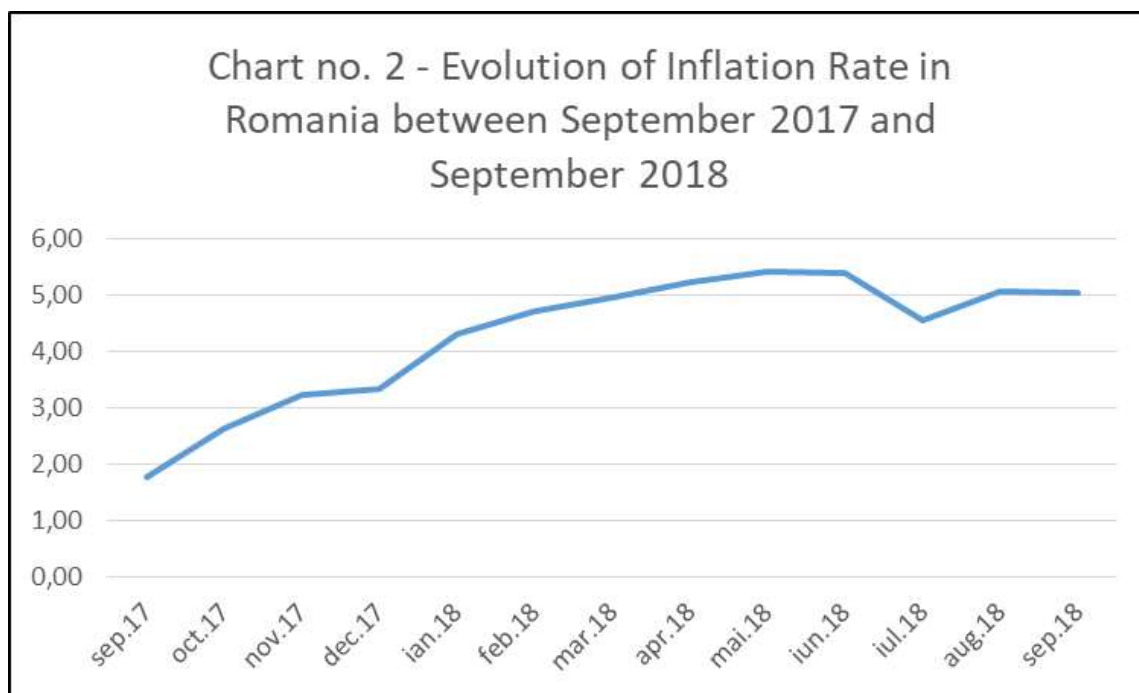
Figures are so apparent, but if we continue the incursion, we will notice that Romania is not in such a good situation, so it will be necessary to meet as many real convergence indicators as possible.

Turning to the nominal convergence criteria, we note that the most frequent problems occurred in fulfilling the criterion on inflation rate and interest rate, which are also strongly correlated depending to given conditions (according to Chart 1), under the stress of the crisis, the exchange rate and the budget deficit. The chart and calculations in excel allow me to say that there is a strong link between the inflation rate and the long-term interest rate (the correlation coefficient is 0.82), but also between the inflation rate and the budget deficit (correlation coefficient of -0.61) and the inflation rate and public debt (correlation coefficient of -0.74), there are medium-intensity links. The relationship between the inflation rate and the interest rate is explicable by the way the interest rate is formed, but the links between the inflation rate and the budgetary position indicators reflect precisely this interconnection of the convergence criteria and the common denominator of all, namely the inflation rate.



Source: processing by data from table no. 1

Ensuring a stable and predictable inflation rate generates sustainability for the other criteria. At the same time, fluctuations in the inflation rate should be treated as negative signals about the economy's evolution, likely to produce effects in the medium and long term. Consequently, the situation of meeting the convergence criteria over the last 4 years can be very quickly reversed in the next period, the main cause being linked to the evolution of inflation rates in 2018, not yet covered by any convergence report (Chart 2).

