# Risk Factors in Euro Adoption by Romania

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**Abstract:** The costs and benefits of adopting a unique currency have been studied and outlined by the optimum currency areas theory. This theory of Mundell has suffered modifications, a series of economists identifying and introducing a series of subsequent or additional criteria in the analysis. Starting from the costs indicated by the optimum currency areas theory and its further developments, I have identified a series of factors that I believe to represent future risks for the Romanian economy within the process of adopting the unique euro currency.

Keywords: interest rate, economic growth, exchange rate, credit risk rate.

JEL Classification: E32, G14.

## 1. Different competitiveness of Romania in comparison to the Euro area

In a top regarding the economic competitiveness made by the World Economic Forum, Romania holds the penultimate place in the EU, surpassing only Greece.

World Economic Forum based its analyses regarding the competitiveness on the Global Competitiveness Index, a comprehensive instrument which measures the macroeconomic and microeconomic fundaments of the national competitiveness. They define the competitiveness as a set of institutions, factors and policies which establish the level of productivity of a country. The level of the productivity, determines the level of the prosperity which can be gained by an economy. The level of productivity determines at the same time the rate of the profit obtained from the investments in the economy, which in its turn represents the main determinant of the growth rate. In other words, a more competitive economy is the one which has a growth probability rapid in time.

There are many elements which determine the productivity and the competitiveness. The Global Competitive Index includes a weighted level of different components, each measuring the different aspects of competitiveness, grouped on 12 pillars. The countries are grouped on different stages of development. Romania being included in the category of the countries based on efficiency, of the 5 categories, next to Bulgaria. All the other countries are found in high development stages, respectively in transition fromstages 2 and 3: Estonia, Hungary, Poland, Lithuania, Latvia and in stage 3 based on innovation: Austria, Belgium, Czech Republic, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Holland, Portugal, Slovenia, Slovakia and Spain.

Indicators	Place (from 144)	Points
Basic requirements	90	4,2
Institutions	116	3,3
Infrastructure	97	3,2
Macroeconomic environment	58	4.8

Table no.1.Global Competitiveness Index in Romania

Indicators	Place (from 144)	Points
Health and primary education	83	5,5
Potentiators of efficiency	64	4,1
High education and training	59	4,4
Goods market efficiency	113	3,9
Labour market efficiency	104	4,0
Financial market development	77	4,0
Technological training degree	59	4,1
Market dimension	43	4,4
Innovation and refinement factors	106	3,2
Business refinement	110	3,5
Innovation	102	2,9
Global Competitiveness Index	78	4,1

Source: Global Competitiveness Report 2012-2013

From the EU states, the only one placed below Romania in the top is Greece, an economy which lost approximately 20% of GDP after five years of recession, devastated by the state debts crisis. In the Central and Easter European Area, the best placed is Austria (16), followed by the Czech Republic (39), Poland (41), Lithuania (45), Latvia (55), Slovenia (56), Hungary (60), Bulgaria (62), Russia (67) and Slovakia (71). The Romanian economy is best placed in the efficiency department, on the 64<sup>th</sup> place in the world, and worst placed as far as innovation is concerned – place 106.

Table no. 2. Comparison Romania –countries in the EMUfrom the point of view of competitiveness

Country	Place (of 144)	Points
Romania	78	4,1
Finland	3	5,55
Holland	5	5,50
Germania	6	5,48
Austria	16	5,22
Belgium	17	5,21
France	21	5,11
Luxembourg	22	5,09
Ireland	27	4,91
Estonia	34	4,64
Spain	36	4,60
Italy	42	4,46
Malta	47	4,41
Portugal	49	4,40
Slovenia	56	4,34
Cyprus	58	4,32
Slovakia	71	4,14
Greece	96	3,86

Source: Global Competitiveness Report 2012-2013

Criteria regarding the efficiency refer to the access to education and qualification, the consumption market efficiency, the financial market development degree, the economy technologization degree, but also the internal market size. The

innovation chapter refers both to the implicit aspect of innovations brought by the local economy, and also the "sophistication degree" of the business environment.

Regarding the basic requirements of a market economy, and also the institutional development degree, the infrastructure, the macroeconomic environment and the access to health and primary education services, Romania is placed on the 90<sup>th</sup> place in the world, according to the report.

