
NOMINAL CONVERGENCE: THE CASE OF ROMANIA*Ramona Orăștean, Silvia Mărginean****Abstract**

The main objectives of this paper are: determining the extent to which the indicators of nominal convergence reflect the reality of the Romanian economy, in order to find an optimal correlation between nominal and real convergence from the point of view of a dualist approach, meaning that there are opinions according to which nominal convergence (by the formal meeting of the Maastricht criteria) must be carried out before real convergence, or on the contrary, that real convergence has positive effects on nominal convergence; short term forecasting for the evolution of nominal convergence indicators in Romania comparing with other new EU member states.

Keywords: nominal, convergence, Romania, euro area

JEL Classification: E31, E43, E62, F31

Under the Maastricht rules, a EU member country must achieve a high degree of price stability, keep its government finances sustainable and maintain a stable exchange rate and convergence in long term interest rates in order for it qualify for Eurozone membership. The challenge the new member states are facing is how to proceed with monetary integration in order to enter in a large monetary union. The Maastricht criteria form a coherent package based on a set of economic indicators that is neither negotiable nor subject of change.

Prior to the euro adoption, a country must be a member of the Exchange Rate Mechanism - ERM II for a minimum 2 years, that means fixes its exchange rate to euro with a central rate with a fluctuation band of $\pm 15\%$. The entry in ERM II should not be considered before a sufficient degree of nominal convergence and structural adjustment has been reached [De Grauwe, Schnabl, (2004)]. First, by setting the central rate misalignments need to be avoided. Equilibrium exchange rate is extremely difficult to assess when major structural adjustments have not yet been achieved and nominal convergence is not in advance stage. Second, if participation in ERM II occurs too early, maintaining simultaneously price stability and exchange rate stability could become extremely difficult.

The real and nominal convergence coincides with two particular macroeconomic phenomena:

- many new member states have experienced large capital inflows in the form

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of foreign direct investment. The prospect of future productivity increased, the low capital stock and the abundance of well-educated work force has fostered these inflows. FDI fosters capital accumulation and has brought in transfers of technology. It increases the linkage of new member states and EU-15 and helps the achievement of real convergence and cohesion [Issing, (2004)];

- an expected trend appreciation of the real exchange rate due to the occurrence of the so-called Balassa-Samuelson effect, that gives a supply-side explanation for the differences in the price levels between countries in different stages of economic development [Balassa, (1964)]. The Balassa-Samuelson model describes a possible path of convergence in the price level as developing economies catch up with those that are more developed. Higher labour productivity in the traded goods sector will raise the wage level in the whole economy. Due to the model's assumption that the production elasticity of labour is higher in the non-traded goods sector than in the traded goods sector, labour productivity increases in the former will be smaller. The rising wage level will therefore lead to higher prices for non-traded goods and a rising price level. However, as the Balassa-Samuelson model only focuses on one aspect of price level convergence, its applicability for new members in the catch-up process is limited.

The greatest difference between the new EU member states and the EU-15 is the level of economic development measured in terms of GDP/capita. Macroeconomic stabilization, pursued in order to achieve the nominal convergence criteria, is also compatible with real convergence i.e. the capacity to achieve, in parallel, high enough rates of real GDP growth in order to maintain progress towards real convergence. Experience has shown that the two processes can be mutually reinforcing, notably if the process of nominal convergence acquires enhanced credibility, affecting thus the formation of key variables such as interest rates, wages and prices.

It is often argued that enlarging the euro area by admitting countries still in the catch-up process would impair the ECB's policies, because real convergence in the new member states is inevitably connected with higher inflation rates [Sinn, Reutter, (2001)]. In such circumstances, the ECB would only be able to achieve its target of a maximum inflation rate of 2% for the Eurozone as a whole if the more advanced member states had a correspondingly lower inflation rate.

Nominal convergence can be forecasted by the completion of the criteria established by the Maastricht Treaty regarding: inflation rate, budget deficit, public debt, exchange rate and long term interest rate.

