

ROAD TO EURO. COMPARATIVE ANALYSIS ROMANIA-BULGARIA

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Abstract: The article makes a comparative analysis of Romania and Bulgaria on their way to adopting the euro. In order to highlight the situation of the two countries after 5 years of EU membership and the opportunity to adopt the euro, we analyzed the macroeconomic key performance indicators, the indicators of the financial sector and of foreign trade for Romania and Bulgaria. The article emphasizes the comparison between the two countries in terms of the achievement of the convergence criteria and the position that officials have regarding the euro.

JEL classification: G01, G15, G31

Key words: euro, performance indicators, convergence criteria

1. INTRODUCTION

The integration of Romania and Bulgaria in the European Union took place in January 2007. After five years, the belonging to EU is no longer a warranty for a peaceful economic climate or for a better life. Moreover, the introduction of a unique currency seems far from happening, in the case of both countries. Bulgaria and Romania are behind other European Union member states as far as their development is concerned, being placed at the level of the other candidate countries from the Balkans.

2. ROMANIA AND BULGARIA: PERFORMANCE INDICATORS

Although Romania and Bulgaria are two of the economies with the fastest economic growth from EU 27, they are still placed on the last two places of the UE top, especially upon the effects generated by the economic crisis from 2008 which interrupted the continual increase process of the GDP/inh. Thus, the Value of the Gross Domestic Product (GDP) per inhabitant expressed in the parity of the purchase power standard (PPS) in Romania was situated in 2011 to 49% of the European Union average, still occupying the penultimate place in the EU, in front of Bulgaria where the value of the GDP per inhabitant expressed in PPS was of 45% from the EU average¹.

In the two countries the high growth process was accompanied by a sinuous evolution of the inflation. In Bulgaria the annual inflation measured from the

¹Eurostat, http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/GDP_per_capita,_consumption_per_capita_and_price_level_indices/ro

consumption prices had a volatile evolution being placed in the 2.3%-12% interval. After the 2003 decline, the inflation climbed vertiginously to 12% in 2008, going down again to 2.8% in 2009. The variations of the inflation reflected the adjustments of the administrated prices and of the excises, the evolution of the raw materials prices and other shocks of the supply nature, and also the impact of the internal demand. Until 2008, the massive capital inputs in Bulgaria contributed to the rapid increase of the internal demand, and especially of the investments. Subsequently the world crisis determined a correction favoured by the decrease of the imports and the slower dynamics of the capital inputs.

In Romania the inflation decreased from very high levels at the beginning of the 2000 years until 2007, when the decreasing trend got reversed. In 2009, the inflation went down again, to get stabilized afterwards. This evolution was determined by the unitary costs with the labour force, the shocks of the supply nature, the adjustments of the administrated prices and of the excises. The decrease from 2011 is justified by the decrease of the VAT starting from the half of the year 2010 and the reduction of the pressures exercised by the food products and of the power products prices.

Table no. 1. The dynamics of the main macroeconomic indicators in Romania and Bulgaria

