ECONOMIC DEVELOPMENT AND CONVERGENCE IN ROMANIA

Elena-Raluca, Moisescu (Duican)¹

Abstract: This paper presents the economic connection between nominal convergence, real convergence and economic development in Romania. It is shown that fulfilling the nominal criteria is not enough to enter the Economic Monetary Union. It needs to be accompanied by a sustainable economic development and an increasing labour productivity.

Keywords: economic development, convergence, real convergence, nominal convergence

JEL Classification: F63, O47

1. Introduction

The integration of Romania in the eurozone requires a certain level of nominal and real convergence with the countries in this area, and reducing disparities between our country and the European Union average.

According to Raileanu and Marinescu (2010) empirical evidence shows that real convergence process influences the nominal convergence through productivity growth and openness of the economy.

Openness of an economy is one of the criteria the theory of optimum currency areas and is a factor that indicates growth. The contribution of labor to gross domestic product (GDP) can be measured by labor productivity growth. GDP growth rate highlights the absolute and conditional convergence, based on the initial GDP/capita.

In order to strengthen the euro area, the European Union (EU) has taken steps such as „Euro-Plus Pact“ that support a better coordination of economic policies in order to increase the convergence and economic competitiveness. The main measures are referring to sustainable public finances and strengthen economic stability supports Niţă (2014).

The financial and economic recent crisis has brought in discussion three coordination components for the economic policies affirms Ghizdeanu (2012):

- Structural reforms within Europe 2020 Strategy that refer to the kind of desirable economic growth, i.e. an intelligent, sustainable and socially inclusive one.
- The fiscal-budgetary supervision, within the Stability and Growth Pact – it refers to the obligation of the Member States to reach and maintain a medium-term budgetary objective. It presents constraints in the real convergence process by limiting public investment for the catching-up process.
- The macroeconomic imbalances supervision. It is introduced an index system that detects the macroeconomic imbalances.

Mere fulfillment of the nominal convergence criteria of the Maastricht Treaty does not guarantee entry and maintenance of a state in the eurozone. Therefore, it is necessary a deep analysis of economic and financial characteristics.

This article uses the example of countries like Romania, mainly, and Bulgaria, based on similarities between economies.

2. Literature review

Many works have the concept of economic convergence as a subject.

Figuet and Nenovsky (2006) investigates the case of Romania and Bulgaria in the context of the single currency and to what extent it is influenced the economic development by the convergence with the EU. There are analyzed the nominal and real

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convergence and EU business cycle synchronization using beta convergence. The results indicate that Bulgaria has a higher level of convergence in the studied period.

Allam (2009) points out that depreciation and slowing economic activities during the financial crisis hamper the situation of the new Member States of the European Union that aimed achieving nominal convergence criteria.

Miron, Tatamir and Alex (2013) analyze the structural convergence with the euro area of Central and Eastern European countries (CEE): Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovakia, Slovenia, between 2000 in 2010. Results indicate that real convergence has a positive effect on structural convergence. However, Romania and Bulgaria lags behind other CEE countries.

An important role in assessing a country’s entry into Economic and Monetary Union (EMU) plays real convergence. Catching-up process depends on the initial condition of a state, and on its ability to catch-up the EU and the euro area. Real convergence has as main factors: GDP per capita at purchasing power parity, labor productivity, and price levels.

The same authors state that there are two important criteria which make structural convergence equally important. The first refers to the implications of the international transmission of business cycles, and the second criterion shows the importance of structural convergence in the economic development.

Sikulova and Páleník (2007) concluded in their paper that the time of adopting the euro in the new Member States remains an open question because the real convergence could cause risks of asymmetric shocks. The criteria set by the Maastricht Treaty are the basis for accession to the euro area. The relationship between real and nominal convergence is a close one. An increase in the productivity of a country leads to increased prices, jeopardizing the achievement of nominal convergence criteria.