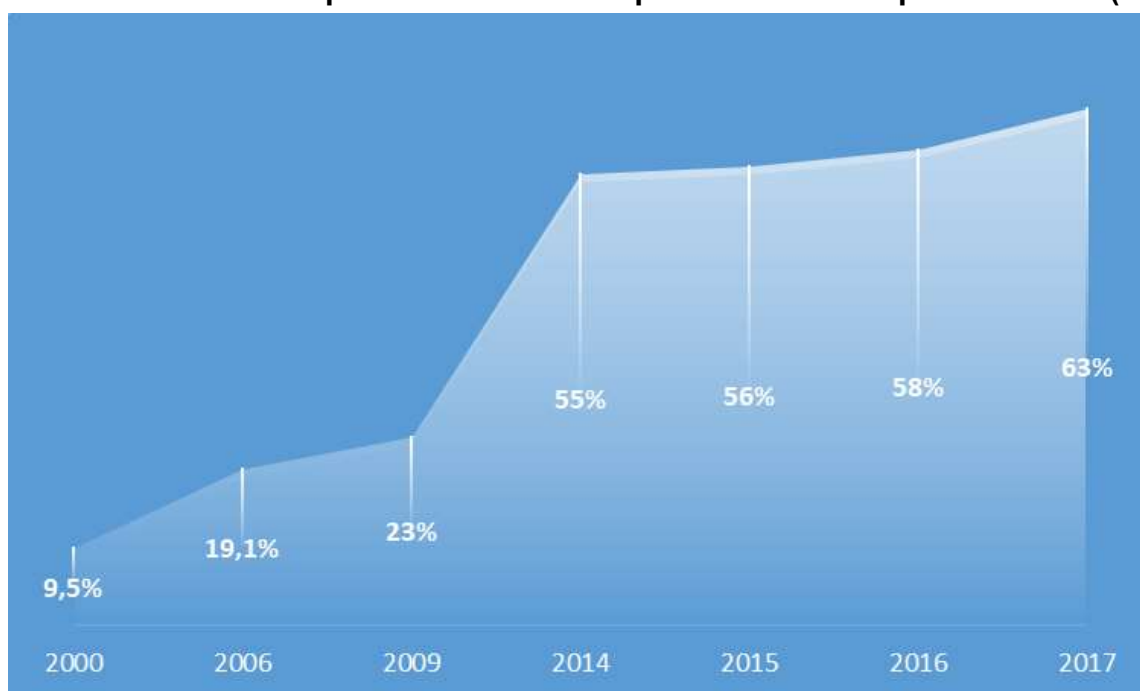


Source: NBR processing - Inflation report, Statistical data series used in graphs, <http://www.bnro.ro/Raportul-asupra-inflatiei-3342.aspx>

The evolution of this year's inflation rate, which results in a 4.96 average record of the first 9 months, almost double the monetary policy rate target of the NBR and well above the eurozone level, cancels efforts to meet the convergence criteria over the last 4 years and considerably delays the adoption of the euro, given that the impact of this inflation increase can be seen only in the medium and long term, and given the effect this growth will have on the other criteria. Thus, the interest rate will increase and, of course, the budgetary indicators will be affected. Thus, according to analyzes by the European Commission, the budget deficit is projected to increase to 3.3% in 2018, 3.4% in 2019 and 4.6% in 2020. (European Commission - Autumn 2018). The main cause of this situation is linked to wage increases in the public sector, on average by 25% in 2018, and this is the main reason for the rise in the inflation rate, under pressure from increased demand but also under pressure from tax changes. Thus, although the inflation rate and the other criteria are not visible and indirect, the link between the inflation rate and the other criteria is strong and, furthermore, the moderation of inflation, once on the trend of growth, is cumbersome and requires concerted efforts by all the institutions responsible for Romania's economic policy.

Regarding the real convergence criteria, many analysts are tempted to refer primarily to GDP growth per capita as a measure of the country's living standards. The experiences of the other countries that have brought the euro show that if GDP per capita reaches the level of 60%, real convergence is demonstrated. From this perspective, Romania fulfills this criterion, which is beneficial from the perspective of the steps taken to join the euro area (Chart no. 3).

**Chart no. 3 - GDP / capita in Romania compared to GDP / capita in the EU (%)**



Source: Processing by Eurostat, Statistics Explained, File: Volume indices per capita, 2014-2017 and NBR presentations on convergence topics presented in bibliography

Even if, from the perspective of the aggregate indicator, GDP per capita converges to the existing level in the EU, the major problems are related to the discrepancy between the regions of Romania regarding this indicator. Thus, at the end of 2011, the per capita GDP in Bucharest and Ilfov represented 122% of the EU average, the North East region was only 29%, the South-West region was 37%, the South-East region, 39%, which is why Romania is considered the country with the most heterogeneous regional development. (Isărescu, M., 2015). So, future concerns from this perspective would be to stimulate development across the country, otherwise joining the euro area would cause unfavorable effects for some citizens or companies in less developed areas. And the key issue that has triggered the accumulation of these gaps is related to Romania's precarious infrastructure, which prevents the penetration of investors to the eastern region, and their polarization in the western region, the center and the capital's area. Even if the GDP / capita trend will continue to grow, it cannot be sustainable if there is no quality infrastructure that contributes to similar levels of development in Romanian regions.

