ROMANIA'S PATH TO THE EURO AREA – THE IMPORTANCE OF REAL CONVERGENCE

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Abstract. *The recent economic and financial crisis brought into discussion the importance of economic stability and the improvement of economic processes. In order to join the European Monetary Union, our country needs to accomplish the nominal convergence criteria that are stated in the Maastricht Treaty. In addition, even if they are not stipulated in the treaty, there are real convergence criteria to be fulfilled. This paper presents the concept of economic convergence, both real convergence and nominal convergence, in Romania, and it is showing their level of accomplishment in this moment.*

Keywords: *nominal convergence, real convergence, European Monetary Union.*

JEL Classification: E26, E42

1. Introduction

The recent financial and economic crisis has raised questions on the criteria for joining the Euro zone. It was raised the criteria reform for joining the euro area because of European Union (EU) enlargement from 15 to 27, then to 28, and because of breach criteria by Euro area Member States. The crisis has highlighted the asymmetry between euro area Member States and those outside the area. The criteria reform can be done on three levels: firstly, on inflation and interest rates, secondly on four criteria measuring a period exceeding one year and thirdly, a treaty change. [1]

In the context of the international crisis and non-congruence of the requirements between macroeconomic stability and economic growth, real convergence process seems to be a difficult one. From 2010, was adopted The European Semester, which includes procedures relating to the Stability and Growth Pact, the General Guidelines for the Economic Policies of the Member States and those on macroeconomic, fiscal and structural policies. This includes the structural reforms of intelligent, sustainable and socially inclusive growth Europe 2020 Strategy, it is introduced an objective for

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Member States to maintain a medium-term budgetary objective (MTO) related to the structural budget deficit and surveillance of macroeconomic imbalances. [2]

In 2009, almost all European Union member states had budgetary deficit, emphasizing the situation in some cases in 2010. Some countries have introduced fiscal measures (tax cuts or increased government spending) in response to the crisis.

This paper presents a brief history of Economic and Monetary Union (EMU) convergence criteria set by the Maastricht Treaty and their level of fulfillment in this moment in our country's accession to the Euro zone. It also stated that although there is no set of criteria, the real convergence has a great importance in joining the euro zone. The data used in the study are taken from the Eurostat database and covers the period between 2007 and 2015.

2. Theoretical aspects

Initial process of Economic and Monetary Union started a long time ago, even if officially Economic and Monetary Union began in 1999. In an effort to respect the properties of the theory of optimum currency areas, the European Union passed by the Single Market (where it had to fulfill features as: trade integration, mobility of capital and labor).

In 1957 the Treaty of Rome was signed, treaty which referred to the formation of the Common Market following several steps: forming a customs union and then an economic and monetary union.

In 1979, it was created in Paris the European Monetary System that targeted reducing inflation, stabilizing exchange rates and preparation of optimal monetary unification. Fluctuation band was set at ± 2.25% compared to the official parities. With the removal of capital controls, there is incompatibility between the fixed exchange rate, independent monetary policy and perfect mobility of capital.

Delors Report proposes the objective of creating EMU, going through three stages:

- The first phase (July 1 1990 – 1 January 1994) cover the full liberalization of capital movements, better coordination of economic policies.
- The second phase (January 1, 1994 January – 1 1999) provided: coordination of monetary policy, waiver of realignment parities, the creation of a central monetary institution.

– The third stage started from 1 January 1999. Delors Report provides orientation irrevocably fixed exchange rates and replacing with a single currency. The European Council in Madrid in 1995 decided to call the new currency euro. [3]

The theory of optimum currency area (OCA) has its origins in two articles written in the early '60s by Robert Mundell (1961 – considered "the father" of theory of optimum currency areas) and Robert McKinnon (1963). Those articles were debating contemporary issues on fixed exchange rates versus flexible exchange rates, the election being considered a more theoretical than a practical problem. The task of this theory was to make possible a monetary union. [4]

An economy with capital mobility and fixed exchange rate cannot have central bank independence. Incongruence between the three so-called "the impossible trinity" is analyzed by P. Kauffmann showing that monetary unification is the best solution for the European Union. It is based on the observation that, in 1991, the European Union has perfect mobility of capital. Mundell has identified the point where monetary independence is worthy, also the point where the factors ceases to be mobile.