Giving up control of its currency means for a country that it cannot use currency devaluation in order to stay competitive in the world market. There are some benefits of using common currency (eliminating foreign exchange risks, promoting significant economic growth and development). In contrary, in times of significant downturns, a government that uses its local currency can reduce the real interest rate to encourage investments in domestic businesses affirms Vodenska and Chitkushev (2013). In this paper, the authors analyze three groups of countries and they investigate the relationships between a group of macroeconomic indicators and sovereign debt as a percentage of GDP. The results show that even though the European Monetary Union is strategically, politically and economically important, the most recent European sovereign debt crisis has brought new challenges that need to be taken in consideration when considering the replacement of the countries local currencies with the euro.

Theories of economic growth are closely related to those of economic convergence. Besides the neo-classical theory (which emphasizes the idea of absolute convergence), appear neoliberal theories (where, first, the gap is widening, then, it arrives at a period of convergence from divergence). In the same work, Zaiț (2006) states that prudence regarding support convergence is found in the neo-classical theories improved (augmented). Endogenous growth is divided into two groups of theories: endogenous innovation (Schumpeterian endogenous innovation) and endogenous capital (endogenous broad capital). Finally, the existence of long-term divergence is supported by Myrdal, Kaldor, Perroux, as regional growth patterns.

In its initial form, the neoclassical model of economic growth suggests convergence to the same level of economic development of the states. Capital accumulation leads to faster growth in poor countries compared to rich ones.

On the other hand, the model refers to the increase in endogenous growth in different ways. Engine of economic growth can be called the effort made for research and
Dinga states that there are five distinct types of real convergence processes in the literature: gamma-convergence ($\gamma$) which it has as a target the synchronization of business cycles, alpha-convergence ($\alpha$) covering similar structure of the economy, delta-convergence ($\delta$) that relates to similar levels of convergence, sigma-convergence ($\sigma$) requires similar levels of GDP/capita between regions and countries, beta-convergence ($\beta$) shows a negative correlation between the initial state and convergence speed sigma. The most common types are the sigma convergence and beta.

Sigma convergence measures the dispersion of GDP/capita between regions or countries based on standard deviation. When the difference between the GDP/capita in constant prices between regions or states decreases (standard deviation decreases over time) there is convergence. A second embodiment of the extent of convergence is the coefficient of variation. If it falls over a time period we can say there is convergence.

Beta convergence can be obtained through a regression analysis where it is estimated the growth of GDP/capita over a period of time to its initial level. The literature found two types of beta convergence: conditional (when countries converge to different stationary states) and unconditional (where regions converge to steady state).

3. Aspects on nominal convergence

For adopting the euro, a country must meet the nominal convergence criteria. The recent financial crisis has raised new challenges for states that wish to adopt euro, asking them to meet difficult criteria. States seeking entry into the euro area should provide a real GDP growth similar to most developed countries in this area.

As well as the challenge to meet and maintain the nominal convergence indicators according to criteria set by the Maastricht Treaty, these countries face with the economic catching-up process, according to Ouardigha and Kapetanovic (2009).

The five nominal convergence criteria laid down in the Maastricht Treaty refers to:
- Price stability; inflation rate must not exceed by more than 1.5% average inflation rate for the first three EU Member States that had the best results in terms of price stability;
- Long-term interest rate: the average must not exceed by more than 2% average rate of the three Member States with the best results;
- Budgetary discipline: the budget deficit should not exceed 3% of GDP and public debt 60% of GDP;
- Exchange rate stability: the national currency must fall within a narrow fluctuation band of $\pm$ 2.25% and a broad band of $\pm$ 15% for two years before entering the European exchange rate mechanism ERM II.

3.1. The inflation rate criterion

According to the Statute of the National Bank of Romania (NBR), Law no. 312/2004, “the primary objective of the National Bank of Romania is to achieve and maintain price stability”. The main focal point of the Romanian economy is given by inflation. In 2004 there was an inflation of 9.3%, the first year with inflation expressed by one figure after 1990.

In August 2005, the central bank adopted inflation targeting strategy. The reason for the change of strategy is that monetary targeting (based on aggregate M0 as an operational objective and M2 as an intermediate objective) was no longer an effective strategy.

Disinflation has slowed down in 2005. In late 2006 it reached the target of 4.87% and the average inflation rate was 6.56%. Inflation rate of nominal convergence criterion refers
to the average inflation rate rather than the rate on Consumption Price Index. It is noted
that this criterion was not met either in 2010 or in 2011.