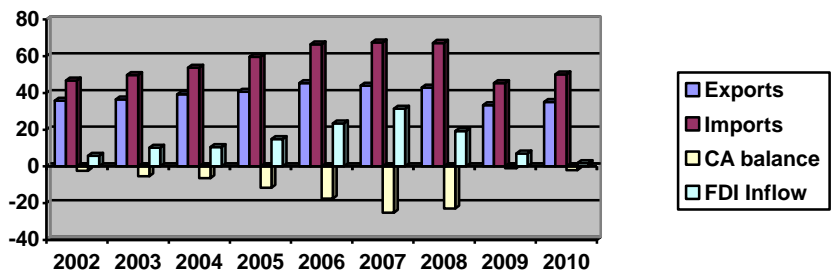
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Bulgaria GDP Growth per capita	6.3	7.5	5.2	6.4	7.3	6.9	6.8	7.0	6.7	5.0	1.1	2.7
GDP deflator	6.7	6.7	4.4	1.8	5.2	3.8	8.5	9.2	8.4	4.3	2.8	5.0
CPI Inflation	10.3	7.4	5.8	2.3	6.1	5.0	7.3	8.4	12.3	2.8	2.4	4.2
Unemployment rate	18.2	18.1	17.7	13.9	12.2	10.2	9.0	6.9	5.7	6.9	10.3	11.3
Employment rate	-	-	-	52.5	54.2	55.8	58.6	61.7	64.0	62.6	59.7	58.5
Romania GDP Growth per capita	2.5	5.8	8.0	5.5	8.8	4.4	8.1	6.5	7.5	-6.4	-1.5	2.9
GDP deflator	44.3	37.4	23.4	24.0	15.0	12.3	10.8	13.0	11.6	6.5	3.6	7.1
CPI Inflation	45.7	34.5	22.5	15.3	11.9	9.0	6.6	4.8	7.8	5.6	6.1	5.8
Unemployment rate	6.9	6.4	8.4	7.0	8.0	7.2	7.3	6.4	5.8	6.9	7.3	7.4
Employment rate	63.6	62.9	58.0	57.8	57.9	57.7	58.8	58.8	59.0	58.6	58.8	58.5

Source: INS Romania and Bulgaria, Eurostat

A macroeconomic indicator which reflects that the impact the world crisis generated on the two economies is the one of the unemployment rate. In Bulgaria, the unemployment rate (see Table no. 1) was permanently reduced from 18.2% as it was registered in 2000 to 5.7% in 2008, and the outbreak of the crisis determined an increase of up to 11.3% in 2011. In Romania the evolution of the unemployment rate

(see Table no. 1) was oscillating in the analysed period, with a maximum reached in 2003 and a minimum of 5.8% in 2008. In Romania also we can observe an increase of the unemployment rate up to 7.4% as a consequence of the downsizing determined by the crisis.

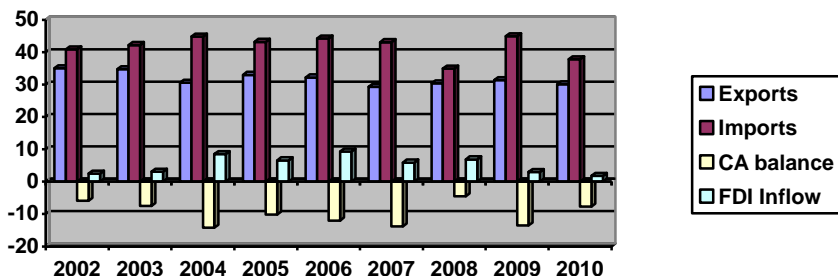
Figure no. 1
Bulgarian external indicators, in percent of GDP



Source: Bulgarian National Bank and Eurostat

In Bulgaria, (see Figure no. 1) the exports increased constantly until 2008 both in nominal and also real terms and as percent of GDP, but the imports had an even faster increase. After 2008, both exports and imports were reduced as a consequence of the crisis, but the imports in a greater proportion, which generated an improvement of the current account of the external balance. At the same time there was a rapid increase of the foreign capital inputs both through direct investments and also through the credit channels reaching in 2007 to 29.4% of the GDP, to decrease subsequently to 4.5% of the GDP in 2010. These combined evolutions generated a positive payment balance and the increase of the international reserves of the National Bank of Bulgaria which increased to a third of the GDP.

Figure no. 2
Romanian External indicators, in percent of GDP



Source: Romanian National Bank and Eurostat

In Romania, (see Figure no. 2) the increased imports of goods and services were especially determined by the high dependency of the Romanian economy on the power and raw materials imports, and second of all, by the capital assets imports.