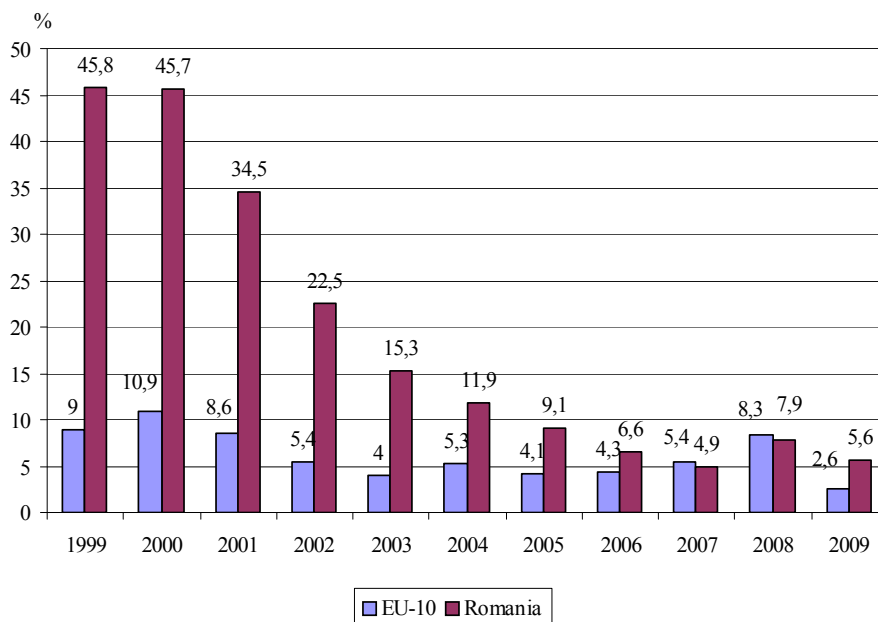
Inflation is one of the most important and painful phenomena that the Central and Eastern countries have confronted with repercussions both on the business environment but also regarding the flows of foreign direct investments.

Performances registered by EU regarding inflation management, although very different, have had as a common trait a continuous decreasing tendency. Therefore, the year before the adhesion, the medium level of inflation in the new member states was almost equal with that in EU.

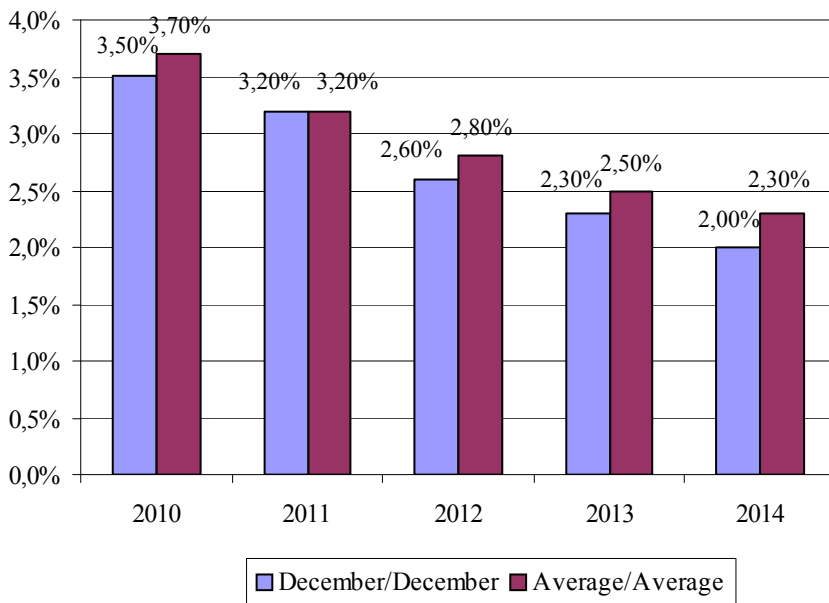
The same thing can't be said about Romania which reached at inflation level a number of 8 years distance from EU-10 countries (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia), the level of inflation the year before the adhesion was higher, 6.6%.

In European Union, after reaching its peak in mid-summer 2008, Harmonized Indice of Consumer Prices started to fall back quickly. In the EU-10 region it has fallen sharply (from 8.3% in 2008 to 2.6% in 2009), similar to trends in the euro area, while in Romania it decreased less, from 7.9% in 2008 to 5.6% in 2009 (graph 1).

Graph 1. Annual average rate of change in Harmonized Indices of Consumer Prices in Romania and EU-10 in 1999-2009 (%)



In autumn 2009 forecast, National Commission of Forecast in Romania predicts for the period 2012-2014 an annual inflation rate (measured by the Consumer Price Index) between 2-3% (graph 2). This represents an objective with a special importance in carrying out the Maastricht criteria which states maintaining the inflation rate under the level of 1.5 over the average of 3 most performing members.

