CONVERGENCE PROCESS- PRECONDITION FOR ENSURING FINANCIAL AND MONETARY STABILITY IN EURO AREA

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Abstract:

In conditions of financial globalization, innovations' development and a broad spectrum of risks' amplification, between financial stability and monetary stability are created an interdependence relationship. Ensuring systemic financial-monetary stability has become a priority of the international economic agenda, particularly for candidate countries to the euro area. The purpose of this article is to highlight the importance of nominal and real convergence as a precondition for financial and monetary stability under Economic and Monetary Union (E.M.U.). Also, we made a comparative analysis of nominal convergence criteria on the example of Central and Eastern Europe countries during the period 2006-2010, stressing, finally, the need to revise the criteria for accession to the Euro zone.

Key words: financial stability, monetary stability, convergence criteria, economic and monetary union, catching-up process

JEL Classification: E42, F15, F36, F44

INTRODUCTION

For adopting the single currency, European Union Member States had to meet nominal criteria stipulated in the Maastricht Treaty in order not to destabilize European economy. The convergence is evaluated based on inflation and long-term nominal interest rate compared with countries that recorded the best performance (maximum three), with strict adherence to values related to government deficits and debt as a percentage of Gross domestic product (GDP) and a minimum period (two years) of exchange rate stability against the euro. A high level of nominal and real convergence has a positive impact on financial and monetary stability, due to reduced risks and performances' anchoring from those registered in the states with the best indicators, considered as benchmarks in the evaluation process. Also, the financial stability can be influenced by the period of participation in ERM II (Albulescu, 2010). Monetary policy in Economic and Monetary Union (E.M.U.) will work best in an environment of financial stability, in which regional differences in the transmission mechanism are as small as possible (Arnold, 1999).

THE IMPORTANCE OF NOMINAL AND REAL CONVERGENCE AS A PRECONDITION FOR FINANCIAL AND MONETARY STABILITY

Nominal convergence criteria imposed by the Treaty establishing the European Union can ensure financial and monetary stability, given the real and financial convergence realized in collateral. Maastricht Treaty mentions, indirectly, the fact that it is needed economic and social cohesion in order to remove the disparities between countries and regions. According to Isărescu's opinion, the real convergence can be quantified by the following criteria: GDP per capita (expressed either the nominal or through standard purchasing power parity), the structure of the economy, the openness of the economy, the share of bilateral trade with EU countries in total foreign trade. Research on real convergence has highlighted opposing viewpoints on the degree of which business cycles are, or will be synchronized.

Caselli and Tenreyro (2005) suggest four channels to achieve real convergence:

- improvement marginal productivity per capita;
- the process of catching-up technology;
- gains from trade in previously relatively closed economies;

• structural change where is a switch of resources oriented towards high-productivity activities.

Also, financial convergence is important; it is imposed the uniformity of financial systems in order to ensure the success of monetary policy transmission and efficient implementation of European directives. Between nominal and real convergence criteria is an interdependence relationship, with implications both positive and negative. Fulfillment of nominal convergence criteria exert influence on real convergence, because the reduction of inflation and interest rates leads to higher investment and hence GDP, but the criteria related to public debt (smaller than 60% of GDP) and budget deficit (less than 3% of GDP) can affect the convergence of economies leading to a low level of investment. Also, the phenomenon of real convergence can affect nominal variables, as follows: structural reforms support the convergence of GDP per capita with a non-inflationary increasing effect of wages and they lead to growth budget revenues, thus reducing deficit and public debt; inflation will keep at a high level, generated by differences in productivity between tradable goods and non-tradable goods and uniform wage increases between the two sectors (the Balassa-Samuelson effect).

Links between financial stability and real convergence operates through a variety of channels. These include the stability of macroeconomic variables, changes in monetary policy and exchange rate, the determinants of financial flows, the nature of financial system and regulatory environment for financial services. Macroeconomic mismanagement has long been recognized as a source of financial crises, the lack of attention to price stability or imbalances in components of demand can lead to volatility in financial markets.

Based on these considerations, we realized a comparative analysis of economic and financial situation of Central and Eastern Europe (CEE) countries, whereas they present distinct particularities in terms of financial and monetary stability.