Another particularity of the Romanian foreign trade is that 71% are performed with the EU member states, according to the World Bank.²

The improvement of the business environment, the effects of the introduction of the unique taxation quota and the positive attitude of the foreign partners towards Romania led to the attraction of a volume of direct foreign investments of 9 billion Euros in 2006 (which also includes the sum of 2.2 billion Euros representing the undertaking of Este Bank of 36.8% of the Romanian Commercial Bank stocks) and of almost 9.5 billion Euros in 2008 which represented the record as far as the direct foreign investments attracted by Romania are concerned. This evolution is also explained by the fact that the adherence to the European Union, the adoption of the communitarian *acquis* and the low price of the labour force, made Romania a more and more attractive destination for the foreign investors.

Suggestive for the intensification of the investing process, but also for the increase of the volume of foreign investments in the development and modernizing of the national economy is also the fact that the import of equipments increased substantially, in the terms of maintaining within financeable limits the current account deficit of the payment balance, especially as consequence of the concomitant increase, in a sustained rhythm, of the volume of goods and services export. The investments made in the economy had an important influence and led to an increase of the competitiveness of Romanian products, fact which was reflected in the change of the structure of the industrial products export in the sense that the small incorporated value added (low technology) resources and products export got reduced, the great incorporated value added (medium and high technology) products export increasing accordingly.

An important indicator in the analysis of the opportunity of adoption the euro currency in Romania and Bulgaria is represented by the performances of the financial sector.

The financial sector in Bulgaria (see Table no. 2) is dominated by the commercial banks, and they hold approximately 80% of the total of the assets of the financial intermediaries. The level of the competition in the Bulgarian bank system is high as it can be seen from the level of the Herfindahl-Hirschman indicator in total assets, loans and deposits which vary between 0.08 and 0.086. The non banking financial system in Bulgaria is less developed, the leasing companies, the investment funds, the insurance companies hold approximately 20% of the total assets.³

Total banking assets knew a powerful growth, even in the conditions of the world crisis, reaching to 102.1% of the GDP in 2011, namely double as percent of GDP as compared to 2003. Total loans also experienced a spectacular growth, from 26.0% of the GDP in 2003 to 74.5% of the GDP in 2011 with the support of an extraordinary dynamic in all segments. The banking system adjusted its activity starting with 2008 taking into account the slowing down of the activity. Thus, as a consequence of a more restrictive crediting policy and a higher unemployment level, the crediting activity remained at a low level, while the importance of attracting funds from the residents increased progressively. Thus the level of deposits increased from 39.3% of the GDP in 2003 to 70.2% in 2011. The slow crediting activity and the continual increase of

² World Bank, *Global Economic Prospects 2012*, pag.10

³ Ganev G., Costs and benefits of euro adoption in Bulgaria, Working Paper, march 2010, pag.18

deposits assured the liquidity of the bank system. As it was expected the total loans % in total deposit indicator decreased starting from 2010, tendency which seems to continue in the next years.

The 17.5% level of the indicator of capitals adequacy is net superior to the minimum level provided by 12%. As for the ROE and ROA indicators, they registered a reduction for the third year, level determined by the increase of the provisions necessary as a consequence of the increase of the loans from the bad loans category and the slowing down of the crediting activity. I estimate based on the data referring to the registered liquidity and the capitalisation which are to lead to economic growth.

The financial sector of Bulgaria can be qualified as relatively small, in comparison to the developed states in the EU, visibly dominated by the commercial banks, which are mostly held by organisations from the EU with a high competitiveness level.