Estonia and the Czech Republic are the most performing in Eastern Europe, being placed on the 34<sup>th</sup> place, 39<sup>th</sup> place respectively. The good level of the competitiveness of these countries is due to a number of mutual characteristics. They prove an excellent education level and an increased efficiency and great development of the goods and financial markets. Estonia proves a particular interest for the technical preparation level, and the high level of macroeconomic stability is especially determined by the good management of public finances.

The flexible exchange rate represents an instrument by means of which one can decrease the competitiveness gaps. The transition to the unique currency determines the disappearance of this instrument by means of which the efficiency of the exported goods should be artificially increased, and the economic agents from a less developed economy will be less competitive. Once in the euro area, an economy with the inflation rate greater than its commercial partners will lose because it will register an increase of the real wages superior to the increase of the labour productivity. One should not only respect the wages – labour productivity correlation, but there should also be a competitiveness gain before the commercial partners (Marinas, M.C.).

In Romania, the cost for the labour force per employee is greater than in the EU and, instead of being close to the one of Germany or the EU average, it continues to grow. The years of economic crisis did not affect this cost at all, although for the countries from PIIGS it experienced an aggressive decrease from the maximum reached in 2008. We have many more adjustments to make, expect for the nominal ones – our country must become competitive in order to develop itself within the euro area, and for that it must increase the productiveness both of the labour force and also of the capital.

Romania can make sustainable process of real convergence with the European model if it will be capable of promoting structural reforms that would generate the increase of the economy potential (of the long term aggregate supply). One of the opportunities the EU member statute gives is the access to structural funds. These should contribute to superseding the structural gaps of the Romanian economy, and also to more rapidly adapting to the requirements of knowledge based economy (by labour force training, information infrastructure development programs) (PirvuGh., Gruescu R).

# 2. Labour market flexibility degree

According to the Optimum Currency Theory the forming of a currency union between regions with limited mobility of the labour force can be expensive if adverse asymmetrical chocks occur. The mobility of the labour force can be, at least partially, compensated by the flexibility of the labour market.

The ability of a country to recover after the consequences of some structural shocks is mostly given by the flexibility of reallocation of factors and by the rigidity of prices on different markets. A usual preoccupation in the developed world as in a series of European economies regards the slowness by which the labour factor adjusts in such circumstances. The persistence of unemployment in the European countries contrasts with the behaviour of the labour factor from the Asian countries which,

despite the fact that they have suffered a recession in the Asian crisis context, had an impressive recovery of the incomes and occupation in the years following the crisis.

In the presence of asymmetrical shocks, in order to re-establish the national competitiveness the costs of the internal production must be reduced. The production costs include three main categories: the costs with the labour force, the price of the equipment and the price of the important materials, of which only the cost for the labour force can be influenced, the other two being determined by external factors.

Generally, in order to reach the convergence and in order to administer the possible asymmetrical shocks in the situation of a crisis, the effort of adjusting the currency policy would have to be doubled, both before, but also especially after entering the euro area, of properly modifying the occupation of the labour force and of the wage at the level of the economies (of some of their branches) of the new European Union member states. This prompt reaction of the labour market evolution, in order to be able to fight the possible negative shocks as consequence of some economic crises, is found under the concept of *labour market flexibility* and it has interest both on national level, and also at the European Union level.

A more flexible labour force can represent a mechanism of dissipation of possible asymmetrical effects produced by different shocks. Despite the important differences from one country to another, the European labour markets are among the most rigid in the world.

Table no. 3. Labour markets efficiency Romania and UEM countries

Country	Place (of 144)	Points
Romania	104	4,01
Estonia	10	5,11
Finland	15	5,00
Holland	17	4,99
Ireland	27	4,91
Austria	32	4,69
Luxemburg	37	4,65
Cyprus	44	4,57
Belgium	50	4,54
Germany	53	4,51
France	66	4,41
Slovakia	86	4,20
Slovenia	91	4,15
Malta	92	4,14
Spain	108	3,98
Portugal	123	3,80
Italy	127	3,72
Greece	133	3,56

Source: Global Competitiveness Report 2012-2013

The differences regarding the rigidity and the national regulations from the labour market between the member states can represent elements of asymmetrical propagation of some mutual shocks, by the fact that they can be better managed in the countries with greater market flexibility than in those characterized by more accentuated rigidity. However, the degree of rigidity from this market should be balanced with the degree of capital mobility, because a high level of this indicator would compensate the lack of the labour force mobility (Criste A, 2009).