During the transition from central planning to market economies, CEE countries have witnessed profound changes in economic governance frameworks, in most cases, initially facing severe recession, high inflation and exchange rate instability (Spinelli and Trecroci, 2006).

Country	$C_{\text{output}} = c_{\text{output}} = c_{\text{output}$	2006	2007	2008	2000	2010
Country	Convergence criterion (%)	2006	2007	2008	2009	2010
Slovenia	Annual average inflation rate (HICP)	2.5	3.8	5.5	0.9	2.1
	Public debt (percent of GDP)	26.7	23.4	22.5	35.4	n/a
	Government deficit (surplus) as percent of GDP	-1.3	0.0	-1.8	-5.9	n/a
	Long-term interest rates (EMU convergence criterion series)	3.85	4.53	4.61	4.38	3.83
Slovakia	Annual average inflation rate (HICP)	4.3	1.9	3.9	0.9	0.7
	Public debt (percent of GDP)	30.5	29.6	27.8	31.9	n/a
	Government deficit (surplus) as percent of GDP	-3.2	-1.8	-2.1	-7.9	n/a
	Long-term interest rates (EMU convergence criterion series)	4.41	4.49	4.72	4.71	3.87
Estonia	Annual average inflation rate (HICP)	4.4	6.7	10.6	0.2	2.7
	Public debt (percent of GDP)	4.4	3.7	4.6	7.2	n/a
	Government deficit (surplus) as percent of GDP	2.4	2.5	-2.8	-1.7	n/a
	Long-term interest rates (EMU convergence criterion series)	n/a	n/a	n/a	n/a	n/a
Hungary	Annual average inflation rate (HICP)	4	7.9	6	4	4.7
	Public debt (percent of GDP)	65.7	66.1	72.3	78.4	n/a
	Government deficit (surplus) as percent of GDP	-9.3	-5.0	-3.7	-4.4	n/a
	Long-term interest rates (EMU	7.12	6.74	8.24	9.12	7.28

Table no. 1. The indicators' evolutions related to nominal convergence criteria in CEEcountries during 2006-2010

	convergence criterion series)					
Bulgaria	Annual average inflation rate (HICP)	7.4	7.6	12	2.5	3
	Public debt (percent of GDP)	21.6	17.2	13.7	14.7	n/a
Government deficit (surplus) as percent		1.9	1.1	1.7	-4.7	n/a
	of GDP					
	Long-term interest rates (EMU	4.18	4.54	5.38	7.22	6.01
	convergence criterion series)					
Romania	Annual average inflation rate (HICP)	6.6	4.9	7.9	5.6	6.1
	Public debt (percent of GDP)	12.4	12.6	13.4	23.9	22.7
	Government deficit (surplus) as percent	-2.2	-2.6	-5.7	-8.6	-5.6
	of GDP					
	Long-term interest rates (EMU	7.23	7.13	7.7	9.69	7.34
	convergence criterion series)					

Source: Eurostat 2011

The 12-month average rate of HICP inflation in **Slovenia** was 2.1% at the end of 2010, an increasing trend from the previous year. Low inflation rate in this country is the result of the Slovenian authorities' decisions: introduction in 2001 a framework of politics in order to maintain price stability and joining in ERM II in June 2004. In 2009, Slovenia registered a deficit of 5.9% of GDP, and failed to maintain the value of this index below 3% after joining the euro zone in 2007. The general government gross debt-to-GDP ratio was 35.4%, far below the 60% reference value stipulated in the Stability and Growth Pact. Long-term interest rates in Slovenia gradually approached the bond's yields in the euro area, standing at a level below than average value recorded by european countries. Slovenian tolar participated in ERM II from June 2004 to December 2006, previous exchange rate regime being managed floating.

On 1 January 2009, **Slovakia** adopted the euro as official currency. Slovakia has registered high and volatile inflation rates, due to changes in administered prices and indirect tax. Ex ante euro adoption, the inflation differential between Slovakia and the EU was negative. Although Slovakia has met the inflation criterion, the principle of stability was violated (in the two years before adopting the euro, the Slovak koruna has appreciated by about 25%). Adjusted for the impact of the increase in administered prices, underlying inflation was favorable overall. The indicator "level of public debt / GDP" recorded values in decreasing due to consolidations of preconditions for robust economic growth and improving management of state debt. Economic turmoil internationally exerted a direct negative impact on the budget deficit in Slovakia, according to data available, the figures rose from 2.1% in 2008 to 7.9% in 2009, far exceeding 3%. As a consequence of these developments, the European Commission initiated the excessive deficit procedure (EDP), formally applicated from December 2009. Duration of participation of the Slovak koruna in ERM II was superior to the minimum necessary period of two years during it recorded a gradually appreciation.