Table no. 2. Bulgarian and Romanian banking sector indicators

	2003	2004	2005	2006	2007	2008	2009	2010	2011
BULGARIA									
Banking system total assets (%GDP)	50	64.2	76.8	85.5	98.2	100.4	103.7	104.6	102.1
Total loans (%GDP)	26.0	34.4	41.4	44.8	63.1	72.4	76.8	76.4	74.5
Loans to private enterprises	19.9	25.1	27.9	28.8	41.5	47.4	49.4	50.0	49.9
Loans to households (%GDP)	6.1	9.8	14.4	16.6	21.6	25.0	27.3	26.3	24.6
Mortgage loans (%GDP)	1.2	2.6	4.7	7.1	9.8	11.9	13.1	13.1	12.4
Total deposits (%GDP)	39.3	50.3	59.4	67.2	64.5	60.2	63.4	66.6	70.2
Deposits from households (%GDP)	19.8	22.8	27.4	29.6	31.5	32.0	36.4	39.8	42.4
Total loans % in total deposits	66.3	68.3	69.8	66.6	97.7	120.3	121.2	114.8	106.1
Number of banks	35	35	34	32	29	30	30	30	31
ROA	2.0	2.1	2.0	2.2	2.4	2.1	1.1	0.86	0.78
ROE	18.7	20.0	21.6	24.4	23.8	20.5	9.3	6.73	5.76
Capital adequacy	22.2	16.6	15.3	14.5	13.8	14.9	17.0	17.5	17.5
Non-performing loans (%total loans)	3.2	2.0	2.2	2.2	2.0	2.4	6.1	11.9	14.9
ROMANIA									
Banking system total assets (%GDP)	31.2	37.1	45.2	50.9	62.5	66.0	72.7	73.7	67.9
Total loans (%GDP)	15.3	16.6	20.8	26.8	35.9	38.7	40.1	40.3	38.9
Loans to private enterprises	9.1	9.7	11.3	14.4	17.6	18.5	19.3	20.1	20.2
Loans to households (%GDP)	3.8	4.8	7.4	11.4	17.2	19.3	20.1	19.6	18.1

Mortgage loans (%GDP)	0.9	1.4	1.8	2.3	3.4	4.1	4.9	5.6	5.8
Total deposits (%GDP)	20.4	23.1	26.0	28.0	32.4	31.2	36.1	36.8	35.0
Deposits from households (%GDP)	9.7	11.0	11.9	12.8	16.5	16.4	19.9	20.2	19.8
Total loans % in total deposits	75.2	72.1	80.0	95.8	110.6	123.8	111.2	109.7	111.2
Number of banks	38	39	39	38	41	42	41	41	40
ROA	2.2	2.4	1.9	1.5	1.0	1.6	0.3	0.2	0.1
ROE	15.6	18.5	15.2	11.7	9.4	17.0	2.9	1.7	1.4
Capital adequacy	21.1	20.6	21.1	18.1	13.8	13.8	14.7	15.0	14.5
Non-performing loans (%total loans)	8.3	8.1	8.3	8.4	1.7	2.8	7.9	11.9	14.1

Source: BNB, NBR, IMF, Raiffeisen RESEARCH

Just like in Bulgaria, in Romania (see Table no. 2) also the banking system experienced an increase of the total assets of up to 73.7% in 2010, and afterwards a regress in 2011 to 67.9%. However, the slowing down of the crediting is much more visible in Romania, the total loans as percent of the GDP decreasing to 38.9%, especially as a consequence of the reduction of the loans to households.

The level of the non-performing loans continued to grow in 2011 also reaching to 14.1% of the GDP, which determined next the increase of provisions and the reduction of the profitability per entire banking system, reflected by ROA and ROE of 0.1% and 1.4% respectively. However, the banking system proves to be still solid, with a level of the capital adequacy of 14.5% superior to the minimum of 12%, providing good conditions for the fulfilment of the BASEL III additional capital requirements.

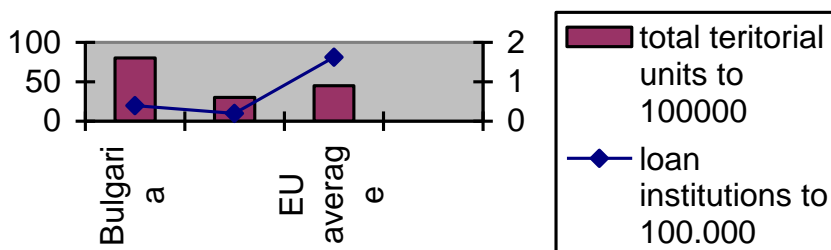
The loan institutions in Romania hold over 65% of the total of the financial intermediaries assets, observing in the last years a reduction of the weigh of the other financial intermediaries as a consequence of the high non payment risk.