The ability of the companies to compete on transnational level on a unique market depends on the ability of the employers and of the employees to properly react to adverse shocks, who can demand decreases of the production costs and of the number of worked hours. In short, the more flexible the labour market, the greater the asymmetric shocks management cost.

Country	EPI (2008)
Romania	2,8
Estonia	2,10
Finland	1,96
Holland	1,95
Ireland	1,1
Austria	1,93
Luxembourg	3,25
Belgium	2,18
Germany	2,12
France	3,04
Slovakia	1,44

Table no. 4. Rigidity of legislation regarding the occupation

Source: OECD, http://stats.oecd.org/Index.aspx?QueryId=10179, accessed on March 12th, 2013

2.51

2,98 3,15

1,89

2,73

Slovenia

Spain

Portugal Italy

Greece

The flexibility degree can be evaluated based on several criteria such as: the labour force mobility, the reaction of wages in accordance to the unemployment rate, the flexibility of the labour demand, the legislation in the labour field, the flexibility forms related to the labour force supply and it refers to a working schedule, the typology of contracts, the capacity of individuals to be flexible on the labour market, but also regarding the institutions specific to the labour market, and also the rigidity degree of the legislation regarding the occupation, the power of the unions, the establishing of a minimum wage.

As it can be seen from the table the most efficient and flexible labour market of the euro area is the one in Estonia, followed by Finland and Holland. On the other side, the weakest markets from this point of view are those of Italy and Greece, Romania itself not having a much efficient labour market, being placed on the 104<sup>th</sup> place out of 144 states, and 4.01 points of 6 possible. Still it is placed before Spain, Portugal, Italy and Greece in the top made by World Economic Forum in 2012.

A national economy is the more advanced as its labour resources are better used. Unfortunately, in Romania, this precise resource has been neglected. The immediate consequences were the migration of a relatively important part of the competent labour force or of the young graduates with a remarkable potential and the accentuation of the gap, as far as the labour productivity is concerned, in line with the level achieved by the West-European countries, but also in line with the in transition countries.

#### 3. The effects of the fiscal policy

The fiscal policy plays an important part within the policies applied by the government for achieving the main multiple macroeconomic objectives: a high level of occupation of labor force; a high rate of economic growth; price stability; external payment balance equilibrium, using specific instruments integrated in the fiscal systems applied at a given time.

The fiscal policy will be the one to undertake to a large extent the part of main adjustment instrument, inflation targeting being replaced by the public deficit targeting. In order to prepare this responsibilities transfer it is necessary that in the public budget construction one eliminate or reduce as much as possible any rigidities, any types of expenses that automatically grow, based on formulas, any commitments which created long term nonadjustable obligations. It is also important that the public deficit is maintained at a much lower level than the one imposed by the Stability and Growth Pact of 3% of the GDP. Many researchers believe that a deficit level around 1% of the GDP would offer enough leeway to absorb the possible shocks; others go even farther and talk about the necessity of maintaining a primary surplus that should allow the undertaking of some possible growths of the external debt cost.

The effects of the fiscal policy could be localized, both on macro and also on micro level. On macro level, these effects are localized in the social redistribution of resources, the dynamic social exits, the "complete" and partial use of the market, the emigrations position and the external equilibrium. On micro level, such effects are reflected in the incomes and expenses fluxes and in the patrimony structure.

The participation in a currency union supposes for the involved countries the acceptance of some constraints regarding the way of financing the budget deficits. Because of the differences between the fiscal systems, the countries use different financing combinations by indebtedness and currency financing of the budget deficits.

The budget constraint is given by the relation:

$$G - T + rB = dB/dt + dM/dt$$

where:

G = level of governmental expenses (except for the payments with the governmental debt);

T = fiscal incomes;

r = interest rate in the governmental debt:

B and M = monetary basis.

The budget deficit is made of the primary deficit (G -T) and the payments with the interest for the governmental debt (rB) and it can be financed by indebtedness(dB/dt) or by increasing the monetary basis (dM/dt). A rational government will try to compare the marginal cost of the incomes growth by increasing the taxation to the marginal cost of the incomes growth by seigniorage; in case the marginal cost of the incomes growth by increasing the taxation exceeds the marginal cost of the incomes growth by inflation (seigniorage), a government chooses the variant of inflation increase. Generally, the countries with underdeveloped fiscal systems believe it is advantageous for them to increase their budget incomes by seigniorage, because the costs of budget incomes growth by increasing the taxation are greater than the budget incomes growth by inflation (it is usually the case of the in developing countries) (Socol C., Socol A.).