Mundell's criteria were the subject of much discussion and controversy. It is therefore important to distinguish between labor and capital mobility criteria. Ingram (1959) argues that labor mobility is a crucial criterion for an optimum currency area. According to Corden (1972), mobility of labor is generally low.

The theory of optimum currency areas is studying the benefits and costs they incur when a country adopts the single currency. Benefits cover import of credibility of the central bank, while the costs refer to the effects of giving up monetary policy independence. It focuses mainly on cost minimization which depends on certain characteristics of the countries participating in the union.

Optimum currency area can be defined as a region where asymmetric shocks are absorbed without having to use the instrument of exchange rate and where waiving own monetary policy brings net benefits. [5]

F. Mongelli (2002) analyzes the OCA and establishes four phases: pioneering, in the early 1960s, reconciliation phase – the costs and benefits ('70s), revaluation phase ('80s-'90s) and the empirical phase (covering the next 15-20 years). [6]

OCA properties are related to: mobility of production factors, flexibility of wages and prices, the degree of economic openness, diversification of production and consumption, the existence of similarities inflation rate, fiscal integration, political integration and similarity of business cycles.

Some remarks on the first phase:

- Properties must be analyzed in detail, even though some are difficult to quantify.
- The criteria should be assigned and united under a large painting.
- A hierarchy of properties is not yet possible. However, price and wage flexibility and mobility are the most relevant factors.

If the factor mobility is high, then we can solve the problem of asymmetric shocks, capital mobility, labor are easing the adjustment process. Labor mobility reflects the fact that people move easily in response to economic incentives. In the context of price and wage flexibility, a shock will not generate persistent unemployment rate. These criteria formulated by R. Mundell is used when there is a shock on the demand side, the exchange rate is fixed, reducing real wages and labor migration can lead to balancing the economy.

In 1963, Robert McKinnon added another property, namely, the openness of the economy, which can be analyzed by the level of trade integration and country size.

About the second phase can say the following:

– It is trying to prioritize properties. Corden established in the top hierarchy the price and wage flexibility, and Ishiyama ranks first similarity in inflation rates.

– It adds the criterion of similarity of business cycles and shocks.

In 1969, Peter Kenen proposed as a criterion of OCA diversification of production and consumption. Monetary area Member States must be different and produce similar goods. The shock specific of a product has reduced consequences and affects similarly all Member States. The similarity of inflation rates (Fleming – 1971) provides stabilization of trade. Great differences in inflation rates are dangerous when are generated by the economy, by structural differences or different policies.

Fiscal integration is closely linked to political integration, and its first principal component is the Stability and Growth Pact (SGP). Regarding this criterion, Mongelli (2002) examines three versions of fiscal integration: fiscal convergence, fiscal stabilization and fiscal centralization. The criteria of the Maastricht Treaty and the Stability and Growth Pact direct fiscal convergence. Fiscal stabilization accounts for how the states meet the provisions of SGP. As governments have retained the authority to set spending and budget revenues cannot talk of fiscal centralization which involved the use of a supranational budget.

Political integration has several aspects: functional political integration (European Union member states already share a supranational framework consists of the European Parliament, European Commission, Council of the European Union Court of Justice of the European Union), the transfer of sovereignty on several elements of economic policy (centralization of monetary policy under the aegis of the European Central Bank) and the increasing need to coordinate policies.

Financial market integration leads to easier adoption of the single currency because if you remove restrictions on capital it reduces the differences between interest rates and no longer exist variations in the exchange rate.

The vital contribution of the '70s is introducing a new criterion, the similarity of business cycles. According to this property, the biggest threats of optimum currency area business cycles are asymmetric shocks.