Graph 2. The forecast of the inflation rate in Romania (2010-2014)

According to National Bank of Romania, in 2009 annual inflation (December/December) dropped to 4.74%, with 0.24 percentage points over the upper limit of the range around the target of 3.5%. Favourable effects of lower inflation were exercised by persistent demand deficit and exchange rate dynamic of the Romanian leu. Current projects of the NBR incorporate favourable premises to continue disinflation, placing annual inflation at 3.5% in 2010 and 2.7% in 2011.

In consequence, the disinflation process in Romania must have a powerful slope, because starting with 2012 price growth has to be constantly situated around the limit of 3%. This is possible only if there is developed a strict fiscal discipline in order to eliminate the financial deficiencies, increasing the level of efficiency for activities in public companies which will continue to hold monopoly positions as well as maintaining a more restrictive monetary policy ensuring the objective's completion of inflation targeting.

One of the constrain factors of both the economic growth and the development of the Central and Eastern European countries was the unbalance of the budgetary balances during the period of economic crisis at the beginning of the '90s.

Thereafter, during the recovery period a positive trend has been registered in most of the Central and Eastern European countries. However, the comparisons between the EU-10 countries reveal a divergent evolution of the *budget deficit*, expressed as a percentage in the GDP, as follows: Estonia and Lithuania have had a constant positive evolution for the entire period; starting with 2001, Estonia was the only European country that registered a budget surplus; in Latvia and Slovenia,

although the budget deficit evolved in a changing trend, its values stayed under 3% of GDP; the Czech Republic, Hungary and Poland have confronted a raise in the budget deficit during 2000-2006, from 3.7% in 2000 to 6.8% in 2002 and a decreasing to 2.6% of GDP in 2006 for the Czech Republic, from 3% in 2000 to 9.3% of GDP in 2006 for Hungary, after that reducing to 3.8% of GDP in 2008 and from 3% in 2000 to 6.3% in 2003 and a decreasing to 1.9% of GDP in 2007 for Poland; Slovakia has the largest budget deficit in 2000 (12.3% of GDP) and then decreased to 2.8% in 2006.

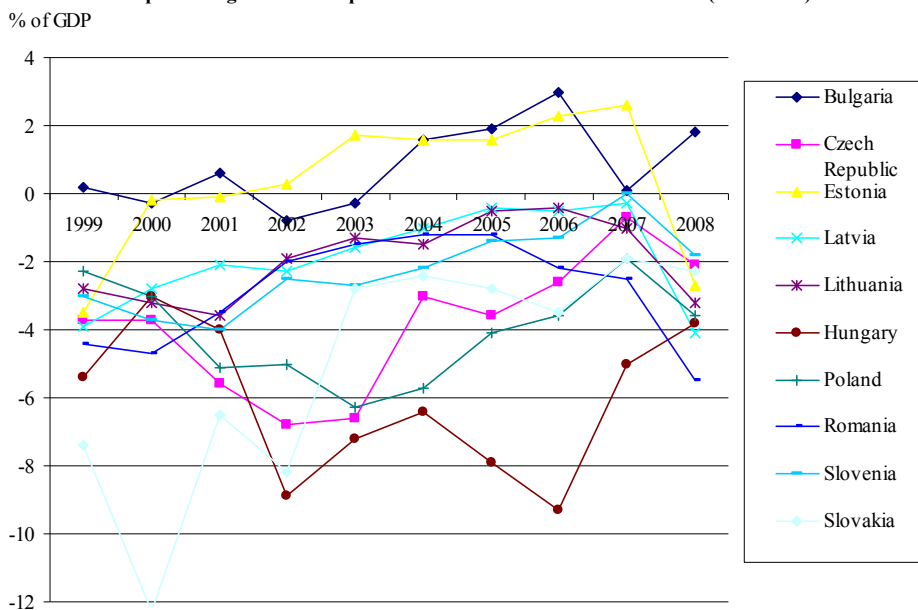
The year before the adhesion, only three countries registered a budget deficit situated around the value of 1% of GDP, namely: Latvia, Lithuania and Slovenia. In 2004 most Central and Eastern European countries registered a reduction of the budget deficit as a consequence of applying certain budgetary austerity programs together with new methodologies of collecting taxes.

In Romania, the budget deficit has continuously lowered, in the years before the EU adhesion reaching 1.2% in 2004, 1.2% in 2005 and 2.2% of GDP in 2006. Taking into consideration the relative high levels registered by most of the Central and Eastern European countries the year before the adhesion to the EU, Romania was situated on a much better position regarding the budget deficit.