The less developed countries which enter a monetary unit next to countries with a high development level will have to increase the taxation in order to finance their

deficit. However the increase of taxation in the less developed countries will lead to a loss in welfare (Burda, M., Wyplosz, 1997).

After renouncing to their own currency, practically the only markets left for adjustments would be labour market, goods market and fiscal policy, given thus the risk that, in lack of control on the modifications in the interest rate and the exchange rate, the optimum occupation of the labour force and the price stability could not be provided.

The European construction focused on the national fiscal policies as stability factor in case some states in the Euro area can suffer from asymmetrical shocks. It was provided in this case that the national fiscal policy interferes and stabilises the economy.

The manifestation of the Balassa-Samuelson effect makes impossible the simultaneous fulfilment of the inflation and exchange rate criteria in the conditions of achieving an economic growth, and one of the solutions would be to impose a restrictive fiscal policy. The application of such policies will be able to lead to the fulfilment of the criteria of Maastricht, but with the cost of reducing the aggregate supply; therefore, it will lead to an economic decrease.

Certain states of the Monetary Union use the fiscal policy to accelerate the process of the economic convergence or simply to counteract the negative effects produced on national level, because the own monetary policy is no longer an option. This situation creates important pressures on the price stability in the Euro area, fact which influences the economic stability of all the countries. In the last years this phenomenon got much amplified, some claiming nowadays that the Monetary Union will resist only in the conditions of a more accentuated fiscal union.

The treaty regarding the stability, coordination and governance within the Economic and Monetary Union, includes the requirement that the national budgets be balanced or in surplus. This requirement will be fulfilled if the annual structural deficit will not exceed 0.5% of the GDP. If a member country has the public debt significantly below 60% of the GDP and the risks regarding the sustainability of the long term public finances are reduced, it can have a structural deficit greater than 0.5% of the GDP, but not greater than 1% of the GDP. The limit of 0.5% of the GDP stipulated by the new fiscal compact is applied for the structural budget deficit.

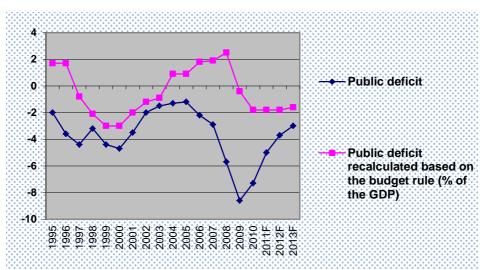
# Actual budget deficit = Cyclic budget deficit (automatic stabilizers) + Structural budget deficit (discretionary policies)

The evolution of the budget incomes and expenses is influenced both by the evolution of the economic activities volume, and also by the governmental authorities decisions.

The economic activity evolution generates cyclic fluctuations on the budget income components. Thus, fees and taxes as the contributions to the social securities, the profit tax, the value added tax, the income tax or the excises are strongly influenced by the position of the economy in the economic cycle – recession or "boom". As for the effects on the budget expenses, they are very influenced by the economic cycle, except for the compensations and payments for the unemployment benefit, which are strongly influenced by the economic activity cyclicity.

These components of budget incomes and expenses which are influenced by the economic cycle represent "automatic stabilisers", contributing to the smoothing of the economic cycle and the decrease of the GDP volatility, with a long term beneficial impact on the economic growth potential.

On the incomes part, the stabilisers act in case the economy is in recession, determining the decrease of budget incomes, less fees and taxes being collected. This decrease stimulates the aggregate demand, thus contributing to the stimulation of the GDP growth. In case of an economic cycle boom, the budget incomes grow cyclically, which makes the incomes of the agents decrease, thus contributing to the limitation of the aggregate demand expansion. On the budget expenses part, the automatic stabilisers usually act through the system of compensations and benefits for the unemployed.



Graphic no.1.The evolution of the actual public deficit recalculated based on the budget rule

Thus, in the case of the recession an unemployment rate growth takes place, the unemployment compensations and benefits are increasing which stimulates the aggregate demand, and in the case of an economic boom, the decrease of these benefits limits the expansion of the aggregate demand.