The degree of financial intermediation calculated based on the weight of assets, loans and deposits in the GDP of the banks which perform their activity on the Romanian territory, are situated much below the EU average and even below the values registered by the other member states, including Bulgaria. From the perspective of the number of territorial units, but also of the number of loan institution to 100.000 inhabitants (see Figure no. 3), the banking system in Romania is still placed below the European average, while in Bulgaria the number of units exceeds by far the European average, but the loan institutions to 100.000 inhabitants although greater than in Romania, is below the European average⁴.

The Herfindahl-Hirschmann index for assets in Romania's case indicates a moderate concentration degree, the value of 895 points being below the average of 1102 registered at the EU level, but superior to the one registered in Bulgaria.

⁴ NBR, Financial Stability Report, 2011, pag. 23

Figure no. 3
The number of territorial units and loan institutions to 100.000 inhabitants



Source: BNR, *Financial Stability Report 2011*

An element which differentiates the two states, Romania and Bulgaria from the perspective of adoption of the euro currency is represented by the used monetary-currency regime. The legal frame in the EU allows the states to choose their monetary regime imposing only the observance of certain requirements referring to the independence level of the monetary authorities, the one of capital adequacy and supervision. From this point of view the two states differ from one another, Bulgaria chose to use the monetary council as a regime, while Romania uses the administrated floating.

In Bulgaria, the central bank is limited in the achievement of the monetary policy only at the level of the held reserves, it cannot buy government securities or borrow from the commercial banks, having no influence on the monetary basis. As effect of the application of the monetary council, Bulgaria imports in totality the monetary policy of the BCE, and the National Bank of Bulgaria has a limited capacity to interfere.

In Romania, the currency market has an increased role in determining the rate and the central bank interferes more rarely in influencing the exchange report of the leu. The interventions of the central bank aim the maintenance of an optimum level of the reserves, and the subsidiary objective is the intervention for maintaining in both senses the rate in a long term sustainable field, the discouragement of the negative influxes, the more rational distribution of profits and losses on the market. The greater flexibility of the exchange rate involves a series of advantages and disadvantages. Romania has a series of *advantages* as a consequence of the discouraging of the speculative influxes, the more balanced distribution among the operators of the profits and losses from the currency transactions, the limitation of the intervention costs for the central bank, the use of a currency mechanism compatible to the direct targeting of the inflation.⁵ The major *disadvantage* derives from the decrease of the predictability of the leu.

⁵ Hândoreanu Cătălina, *Exchange rate and its impact on macroeconomic stabilization*, 2007, p.6, http://www.ectap.ro/documente/suplimente/simpozion_23_nov_2007_ro_vol3.pdf

3. CONVERGENCE CRITERIA: BEFORE AND AFTER THE WORLD CRISIS

The entire world economy has been affected by the loss of confidence in the financial system, which led to liquidity losses, the growth of interests and internal and external financing costs. In most countries the central banks from the developed countries were forced to supply money to the markets. At the same time the rules of supervision of the financial markets toughened and determined the re-evaluation of the investments risks.

As the states interfere in the economies, whether it is to save banks or companies from bankruptcies, or for supporting the economic activity and create new places of employment the need of balancing the state budgets seems more and more acute.