After 2007 the level of budgetary income and the expenses in Romania raised. The level of incomes was higher as a consequence of the improvement of tax collecting (direct and indirect) by deepening the financial discipline. Furthermore, as a member of the European Union, Romania received financial resources from the European Union's budget through the Structural and Cohesion Funds. At the same time the budgetary expenses registered an ascending trend especially because of the supplementary efforts demanded by fulfilling the obligations that come with the quality of being a member of the EU (financing the Union's budget) and the investments made by the Government as a self financial effort in completing the sums received from European funds (co-financing the community funds).

Budget deficits have widened in 2008 in all EU-10 countries, except Bulgaria (with a budget surplus of 1.8% of GDP). Latvia (4.1%), Lithuania (3.2%), Hungary (3.8%), Poland (3.6%) and Romania (5.5%) have exceeded the 3% of GDP deficit threshold (graph 3).

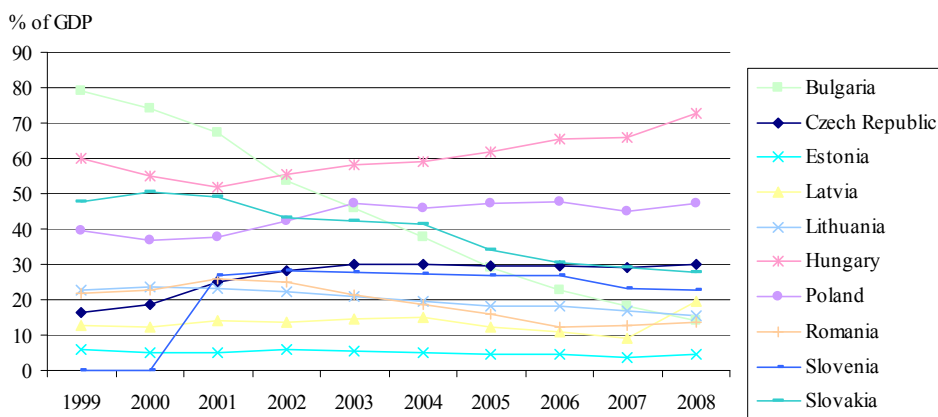
Graph 3. Budget deficit/surplus in Romania and EU-10 in 1999-2008 (% of GDP)



The estimates of the Ministry of Finance foresee a slight reduction of the budget deficits during 2010-2011, to 4.1% in 2010 and 2.9% of GDP in 2011.

A favourable situation is registered in Romania regarding the *public debt* in comparison with some countries from the EU-10 (graph 4). Its dynamics in relative figures was positive in the last few years, and so at 2006 level the government gross debt represented 12.4% of GDP, much under the 60% level established in the Maastricht Treaty.

Graph 4. Government gross debt in Romania and EU-10 in 1999-2008 (% of GDP)



In comparison to the year before the accession some countries from the EU-10 group have confronted much higher levels, for example: Hungary (58.4% of GDP),

Poland (47.1% of GDP), Slovakia (42.4% of GDP), and the Czech Republic (29.8% of GDP).

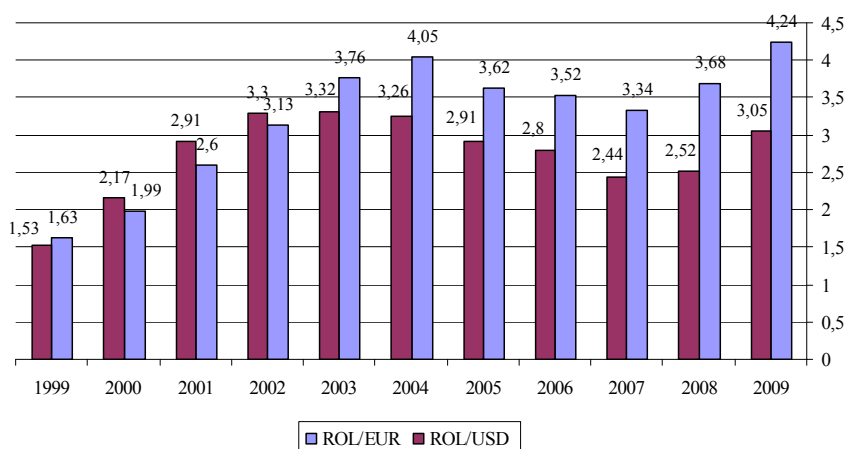
The public debt represents an important factor of economic growth as source of financing the investments projects for developing the major sectors of the economy. It was assumed that after accession the public debt in Romania will register a growth in absolute figures as a consequence of financing the supplementary budget deficit and the investment projects with a special importance for the following economic development. But in 2008, Romania's public debt level stood at 13.6% of GDP, a slight increase over the previous year.