Thus, the automatic stabilizers (the cyclical balance of budget – the difference between the budget incomes and the budget expenses of cyclic nature) act as a "break" for the economic activity when the actual GDP is above the level or the potential, namely as a "stimulus" for the economic activity during the times when actual GDP is below its potential level. Thus, the actual GDP is automatically "forced" to stabilise itself to its potential level.

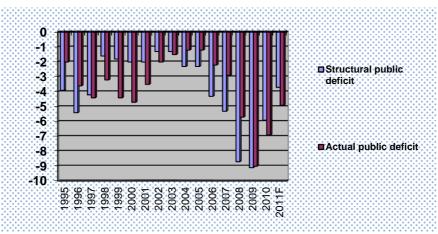
The limit for the structural deficit imposed by the European fiscal pact will determine a very strict control on the public finances in Romania, this having its clear advantages, but also its advantages.

Romania had until now a procyclical discretionary fiscal policy, accentuating the macroeconomic disequilibria instead of attenuating them. The structural deficit registered a growth when the GDP is above the potential level, whose nature was to annul the action of the automatic stabilisers. The 0.5% limit of the GDP will lead almost lead to the impossibility to practice some procyclical fiscal policy and to a pronounced fiscal discipline, which can be a significant advantage to us.

In order to understand this advantage, we can make a simple calculation, for the previous situation. Thus, in 2008, when GDP was above the potential, according to the new rule, Romanian should have had a budget deficit of 2.5% of the GDP instead of an actual budget deficit of 5.7% of the GDP. This situation is valid for the entire 2004-2008 period, during which GDP was above its potential level, and implicitly Romania should have had budget surpluses, as it can be seen in graphic no. 6.

We must also take into consideration the disadvantage of the new European fiscal rule for Romania. This can be seen from the reduction of the existing manoeuvre area to be able to stimulate the economy during the recession times. In Romania's case, the structural deficit limit of 0.5% of the GDP will most likely be reached before the actual public deficit reaches 3% of the GDP. During the 2009-2010 recession, the actual deficit could not have exceeded 2% of the GDP.

It has been theoretically and empirically proven (Dumitru I.)that on average and long term (during a complete economic cycle), the actual average deficit is equal to the average structural deficit, and the average grade of the cyclic deficit is 0.



Graphic no.6. Evolution of the actual and structural deficit

By assuming a target of a maximum structural deficit of 0.5% of the GDP, Romania assumes the obligation that the actual budget deficit, as average grade during an economic cycle be of 0.5% of the GDP maximum, which will mean in line with the historical standards (3.8% of the GDP the average of the structural deficit during 1999-2011) a much lower budget deficitand a much reduced manoeuvre area.

### 4. The effects generated by the inflation rate

A series of empirical studies made (Fernándezşi Sánchez-Robles, Fernández, A. M., Sánchez-Robles, B.)have showed that the interest rate set by the European Central Bank is not optimum for all the states of the Economic and Monetary Union, since the Euro area does not fulfil the conditions for an optimum monetary area, being characterised by the lack of mobility of the labour force.

Given these conditions, the asymmetry of the shocks leads to differences in inflation and, therefore, to divergences of the real rates of the interest among the countries in the Euro area. Thus, the countries with a greater inflation rate than the Euro area average registers a decrease in the real rate of interest, being an incentive for the aggregate demand. In order to avoid these inconveniences the synchronisation of the business cycle between the countries of the Euro area is necessary.

A study which analyses the effects of adopting the Euro currency in Slovenia and Slovakia on the inflation rates from these countries (Damian M., 2011)pointed out that the interest rate of the European Central Bank was not optimum for the two states.

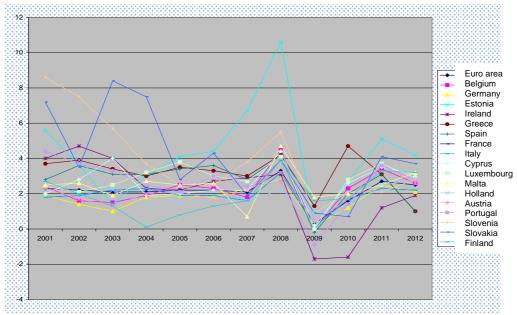
The high value of the inflation rate in Slovenia is due both to the shocks of the supply which affected the world economy, and also to certain internal factors, thus determining the increase of the inflation gap between Slovenia and the Euro are average. One of these internal factors with negative impact on the prices was the salaries growth.