Endogenous theory raises the issue of differences between countries and how these differences influence the formation of a monetary union. There are two scenarios: one optimistic that increased integration can lead to compatibility structures, and a pessimistic one, which does not preclude the occurrence of asymmetric shocks.

In 1996, Frankel and Rose argued endogenous character of properties OMA, under which a country could meet the criteria for joining a currency area ex post, not necessarily ex ante. A greater degree of openness of the economy will lead to a convergence of business cycles, which will provide favorable conditions for political integration and the creation of a monetary zone[1].

Another hypothesis based on the theory of trade and increasing scale economies is specialization theory. It is supported by Paul Krugman and tries to prove the contrary of endogenous theory, namely that trade integration can lead to specialization of each country in the production of those goods and services which have a comparative advantage and a low correlation to economic cycles.

3. Nominal convergence criteria

European integration implies more types of convergence: nominal, real and institutional. After joining the EU, a state must accede to Economic and Monetary Union as a result of the nominal convergence criteria established in the Maastricht Treaty.

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[1] Socol, Aura-Gabriela, *European monetary integration, macroeconomics. The case of Romania,* Economic Publishing, Bucharest, p. 40.

Nominal convergence is a multilateral process, defined as the gradual approximation of national policy institutions and the Member States of the European Union, both in monetary and financial plan. [7]

After the 2014 deadline was missed, Romania aims to adopt the euro in 2019, which is supposed to enter the waiting area to adopt the euro, Exchange Rate Mechanism II (ERM II) in 2016; a favorable decision would come in 2019.

The Maastricht Treaty has provided for the imposing of restrictive conditions of member countries seeking entry into the euro area with a view to establishing a stable and sustainable monetary zone. The nominal convergence criteria are the following:

– the budget deficit not exceeding 3% of gross domestic product (GDP);

– public debt shall not exceed 60% of GDP;

– inflation rate over a period of one year before the euro zone access is at most 1.5 percentage points above the average of the first three member states with the lowest inflation;

– stable long-term interest rate (close to the level of the best countries in terms of price stability, that not exceed the maximum 2 percentage points the average interest rates of the three countries with best results of price stability);

– the exchange rate to be stable for at least two years, to respect the normal fluctuation bands of ± 15% provided for by the exchange rate mechanism before joining the State Economic and Monetary Union.

These criteria are based on economic motivation and monetary stability.

After admission to the European Union on 1 January 2007, the next step is the adoption of the single currency. For this our country must meet certain performance criteria.

For new members the transition to the euro, the EU Strategy consists of three stages. The first step is acceptance of the candidate countries in the European Union (free movement of capital).

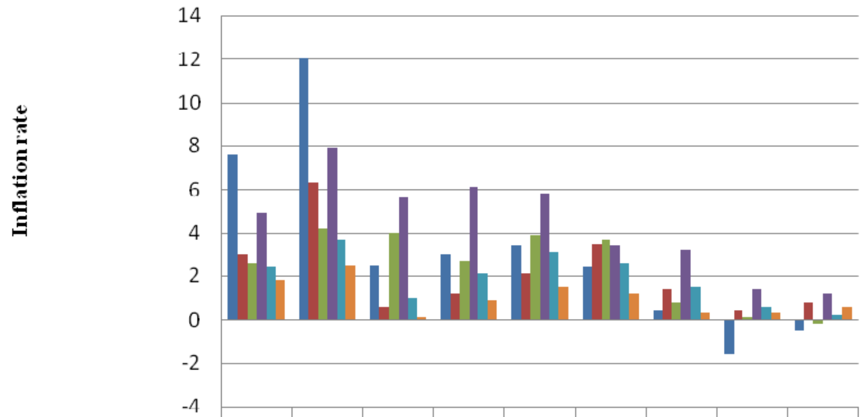
Within the framework of the second stage it is required the implementation of programs and coordination of economic convergence with the other countries on the basis of indications from the Commission. Participation in the Exchange Rate Mechanism II involves binding the euro currency and maintains the exchange rate within a certain fluctuation band.