Table no. 3. The degree of fulfilment of the convergence criteria in Romania and Bulgaria

Country	Year	Prices stability Inflation IAPC	Public finances		Exchange rate	Long term interest rate
			Public administrations surplus/deficit	Gross public debt		
Bulgaria	2006	7.4	3.0	22.7	0.0	4.2
	2007	7.6	3.4	18.2	0.0	4.5
	2008	12.0	1.8	14.1	0.0	5.4
	2009	2.5	-3.9	14.8	0.0	7.2
	2010	3.0	-3.1	16.3	0.0	6.0
	2011	3.4	-2.1	16.3	0.0	5.4
	2012	2.7	-1.9	17.6	0.0	5.3
Romania	2006	6.6	-2.2	12.4	2.6	7.2
	2007	4.9	-2.5	13.0	5.4	7.1
	2008	7.9	-5.4	13.3	-10.4	7.7
	2009	5.6	-8.3	23.7	-15.1	9.7
	2010	6.1	-6.8	30.5	0.7	7.3
	2011	5.8	-5.2	33.3	-0.6	7.3
	2012	4.6	-2.8	34.6	-2.8	7.3
Reference value (2011-2012)		3.1	-3%	60.0%		5.8%

Source: ECB, Convergence Report, 2007-2012

Bulgaria is no longer the object of a decision of the EU council regarding the existence of an excessive deficit. In 2009 the budget deficit of Bulgaria was of 3.9% of the GDP, but its level was reduced to 1.9% in May 2012, and the level of the public debt, net inferior to the 60% reference value. We can appreciate that the sustainability of the public finances in Bulgaria registers a low risk level, but broad measures of tax consolidation are needed in order for the medium term objective to be fulfilled.

Regarding the inflation level, Bulgaria registered an annual average IAPC inflation rate of 2.7%, level inferior to the 1.0% reference value.

After the decline in 2003, the inflation vertiginously climbed to 12.00% in 2008, descending again to 2.5% in 2009. The variations of the inflation reflected the adjustments of the administrated prices and of the excises, the evolution of the raw materials prices and other shocks of the supply nature, and also the impact of the internal demand. The inflation progressively increased to 3.0% in 2010 and to 3.4% in 2011, especially as a consequence of the increase of the raw materials prices and the tobacco excises.

The increases beyond expectations of the raw materials prices on the international markets represent the main risk in the sense of the increase at the address of the predicted inflation. If we take into account the fact that in Bulgaria one applies the monetary arrangement of the monetary council type, and implicitly the limits of anti-cyclical policy alternative instruments the prevention of the reappearance of some macroeconomic disequilibria, including of the high inflation rates, could prove difficult.

The Bulgarians started on the budget cuts from upside down. The government wants to cut off the budgets by 15% for the parties and lower the travel expenses of the parliament members. The legislative body will also reduce the amounts allocated to the parliament members for the hotel payment. On the other hand, the Ministry of Finances analyses the possibility of increasing the basic salary by 10% in all the state institutions.

After nine years of economic growth, at the end of which it had a 8.3% deficit, and after one year, 2009, lost form the reforms point of view, the Government of Bucharest, with a fragile support in Parliament, was forced to take drastic measures: reduction by 25% of the salaries in the budget sector, by 15% of all pensions, the elimination of private pensions, possible salary reduction in the state companies.

In Romania, the annual inflation measured through the consumption prices decreased from very high levels at the beginning of the years 2000 until 2007, when the decreasing trend got reversed. In 2009, the inflation decreased again, but subsequently got stabilised, in general, around the 6% value, so that in 2012 it reaches the 4.6% level on the background of the economic activity restriction in the 2010-2011 years. The most recent available prognoses regarding the inflation supplied by the main international institutions reveals the fact that the inflation rate will accelerate during 2012-2013 from historic minimal levels and it will vary between 2.9% and 3.1% in 2012 and between 3.1% and 3.7% in 2013.

According to the international financing agreement concluded with the IFM/EC Romania obligated itself to reduce the level of the budget deficit from 4.4% of the GDP in 2011 (about 5% of the GDP according to the European standards). In this regard, our country took tax correction measures (the VAT increase from 19% to 24% and the reduction of salaries from the public sector), and the reach of the targets in question supposes the carrying on with the tax reforms over the next years.