The package of external financing contracted in 2009 from the IMF, European Commission, World Bank and other international financial institutions, totalling EUR 19.95 billion, the Ministry of Finance is considering the use of foreign loans. Incorporating in the indicator of government gross debt (according to ESA95 methodology) this financial package, the public debt in Romania will represent 30.8% of GDP in 2011.

According to the National Bank of Romania data, in 1999-2009 the *evolution of the exchange rates* of the Romanian Leu to American Dollar and Euro was unstable (graph 5). In 1999-2004 both currencies followed an ascendant trend, from 1.53 ROL to 3.26 ROL in the case of the USD, respectively from 1.63 ROL to 4.05 ROL for EUR. In 2005-2007, as a consequence of the appreciation of the national currency, the exchange rate of the American Dollar reached 2.91 ROL, 2.80 ROL respectively 2.44 ROL and that of the Euro followed the same trend till 3.62 ROL, 3.52 ROL respectively 3.34 ROL.

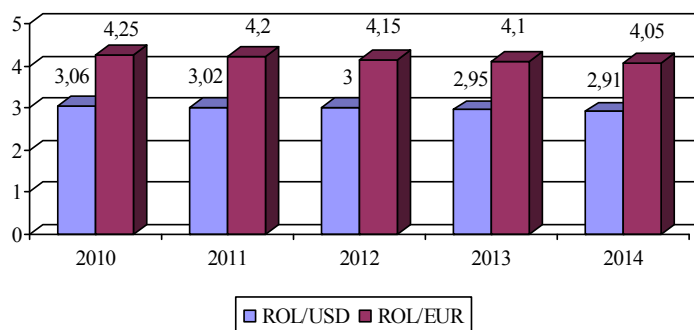
In the period 2008-2009, EU-10 countries with flexible exchange rate systems experienced strong depreciation pressures relative to the euro, especially the Polish Zloty (from 3.51 in 2008 to 4.33 in 2009), Hungarian Forint (from 251.51 in 2008 to 280.33 in 2009), Czech Crone (from 24.95 in 2008 to 26.44 in 2009) and Romanian Leu (from 3.68 in 2008 to 4.24 in 2009).

Graph 5. The exchange rate in Romania in 1999-2009 (annual average)



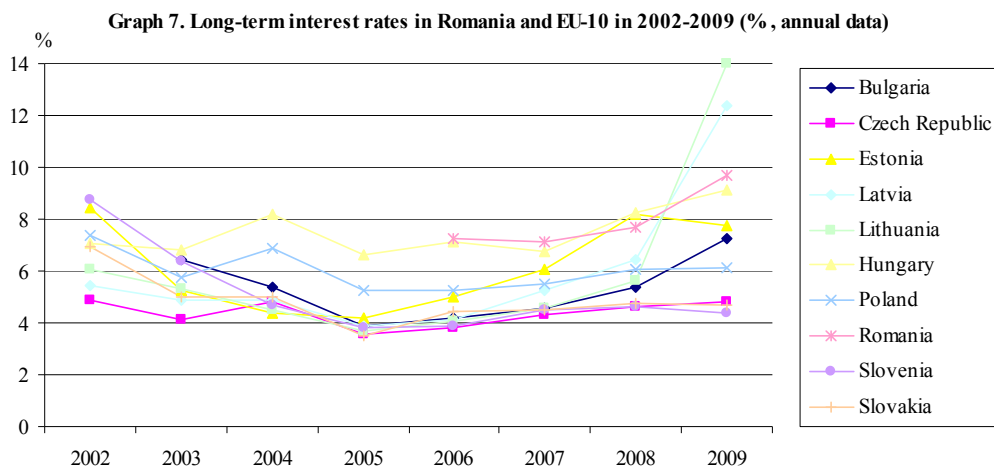
In autumn 2009 forecast, National Commission of Forecast in Romania estimates that the national currency will appreciate slowly, and so that in 2014 the ratio Leu/Euro will be 4.05 and Leu/Dollar 2.91 (graph 6).