Estonia joined the euro zone on 1 January 2011, becoming the 17th member of EMU. At the end of 2009, the 12-month average rate of HICP inflation in Estonia was 0.2%, well below the reference value of 1,0% for the criterion of price stability, as a result of temporary factors, including the severe adjustment of economic activity. Subsequently, this indicator recorded an upward trend, the ECB Convergence Report-May 2010 stressing the difficulties in maintaining the sustainability of convergence inflation rate in Estonia, due to loss of monetary policy autonomy. In 2009, Estonia recorded a budget deficit of 1.7% of GDP, well below the reference value. The general government gross debt-to-GDP ratio was 7.2%, significantly lower than the reference value of 60%. The Estonian kroon has been participating in ERM II with effect from 28 June 2004. The central rate for the Estonian currency in ERM II was set at 15.6466 kroons per euro, with a standard fluctuation band of $\pm 15\%$. In the absence of a mature bond markets denominated in Estonian crowns, are not available harmonised long-term interest rates, making it difficult the sustainability assessment of convergence process prior to adopting the single currency.

At the end of the reporting period, the 12-month average rate of HICP inflation in **Hungary** was 4,7%, considerably above the reference value of 1.0% for the criterion on price stability. Hungary is at present subject to an EU Council decision on the existence of an excessive deficit. In

2009, Hungary recorded a deficit of 4.4% of GDP, well above the reference value of 3%. The general government gross debt-to-GDP ratio reached 78.4%, higher than the reference value of 60%. Hungarian forint did not participate in ERM II. In the period between mid 2008 and March 2009, the forint has depreciated heavily, after which recorded a period of relative stability since mid-2009. On 31.12.2010, the long-term interest rates were located, on average, at 7.28%, significantly higher than the reference value, corresponding to the interest rate convergence criterion.

At the end of 2010, the 12-month average rate of HICP inflation in **Bulgaria** was 3%, well above the reference value of 1.0% for the criterion on price stability. In Bulgaria consumer price inflation has been relatively volatile, noting an increase, on average, of 6.7% in annual terms over the period 2000-2009. Looking further ahead, the catching-up process is likely to have a bearing on inflation over the coming years, given that GDP per capita and price levels are still significantly lower in Bulgaria than in the euro area. But the currency board arrangement and limitations of alternative instruments of counter-cyclical policy make more difficult to prevent macroeconomic imbalances. Bulgaria is not subject to EU Council decision on the existence of an excessive deficit. In 2009, Bulgaria's budget deficit was 4.7% of GDP, higher than the reference value of 3%. The general government gross debt-to-GDP ratio was 14.7%, well below the reference value of 60%. Long-term interest rates stood at 6.01% on average at the end of the period analyzed, higher than the reference level of convergence criterion. Bulgarian Lev has not participated in ERM II, but was anchored to the euro in the context of the currency board type arrangement adopted in July 1997. Creating a favorable environment to sustainable convergence in Bulgaria requires, among other things, implementation of economic policies to ensure macroeconomic stability, including sustainable price stability.

The 12-month average rate of HICP inflation in Romania was 6.1%, at the end of 2010, well above the reference value of 1.0% for the criterion on price stability. In a longer perspective, the catching-up process it is likely to have a positive impact on inflation and /or on nominal exchange rate, given that GDP per capita and the prices are still significant lower in Romania than in the euro area. The Romania's performance on inflation criterion is comparable with that of other members with derogation. Romania is at present subject to an EU Council decision on the existence of an excessive deficit, EDP recommendations targeting the following: correcting the budget deficit below 3% until 2012; initiating aggregate measures regarding budget consolidation; State pension law revision; achieving an annual average effort to strengthen on 1.75 percentage points over 2010-2012. At 31.12.2010, Romania registered a budget deficit of 5.6% of GDP, far higher than the reference value of 3%. The general government gross debt-to-GDP ratio was 22.7%, well below the reference value of 60%. During the reference period of two years, the Romanian leu has not participated in ERM II, being traded under a flexible exchange rate regime. Multilateral Agreement of external funding developed under the EU and IMF coordination has contributed to alleviate the pressures felt by the Romanian currency depreciation. At 31.12.2010, the long-term interest rates were located on average at 7.34% higher than the reference value corresponding to convergence criterion on interest rates. In recent years, long-term interest rates in Romania have soared in the context of high levels of investor aversion to risk and uncertainty surrounding the economic outlook. Recently, these indicators have registered a downward trend, but continued to place at relatively high levels.