Inflation has seen a decrease in the second half of 2013 due to lower food prices and reduced value-added tax on bread and bakery products.

Inflation rate continues to decrease in 2014. However, in 2015 is expected to rise to 3.3% due to recovery in domestic demand.

It can be said that it is a criterion quite problematic for a country because there are many factors that may increase inflation (domestic demand, rising energy prices and food). In states which have monetary inflation targeting strategy (Czech Republic, Poland, Romania) values of inflation differ.

Among the possible reasons of missing the inflation target in the coming years we can mention the future conduct of fiscal policy, wage increases more than labor productivity growth and aggregate supply shocks (oil and natural gas price increase).

Table number 1 - Inflation rate (Romania-EU-28)
(HIPC, in percentage)

<table>
<thead>
<tr>
<th>Countries/Years</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015 (estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>3.0</td>
<td>3.4</td>
<td>2.4</td>
<td>0.4</td>
<td>-0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Romania</td>
<td>6.1</td>
<td>5.8</td>
<td>3.4</td>
<td>3.2</td>
<td>2.5</td>
<td>3.3</td>
</tr>
<tr>
<td>UE</td>
<td>2.1</td>
<td>3.1</td>
<td>2.6</td>
<td>1.5</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Average of the three countries with the lowest inflation rate in the EU</td>
<td>0.9</td>
<td>1.5</td>
<td>1.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Source: Eurostat Database, European Commission Forecast, 2014

3.2. The long-term interest rate criterion

In Romania it is difficult to analyze the interest rate, in conditions of launch by 2006 of only two long-term bonds: in April 2005 at an interest rate of 6.75% and 2006 at an interest rate of 7.49% both with a maturity of ten years. It is noted that in the 2010-2014 period, the interest rate remains above the average of the first three countries with the lowest inflation rate in the EU, although a downward trend.

Table number 2 – Long-term interest rate (Romania-EU-28)
(ten-years bonds as a percentage)

<table>
<thead>
<tr>
<th>Countries/Years</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>6.0</td>
<td>5.3</td>
<td>4.5</td>
<td>3.4</td>
<td>-</td>
</tr>
<tr>
<td>Romania</td>
<td>7.3</td>
<td>7.2</td>
<td>6.6</td>
<td>5.4</td>
<td>-</td>
</tr>
<tr>
<td>Average of the three countries with the lowest inflation rate in the EU</td>
<td>2.8</td>
<td>2.3</td>
<td>1.5</td>
<td>1.7</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Eurostat Database

3.3. The budget deficit criterion

In 2008, although the European Commission forecast was 3.2%, the consolidated budget deficit was 5.4%. Because this level was above the reference value of the Treaty of Maastricht, the European Commission recommended our country measures to reduce this indicator.

Deepening budget deficit in 2010 is due to cyclical and structural factors. Deficit criterion has been met since 2012.

Certain elements favoring fiscal imbalances such as wage policy imprudent rapid growth of pensions and fiscal policy inconsistency can be removed by the Ministry of Economy and Finance by taking structural measures to strengthen the role of fiscal policy, ie a plan of rationalization of public expenditure and implementing EU multiannual
budgetary planning process and discussions with the central bank monetary policy makers according to Socol (2009).

Table Number 3 – Budgetary balance
(Romania – UE-28, as percentage)

<table>
<thead>
<tr>
<th>Countries/Years</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015 (estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>-2,4</td>
<td>-1,2</td>
<td>0,1</td>
<td>-1,1</td>
<td>-0,7</td>
<td>-1,1</td>
</tr>
<tr>
<td>Romania</td>
<td>-6,8</td>
<td>-5,5</td>
<td>-3,0</td>
<td>-2,3</td>
<td>-2,2</td>
<td>-1,9</td>
</tr>
<tr>
<td>UE</td>
<td>-3,8</td>
<td>-1,5</td>
<td>-1,0</td>
<td>-0,5</td>
<td>0,2</td>
<td>0,2</td>
</tr>
</tbody>
</table>

Source: Eurostat Database, European Commission Forecast, 2014

3.4. Public debt criterion
Low share of public debt to GDP, below the EU average, gives a possibility for upgrading Romanian economy by contracting foreign loans. However, from 2010 to 2014, public debt increased from 30.5% to 39.9%.