Graph 6. The forecast of the exchange rate in Romania in 2010-2014 (annual average)



It's obvious that in the future the national currency will know both a nominal and a real appreciation. The real appreciation of the national currency correlated to an accentuated growth of the GDP (especially because of the labour productivity) would allow Romania to reduce the existent gap to the EU average regarding the level of the GDP per capita. On the other side, an excessive appreciation of the national currency can negatively affect exports, which would pressure the budget in case there are needed adjustments to the balance of payments.

Maastricht convergence criterion *long term interest rates* is defined as central government bond yields on the secondary market, gross of tax, with around 10 years' residual maturity. In 2002-2008, the values for this indicator ranged between 3% and 10% for the EU-10 region, with an increase in 2009, especially in the case of Latvia (from 6.43% in 2008 to 12.36% in 2009) and Lithuania (from 5.61% in 2008 to 14.0% in 2009). In Romania the growth was smaller, from 7.7% in 2008 to 9.69% in 2009, but the level is still difficult to analyse, because only in April 2005 were launched the first bonds with 10-year maturity (graph 7).



Conclusions

Romania should enter the ERM II only when all nominal convergence criteria and the majority of real convergence criteria are met.

The inflation rate criteria remain the main critical point of the Romanian economy, not fulfilling it, assuming the non-sustainability of the economic macro stabilization process. Taking into consideration the predictions of the National Commission of Forecast the criteria of the budget deficit and that of the public debt will be in the limits stated by the Maastricht Treaty. The criteria of exchange rate stability depend on fulfilling the criterion regarding the inflation rate. An appreciation in real terms of the national currency increases the disinflation process. The limited intervention of the National Bank of Romania on the exchange market should keep on so that the exchange rate should be as flexible as possible, which will allow to the central bank to assure an internal price stability by growing the monetary policy efficiency. Regarding the criteria of the long term interest rate, in 2009 the euro area average was 3.81%, comparing with the value for Romania of 9.69%.

The progresses in fulfilling the nominal criteria of convergence influence the real economic variables. Initially the nominal convergence can generate a reduction of the performances. Thus, imposing to respect the Maastricht criteria (especially in what regard the budget deficit and the public debt) can affect the process of convergence of those economies where the level of investments is low. But fulfilling all the Maastricht criteria is able to assure a higher macroeconomic stability, which will create the premises for a superior rate of economic growth.

The financial crisis strongly affected the EU economy from the autumn of 2008, hitting the member states to a different degree. A great deterioration in public finances is taking place so that the fiscal costs of the crisis will be enormous for all European countries. In this context it will be more difficult for new EU countries to comply with the Maastricht criteria for euro adoption. Yet only Cyprus, Malta,

Slovenia and Slovakia have entered in the euro area. Lithuania saw its application rejected in 2007 because it missed the inflation criteria.

In a recession period, keeping the budget deficit below 3% of GDP will be much harder. For this reason, most analysts think that the targets for euro adoption are unrealistic and could be reviewed.

References

Balassa, B. 1964. "The Purchasing Power Parity Doctrine: A reappraisal", *Journal of Political Economy*, pp. 584-596.

Brada, J., Kutan, A., Zhou, S. 2005. "Real and Monetary Convergence between The European Union's Core and Recent Member Countries: A Rolling Cointegration Approach", *Journal of Banking and Finance*, Elsevier, Vol. 29.

De Grauwe, P., Schnabl, G. 2004. "EMU Strategies for the New EU Member States", *Intereconomics*, No. 39 (5), pp. 241-247.

Issing, O. 2004. "EU Enlargement and Monetary Integration", pp. 193-194.

Sinn, H. V., Reutter, M. 2001. "The Minimum Inflation Rate for Euroland", *NBER Working Paper*, No. 8085.

Weber, A., Beck, G. 2005. "Price Stability, Inflation Convergence and Diversity in EMU: Does One Size Fit All?", Center for Financial Studies, *Working Paper*, No. 30.

ECB - Convergence Report, May 2007, May 2008.

European Commission - Convergence Report, 2009.

National Bank of Romania - Annual Report, 2002-2008.

National Bank of Romania - Inflation Report, February 2010.

National Commission of Forecast - Autumn 2009 forecast.

Romanian Government - Convergence programme 2008-2011, May 2009.

World Bank - EU-10 Regular Economic Report, February 2009, October 2009.