Relevant issues stemming from the analysis of economic and financial situation of the CEE countries are the following:

- three countries are members of the euro zone (Slovenia-2007-2009 Slovakia, Estonia, 2011); Hungary has announced its participation in ERM II before joining the EU setting unilaterally a fluctuation band of ± 15% against the euro, but not adopted yet the single currency; Bulgaria and Romania joined the EU in 2007, presenting a significant gap comparative with countries members of the EMU;
- between analysed countries, Romania has registered the worst performance in terms of price stability, but it is comparable to that of other candidate countries to the EMU; and

Hungary faced with the highest level of public debt to GDP, the value of this indicator was 78.4% at 31.12.2010, higher than the reference value of 60% stipulated by the Stability and Growth Pact;

- there is an increasing convergence regarding monetary and financial stability, but it can be observed a significant gap between the countries which joined the euro area and the candidate countries to EMU;
- some member states of EMU rears questions regarding the sustainability of the convergence process before single currency adoption (there are no available data regarding interest rates bonds issued in Estonia, Slovakia violated the principle of stability, because the Slovak koruna has appreciated by about 25% in the two years before euro adoption);
- in terms of nominal convergence, maintaining budget deficit below 3% of GDP raises the biggest problems.

CEE countries experience shows that the moment of euro adoption has important implications on monetary and financial stability. Albulescu (2010) argues that there are three theories regarding the moment of accession to EMU:

- adopting the single currency sharply, like "big bang", which can create a short decrease in "J" curve, followed by an immediately recovery;
- a longer period for acclimatization in ERM II, which targets the exchange rate stability, with low losses, but also with a slow recovery;
- a sequential approach where the accent is placed initially on price stability, followed by a minimum period in ERM II.

In what follows we realized a comparative analysis of the favorable and unfavorable arguments for the single currency adoption by a country, in different moments.

Table no. 2. The favorable and unfavorable arguments for the early or delayed adoption of
the euro

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	Favorable arguments	Unfavorable arguments
Early adoption of the euro	 strengthening structural reforms; disappearance of currency risk sharply, with beneficial effects on economic growth; price transparency; more solid economic framework; 	 loss of monetary policy and exchange rate autonomy, which leads to structural adjustment in production and jobs; occurrence of asymmetric shocks due to non-synchronized business cycles; stronger expression of Balassa-Samuelson effect with consequences on the disinflation limitation and / or the national currency's appreciation; reduced time for consolidation inflation targeting as monetary policy regime;
Delayed adoption of the euro	 a longer period of time necessary to realize structural adjustments still outstanding; a sustainable nature in terms of real and nominal convergence; business cycle synchronization with that of the euro area; keeping for a long time the benefits of monetary policy and exchange rate autonomy ; 	 higher transaction costs associated with currency risk, which may reduce investment; adverse incentives of postponement the structural reforms; ambiguous message forwarded international capital markets;

Source: Popa, C. -Adoptarea unilaterală a euro: soluție sau capcană?, Colocviile de politică monetară, București, 2009

Romania doesn't presents high level of real and financial convergence with the EMU countries, although we remark an improvement of the financial aspects. In case of our country it is

favorable for financial stability the progressive approach (Albulescu, 2010). Comparative with the EU accession which enjoyed public support in terms of considerable advantages (structural funds, attraction of foreign investor attention, free movement within the Community), joining the euro zone is not supported by public opinion due to structural reforms which affects life standard.

Dates for the changeover should take into account the fact that (National Bank of Romania, 2010):

- euro adoption is the last and not first phase of convergence;
- must be based on the national political consensus, being the result of cultural, social and academic efforts;
- unilateral adoption of the euro is not viable, because it doesn't replace the structural reforms and economic restructuring process.