After nominal and real convergence criteria are met, Member States will participate in Economic and Monetary Union, introducing single currency euro. This last stage also implies giving up independence of monetary policy and exchange-rate mechanism and compliance with the convergence criteria.

To see whether or not economies suffer major shocks resulting from the withdrawal mechanism of adjustment of monetary policy or exchange rate, we have observed two things: the level of compliance of properties optimum currency area and the convergence criteria.

Regarding the price stability criterion, it is reflected in the objective of the National Bank of Romania (BNR), according to its state. The strategy of inflation targeting was adopted in 2005 because monetary targeting was no longer an effective strategy.

It is observed (see Figure 1) that in the first years after joining the EU, Romania hasn't met the inflation criterion.

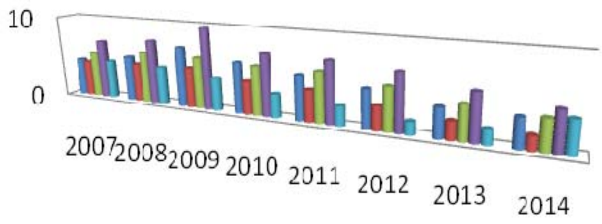


	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bulgaria	7.6	12	2.5	3	3.4	2.4	0.4	-1.6	-0.5
Cehia	3	6.3	0.6	1.2	2.1	3.5	1.4	0.4	0.8
Polonia	2.6	4.2	4	2.7	3.9	3.7	0.8	0.1	-0.2
Romania	4.9	7.9	5.6	6.1	5.8	3.4	3.2	1.4	1.2
UE-28	2.4	3.7	1	2.1	3.1	2.6	1.5	0.6	0.2
The average of the first three countries with the lowest inflation rate	1.8	2.5	0.1	0.9	1.5	1.2	0.3	0.3	0.6

Figure 1. The average annual change in HIPC.

Source: Eurostat database, European Commission Forecast, 2015.

The criterion of long-term interest rate is linked to the inflation rate criterion. In 2005, our country issued government bonds with 7.49% interest rate, above the average rate. When the inflation rate reduces, it is easier for this criterion to be met, because the government bonds will be issued at a lower interest rate. Regarding long-term interest rate criterion can be seen as follows (Figure 2), from 2014, Romania has met the criterion:



	2007	2008	2009	2010	2011	2012	2013	2014
Bulgaria	4.5	5.4	7.2	6	5.3	4.5	3.4	3.3
Cehia	4.3	4.6	4.8	3.9	3.7	2.8	2.1	1.6
Polonia	5.5	6.1	6.1	5.8	5.9	5	4	3.5
Romania	7.1	7.7	9.7	7.3	7.2	6.7	5.4	4.5
The average of the first three countries with the lowest inflation rate	4.6	4.5	3.9	2.8	2.3	1.5	1.7	3.7

Figure 2. Long-term interest rate.

Source: Eurostat database, European Commission Forecast, 2015.

In 2008, the first year after Romania joined the European Union, although the European Commission forecast was 3.2%, the consolidated budget deficit was 5.9% of GDP. Because this level was above the reference value of the Treaty of Maastricht, the European Commission recommended our country for measures to reduce this indicator. Certain elements favoring fiscal imbalances, such as an imprudent wage policy, the rapid growth of pensions and fiscal policy inconsistency can be removed from the Ministry of Finance by taking structural measures to strengthen the role of fiscal policy. This criterion has not been met either in 2009, when the financial and economic crisis occurs, the budget deficit reached –8.9% of GDP. They were taken austerity measures to reduce public spending, so in 2012 the deficit reached –2.9%, remaining below 3% by 2014. The impact of lower social security contributions by 5 percentage points was counterbalanced the increase in excise duties on fuel and the special tax on construction. For 2015, it forecasts a deficit of –1.5% of GDP (see Figure 3).