Romania is the object of an EU Council decision regarding the existence of the excessive deficit. The weight of the public debt in the GDP of 34.6% is net inferior to the 60% value, being in fact the only convergence indicator Romania has fulfilled nowadays.

There are estimates that the gaps recovery process will have an influence on the inflation and on the exchange rate because the GDP per inhabitant level and the prices level are significantly reduced as compared to the euro area.

The Romanian currency did not participate in the MCS II, but it was transacted in the conditions of a flexible exchange rate. In 2010, the leu was generally stable,

being modestly appreciated in the 1st semester of 2011 and subsequently gradually depreciated in report to the euro. Thus the exchange rate of the leu in report to the euro consigned a relatively high volatility degree – although, as an average, substantially more reduced than other countries in the region which have the inflation targeting as a strategy.

The long term inflation rates were situated in average last year to 7.3% value net superior to the 5.8% reference one regarding the convergence criteria regarding the interest rates. During the last years, the long term interest rates in Romania tended to fluctuate around the 7% value with a margin of ± 0.5 percent points, in the conditions in which the persistent inflation prevented the decreasing trend supported by the nominal rates of the interests.

Recently, the inflation got strongly reduced, allowing the central bank to relax the monetary policy rates more rapidly than in the previous times. This contributed to the slight reduction of the short term interest differential between Romania and the euro area average.

4. CONCLUSIONS

From the robust economic growth which exceeded many times the growth registered in the countries belonging to the Economic and Monetary Union, after 2008 the trend reversed for the two analysed countries. This fact was determined mainly by the reduction of the foreign capital fluxes and especially the reduction of the private consumption, caused by the generalised decrease of the incomes. The reduction of the incomes was affected in its turn, after a certain period of time, and the banking system, the volume of the non-performing loans registers a sustained increase.

All these phenomena were manifested very powerfully in Romania, which nowadays registers high uncertainty levels regarding the future economic and financial situation. The development preponderantly determined by the consumption of the internal market (many times based in its turn on the loan), to the detriment of increase of the economic performances can also explain the different manner in which our country behaved after the occurrence of the economic and world crisis. Once these effects were fully settled, leading to a substantial reduction in the citizens' and companies' incomes, a dramatic decrease of the total GDP was registered, especially due to the fact that previously the economic growth was preponderantly supplied by the consumption and the growth of the exports performance was neglected.

The subsequent occurrence of the world economic crisis effects, and also the implementation of the stabilisation measures, which included the rise of the indirect fees and of the administrated prices led to the maintaining of a high inflation level. Considering that all the food products and the power hold over 60% from the consumption basket, and in the future one anticipates other growths on these categories of goods (caused by the worldwide growths, and also the need for the price alignment), the measures implemented for the decrease of the inflation level are going to have to be emphatic.

In the terms in which the member states of the area, are asked to financially support other states overwhelmed by the debts and in which the risk of contagion extends beyond Ireland and Greece, the adoption of the unique European currency is no longer a top priority for the ex-communist countries still outside the area. However, the Romanian officials are firm in their decision to adopt the euro currency in 2015, while Bulgaria postponed its adherence plans. The adoption of the euro currency is however

conditioned by the previous fulfilment of the nominal convergence criteria set by the Maastricht treaty, but in Romania the criterion regarding the governmental debt is the only fulfilled criterion, while Bulgaria fulfils them all. The position of Bulgaria is a consequence of the deterioration of the economic conditions and of the uncertainties related to the future of the monetary block, next to the change of the public opinion in the country regarding the euro adoption, at the beginning of the third austerity year.

We believe that the future preoccupations for assuring the nominal and real convergence must aim actions regarding the GDP/inhabitant growth, the growth of the labour force productivity, the increase of the volume and of the competitiveness of the exports. There are needed measures which aim a change in the economy structure, so that it gets closer to the economic structure existing in the euro area. This fact leads to an increase of the synchronisation of the business cycles between Romania and the countries of the euro area, stopping thus the installation of some major negative effects induced by the occurrence of the asymmetrical shocks.

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