THE NEED TO REVIEW THE CONVERGENCE CRITERIA OF THE MAASTRICHT TREATY

The ex-ante and ex post violation by EMU members of the requirements stipulated in the Treaty establishing the EU requires rethinking their foundations. These criteria were designed when is not anticipate EU enlargement. Are there opinions which appreciate that maintaining the same provisions in an extended Union violates the equal treatment principle in the economic sense. Also, the budget deficit below 3% of GDP ensures the premises to low inflation, but determines a slow economic increase. However, Darvas, Rose and Szapáry (2007) showed that there is an indirect relationship between the fiscal criteria and business cycle synchronization. Applying an econometric model on a statistical series for 40 years, the authors found the following:

- countries with similar government budget positions tend to have business cycles which fluctuates more closely;
- reduced fiscal deficits improves synchronization of business cycle, because deficit reduction and fiscal convergence remove idiosyncratic shocks.

Another criticism targets the formation of a monetary union without a budgetary union (Turliuc et all., 2007), which could offset the impact of negative influences on the real economy, countered difficult by single monetary policy, likely inadequate to country specific issues.

The international crisis has affected the countries with a fixed operating system of exchange rate. Given the large share of loans in foreign currency, a sharp depreciation would have a devastating effect. However, under a fixed exchange rate, reducing current account deficits is necessary, which may leading, perhaps, to severe recession, unless domestic prices and wages are sufficiently flexible. This macroeconomic dilemma dominates political elections and it cannot be solved by early entry into the euro area. Also, the economic and financial crisis highlights significant asymmetries between member and candidate countries to E.M.U.

So, the asymmetry and "too ambitious standards" are another reason which justify reconsidering accession criteria to E.M.U. Also, numeric values and compliance period for the criteria are disputable (Darvas, 2010). The arguments are based on following observations:

• One-year period for which most of the criteria are assessed is considered being too short. Regarding price stability criterion, a candidate country might be tempted to resort to different techniques (freezing of administered prices, a reduction of consumption taxes) for being situated below the reference value.

• Given the difference of 1.5 percentage points towards average inflation of Member States with the best performance (maximum three), many U.S. metropolitan areas would not be qualified to take part in the monetary area.

During economic and financial crisis, European officials have not taken any action to adjust the criteria for accession. This resistance to change has disadvantaged the countries that have seeked the stability and reliability offered by the eventual accession to the euro zone.

The review of the criteria could be realized on three levels (Darvas, 2010):

- all criteria should be anchored to the average EU level and at the same time to extend the compliance from one year to an average of two or three years;
- criteria on price stability, interest rate and budget deficit allow a range of variation towards the euro zone average;
- formal change would allow a fundamental review.

CONCLUSIONS

Full participation in EMU contributes to monetary and financial stability and to an increase in the volume of trade by eliminating currency risk as a form of barrier. In order to materialize these advantages, the economy should be able to exploit the opportunities offered by joining the euro zone. The calibration process of convergence targets two sides in terms of financial stability: nominal convergence and real convergence, among which there is an interdependence relationship, with implications both positive and negative.

Comparative analysis on the example of Central and Eastern Europe countries highlights the fact that there is an increasing convergence in terms of financial and monetary stability, but we remark a significant gap between countries which joined the euro area and the candidate countries to EMU. Romania has registered the worst performance in terms of price stability, but it is comparable to that of other candidate countries to the EMU, and Hungary faced with the highest level of public debt to GDP, the value of this indicator was 78.4% at 31.12.2010. In case of Romania it is favorable for financial stability the progressive approach; our country has to catch up significant disparities on a new cycle of national economic growth.

Although European officials did not consider opportunely reviewing of criteria stipulated in the Treaty Establishing of EU, their sustainability raise questions in terms of following aspects: criteria were designed in the context of favorable economic and financial circumstances, it is formed a monetary union without a budgetary union, is there a significant asymmetry between member states and candidate countries to E.M.U., the budget deficit below 3% of GDP ensures the premises to low inflation, but determines a slow economic increase, numeric values and compliance period for the criteria are disputable.

Ensuring financial and monetary stability, under the impact of constraints imposed by nominal, real and financial convergence is a complex process, which contribute, in perspective, to refining the life standards.

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