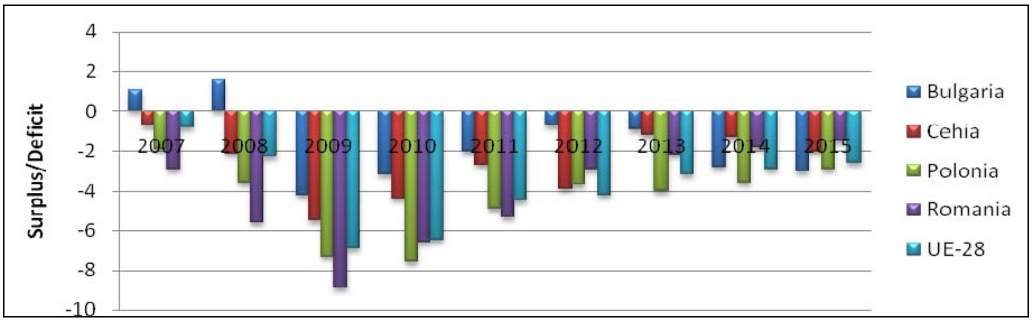


Figure 3. Budgetary balance.

Source: Eurostat database, European Commission Forecast, 2015

Government revenues have been decreasing due to the contraction of economic growth in 2009. Large budget deficits have led to a doubling of public debt from 13.2% of GDP in 2008 to 29.9% of GDP in 2010. The ratio of public debt to GDP reduced, below the EU average, gives a possibility to modernize the Romanian economy by contracting foreign loans.

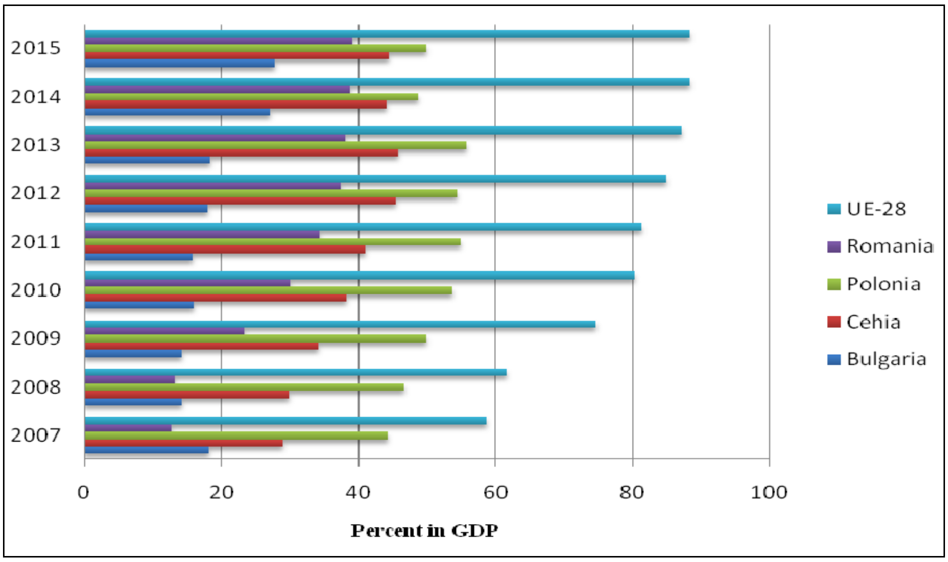


Figure 4. Public debt.

Source: Eurostat database, European Commission Forecast, 2015

Regarding the exchange rate criterion, the Member States may decide in the ERM II when the level of real and nominal convergence with countries belonging to Economic and Monetary Union is favorable to integration. Process flexibility of the exchange rate of the Leu started in 2004. Before entering ERM II, the currency must remain in a narrow fluctuation band of ± 2.25% and a broader band of ± 15% for two years.

Table 1.

The evolution of exchange rate compared to euro.

Country/ Years	2007	2008	2009	2010	2011	2012	2013	2014	2015
Romania	3,33	3,68	4,23	4,21	4,23	4,45	4,41	4,44	4,42

Source: Eurostat database

Among all the provisions of the European Semester, monitoring presents fiscal constraints on the process of real convergence. The structural deficit is defined as the budget deficit that exists where unemployment might find the natural rate of unemployment. Changes in the structural deficit are the effects of discretionary fiscal policy. Cyclical deficit is the difference between the current deficit and the structural deficit. When unemployment falls below the natural rate, the current deficit is lower than the structural deficit and has a negative value, and if the unemployment rate rises above the natural one, cyclical deficit is positive. Changes in deficit are caused by cyclic changes in the tax burden and government spending.