Table Number 4 – Public debt
(Romania – UE-28)

<table>
<thead>
<tr>
<th>Countries/Years</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015 (estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>16,2</td>
<td>16,3</td>
<td>18,4</td>
<td>18,9</td>
<td>23,1</td>
<td>22,7</td>
</tr>
<tr>
<td>Romania</td>
<td>30,5</td>
<td>34,7</td>
<td>38,0</td>
<td>38,4</td>
<td>39,9</td>
<td>40,1</td>
</tr>
<tr>
<td>UE</td>
<td>80,1</td>
<td>83,0</td>
<td>86,8</td>
<td>88,9</td>
<td>89,5</td>
<td>89,2</td>
</tr>
</tbody>
</table>

Source: Eurostat Database, European Commission Forecast, 2014

3.5. Exchange rate criterion
Each Member State may decide entry into ERM II without fulfilling any formal preconditions. Importantly it is as at the entry into ERM II, the country has a favorable level of nominal and real convergence with the countries that are already in Economic and Monetary Union to avoid a currency crisis. In Romania, in November 2004 began the process of flexible exchange rate. This criterion depends on meeting inflation criterion. Regarding the stability of the exchange rate, the currency must fall within a narrow fluctuation band of ± 2.25% and a broad band of ± 15% for two years before entering the European exchange rate mechanism ERM II.

Domestic price stability is ensured by increasing the effectiveness of monetary policy. Balassa-Samuelson effect should not be offset by the exchange rate policy of the central bank. A sustained improvement in labor productivity, improved macroeconomic situation and international low yields lead to increased capital inflows, with unavoidable pressures for real appreciation of the domestic currency. Socol (2009) said that in order to maintain macroeconomic balance is recommended and appropriate fiscal policy (restrictive), besides the exchange rate policy applied.

By applying a restrictive fiscal policy when it comes to capital inflows: reducing aggregate demand, limiting real appreciation of the exchange rate, current account deficit limit, mitigate rising prices and increasing savings.

Although right now, our country meets the criteria of nominal convergence, Romania should not rush to join the euro area, but should wait until you have a level of real convergence (income per capita) in Euro area. It would also have to prove that it can maintain the level of those criteria.
4. Aspects on real convergence

The catching-up process of a country should not be seen as an automatic result of European Union accession. The structure of the economies has to become similar in real convergence. Both, the catching-up and the convergence, are based on economic growth.

The crisis period shows a period of stagnation for the real convergence process. Ghizdeanu (2012) states that Romania’s potential gross domestic product will improve until 2020. The annual growing pace for the potential gross domestic product is estimated at 3% annually, as compared to almost 5% before 2008.

Even if the real convergence criteria are not stipulated in the Maastricht Treaty, they have an important role in adopting a common currency. Policy makers should give more attention to real convergence because of its importance in economic cohesion of a monetary union’s Member States.

In terms of GDP/capita, Romania has made significant progress between 2001 (20%) and 2008 (43%), followed by a slight decrease in 2010 (40.6%). There are differences between the values of GDP in the euro zone and the European Union.

5. Conclusions

A main concern within European Union is to accomplish a sustainable economic growth. It is also

The financial crisis of 2007-2008 brought to light a number of weaknesses within the European Union and the euro area. Amid them, the need for better coordination between Member States’ economic policies became evident. Fiscal and budgetary surveillance is the first component in the new coordination by introducing constraints in the real convergence process towards limit the public investment for catching-up process.

It is not enough to fulfill the nominal convergence criteria in order to have an economic performance in the euro zone. It has to be accompanied by fiscal and structural policies, by flexible domestic production factors.

A tricky problem for Romania is to adopt the euro. Given that the nominal convergence criteria are met, the question is how and when Romania would have to take this step. Little progress made by our country is not enough to meet the new status.

Aknowledgement

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