The rapid economic growth which characterised Slovenia both before, and also after the adherence to the Euro area, is due to the real convergence process necessary to the admission in EMU. On the other hand, the manifestation of the Balassa-Samuelson effect had repercussions only on the inflation rate, unlike the previous time when it also influenced the exchange rate.

The effect of losing the monetary autonomy in Slovakia concretised during some periods of time with an accentuated recession's gap which led to the occurrence of the deflation. The negative effects of adopting the Euro currency caused by losing the monetary policy autonomy were felt on the variation of the inflation rate, their amplitude being different in the two analysed states, as a consequence of the sustainable non fulfilment of the convergence criteria.

There are many empirical studies in the specialty literature which show the divergence of the inflation rates within the Monetary and Economic Union during the first years after adopting the Euro currency, because of the existence of the cyclical and structural factors.

For instance, the manifestation of the Balassa-Samuelson effect after the adoption of the unique currency will lead to inflation differences in line with the Euro area, considering the impossibility of the absorption of nominal appreciation of the exchange rate.



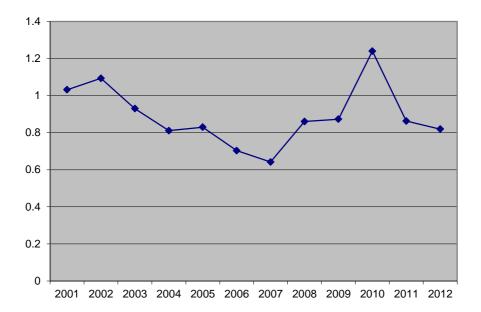
Graphic no.6. Evolution of the inflation rates in the Euro area

Source: Eurostat data

We can observe that there are differences in the transmission mechanism of the monetary policy in the Euro area, since the consumers' preferences are different and

the oil import is different from one country to another, which generates different effects on the prices.

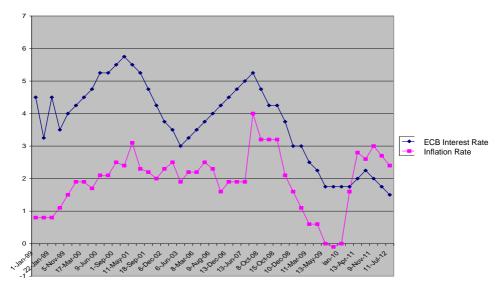
In most of the economies from the Euro area 2003 was the year of slowing down the growth rhythm of prices, 2004-2005 represented times of recession, but in 2005 prices grew in almost all the countries, except for France and Portugal. In 2007-2008 the impact of the growth of the raw materials and oil prices from the international markets on the inflation rate was different in the countries of the Euro area. Also, the contraction of the economic activity worldwide had a different impact on the economies in the Euro area, which determined the ascendant tendency of the dispersion of the inflation rate during 2009-2010.



Graphic no.7.The dispersion of the inflation rate in the Euro area during 2001-2011

Source: own calculations based on the Eurostat data

Being the greatest financing source in the Euro area, the European Central Bank sets the interests so that they influence the availability of the currency and, thus, the inflation rate. As it can be observed in graphic no. 8, the interests set by the European Central Bank and the inflation rate IAPC are correlated in time – which proves the importance of the ECB for maintaining a low and stable value of the inflation of consumption prices.



Graphic no.8.Evolution of the ECB interest rate and of the inflation rate in the Euro area

Source: ECB, Eurostat

The lack of synchronisation of the business cycles between Romania and the Euro area is a clue that the unique monetary policy will be incompatible to the internal requirements of the Romanian economy, having a negative impact on the inflation rate. For instance, if Romania will register an economic growth above the European average this will determine a growth of the internal demand and implicitly, it will need a restrictive monetary policy which should temperate the inflationist pressures. The loss of the autonomy of the monetary policy will not allow the increase of the interest rate and, therefore, the result will be a high inflation rate, as it was the case of Slovenia. I believe that from this point of view it is very important to choose the conversion rate between the national currency and Euro, because an overvaluation of the leu will have negative consequences on the Romanian exporters.

Adhering to the Euro area will have both positive and also negative effects on the inflation rate in Romania. Based on the example of the countries which adhered to the Euro area in 2007 and 2009 I estimate that the inflation rate in Romania will first register an increase after adhering, but subsequently the monetary policy of ECB will be able to control the evolution of prices in our country also.

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