It is observed in Figure 5 that the structural budget deficit in Romania during the crisis deepened, reaching in 2009 to –9.7% of GDP. From 2011 the structural budget deficit slowed and amounted to –1.3% of GDP in 2014, approaching the level set by MTO, 1%.

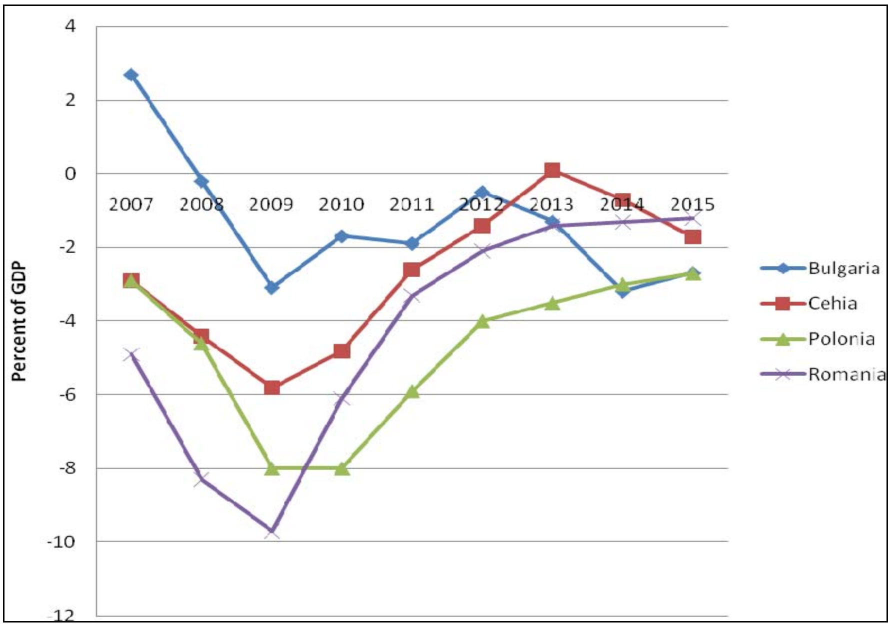


Figure 5. Structural budgetary balance.

Source: Eurostat database, European Commission Forecast, 2015.

4. Real convergence

Concerning real convergence to the EU average is spoken most often of GDP per capita at purchasing power parity standard. One can notice a decrease in real GDP per capita since 2009 and resuming the upward trend from 2011 to present.