However, real convergence means more than GDP per capita. It also means and tends to a level like that of many EU countries. And here I refer to concrete, felt and individual criteria. Thus, the purchasing power of employees is only 42% compared to the EU average, labor remuneration is only 22%, on average by 10 percentage points below the level of the countries in the region. Another very worrying issue, which is also found in the EU countries, is related to the significant increase in the number of pensioners, together with the decrease in the number of employees. Thus, if in 1990 the number of employees was 4.8 million higher than the number of pensioners, in 2017, the relationship of order reversed, and we have 0.3 million people,

more retirees than employees (0.92 employees per retiree). There is a question of ensuring a sustainable pension provision, a problem that will increase, as the number of emigrants to find a better job is on the increase. GDP growth as the main real convergence indicator should be pursued from the perspective of sustainable growth, i.e. growth in the private sector, by companies, and not just as consumption-based growth. From this perspective Romania does not have a satisfactory situation. Thus, Romania ranks last in terms of the number of SMEs per one hundred inhabitants (only 2.2 compared to 4.5, EU average). In addition, there is a significant percentage of companies that do not work properly (almost 16% of them have negative capital, do not register earnings and do not have employees), and only 26% of Romanian companies have paid their debts to partner companies on time. (BNR - Georgescu, F., 2017).

Real convergence is therefore not a subject that can be summed up to a single indicator, it is a complex subject that needs to be analyzed in depth, and the degree of functionality of the economy as a whole, starting from the engines that can determine the sustainability of Romania's development. Analyzing the above aspects, in terms of real convergence, Romania is still at a considerable distance from other EU Member States, and by the time of the euro adoption it will have to demonstrate that economic development is sustainable and fiscal and legislative stability need to support this.

#### **4. Conclusions**

The issue of adopting the euro, but especially of Romania's position on the EU, is of utmost importance, all the more so since the eyes of all are on the rotating presidency of the Council of the European Union, which will be assured by our country, 12 years after accession to the EU. The immediate objective following the accession of 2007 was the adoption of the euro, the targets being permanently changed (2012, 2014, 2019), which is currently ruled as being 2024. It is considered by specialists a moment of political calmness, which can allow the manifestation of the economic policy measures effects to meet the convergence criteria. The study conducted in this article is based mainly on a radiography of the degree of fulfillment of the nominal convergence criteria from the time of Romania's preparations for becoming a member of the European Union to the present. The analysis reflected the fact that Romania has a main problem, namely the lack of correlation between the actions of the main institutions with attributions in the monetary, fiscal and budgetary policy, accentuated by the political and legislative inconsistency, which led to fluctuations in the inflation rate. We have shown that the inflation rate is interconnected with all nominal convergence indicators, and if significant fluctuations have lapsed between 2014 and 2017, the sharp rise in inflation in 2018 will result in fluctuations across all convergence criteria over the next period. If the skews of this indicator in 2007-2011 can be correlated with the pre- and post-crisis international context, fluctuations in the current year only have internal determinants. Romania will have to demonstrate the sustainability of meeting the price stability criterion, with all other nominal convergence

indicators being affected by fluctuations in the inflation rate. Considering this aspect and the fact that the analysis of GDP per capita convergence revealed significant gaps between the regions of Romania, I believe that the moment of the adoption of the euro is moving away. Moreover, the sustainable development of the Romanian economy will be possible only by investing in infrastructure, in the development of entrepreneurship, in fostering culture and financial education, in the cultivation of correct behaviors of the private environment, of course accompanied by fiscal and legislative stability, and political consistency directed towards long-term positive effects on Romania. If these issues are happening, the adoption of the euro will come as an obvious consequence. I also believe that forcing the adoption of the euro can cause shocks on the Romanian economy, and at the same time postponing the moment of joining the eurozone, may hinder the sustainable development of the economy and perhaps even cancel out the structural reform efforts achieved so far.

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