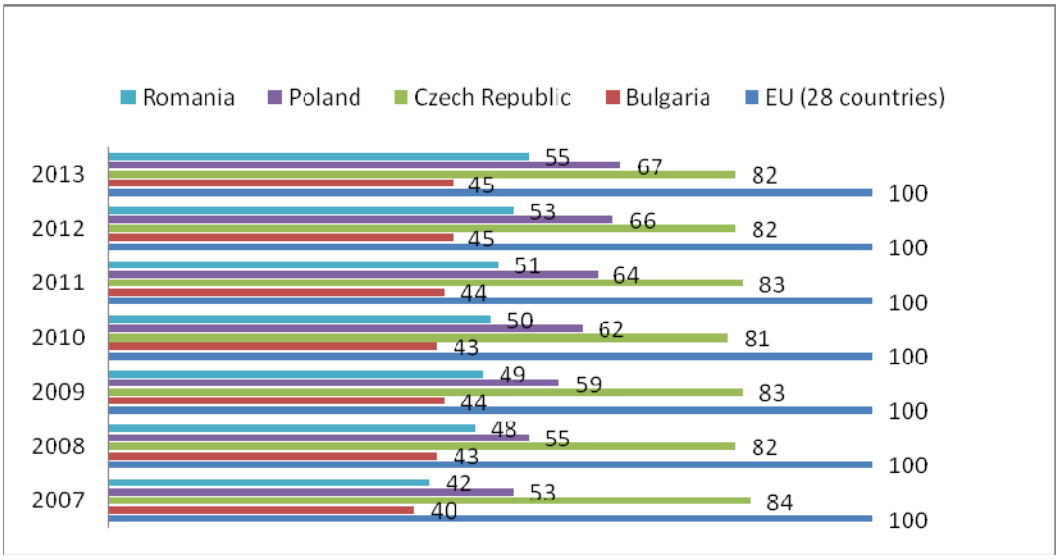


Figure 6. GDP per capita in PPS.

Source: Eurostat database.

It can be said that there was an improvement in living standards in the EU by 2009, when there is a decrease in the analyzed countries, except in Poland. Romania had a value of 55 percent of the european average, in 2013.

The convergence process experienced a period of stagnation once the crisis hit the economy in 2009.

Labor productivity is of particular importance in the process of real convergence. Also essential for participation in the single currency area are workforce flexibility (which depends on wage flexibility, labor mobility, functioning of labor market institutions, shock absorption) and flexibility of production factors. In Romania, labor market flexibility is very low, especially at regional level.

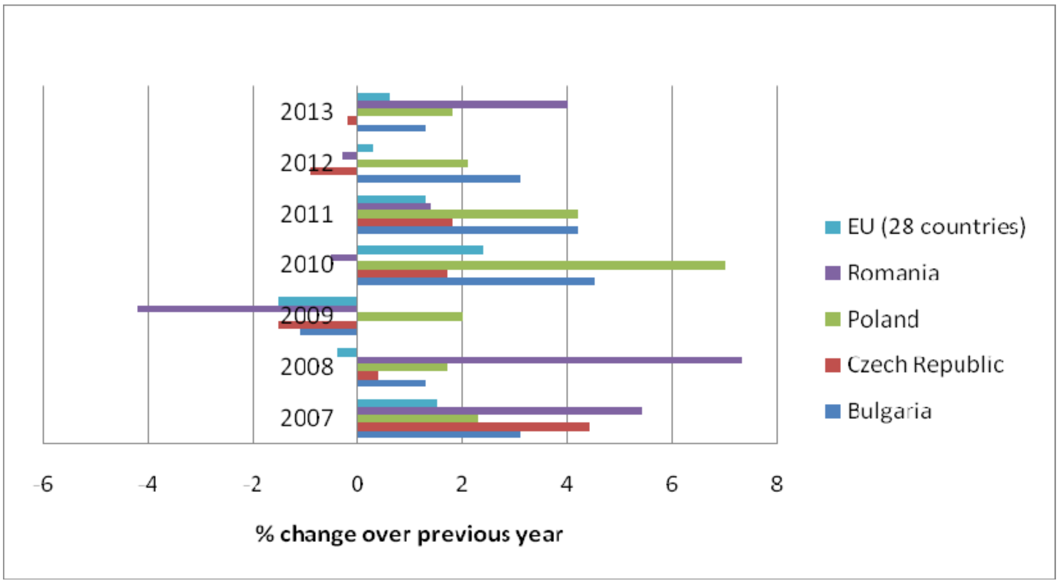


Figure 7. Labour productivity per hour workd.

Source: Eurostat database.

5. Conclusions

Achieving real and nominal convergence criteria is a test for Romanian economy. Although at the moment, Romania meets the criteria set by the Treaty of Maastrischt, our country must demonstrate that they are done in a sustainable way and can be maintained after euro area entry.

While before the crisis, it was prevailing the idea that there was sufficient nominal convergence criteria, the crisis has demonstrated the opposite, attention heading towards real convergence criteria.

The big challenge is to achieve real convergence but, due to differences between our country and the European Union. Current position established by the Convergence Programme, the year 2019, appears to be a good idea if it could contribute to more consistent macroeconomic policies and structural reforms on economic competitiveness in the euro area.

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