# ROMANIA'S MONETARY POLICY TOWARDS EMU INTEGRATION

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#### Abstract

The National Bank of Romania, whose main objective is to ensure price stability, implements the monetary policy in Romania. For many years, the strategy of monetary policy had consisted in the control of monetary aggregates. Using monetary aggregates as an intermediate objective of the monetary policy proved to be effective during the time when inflation was diminished to the current level. Recently, the central bank has reshaped its monetary policy by the adoption of a new strategy - inflation targeting. In this paper, we refer to some important aspects that have created the favourable conditions for the introduction by the National Bank of Romania of this new strategy of monetary policy.

On the 1<sup>st</sup> January 2007, Romania became a member of the European Union. The next important step towards European integration will be Romania's accession to the European Monetary Union. But the adoption of the euro signifies a big challenge for our country because it requires the fulfilment of nominal and real convergence criteria. This article also refers to the stage of fulfilment by Romania of the criteria for both nominal and real convergence. Our paper also compares the situation in Romania with that of the European Union member countries in Central and Eastern Europe.

Keywords: monetary policy, inflation targeting, convergence criteria.

# Introduction

At the present, the most important responsibility of the central bank, almost in every country, is to establish and implement the monetary policy, which is the fundamental task for the National Bank of Romania (abbreviated as NBR), our cental bank, as well.

Monetary policy has the same final objectives as economic policy, such as: sustained economic growth, full employment of resources, a stable balance of payments and price stability. But, frequently these objectives are contradictory because the achievement of one of them may cause the failure of the others. This is the reason why the monetary policy has its own fundamental objective, which is to ensure the price stability. Price stability may create a favourable economic framework for sustained economic growth.

# 1. A brief analysis of the monetary policy before 2005

As in the case of Romania's economic reform, the monetary policy has made slow progress from the direct control of monetary expansion to the indirect instruments and from multiple and contradictory objectives to what should represent the only concern of monetary policy, namely price stability.

In the first years of the transition period, the monetary policy was oriented towards the achievement of some objectives that were not

compatible with the preservation of price stability. This tendency was favoured by the ambiguus formulation of Law no.34/1991 regarding the Statute of NBR, whose article 1 stipulated "The NBR establishes and implements the monetary policy within the economic and financial policy of the state".

As a result, the monetary policy was constrained to pursue multiple objectives, such as: preferential crediting of unprofitable sectors; sustaining the exchange rate artificially, as an anti-inflationist anchor; administration of public debt and financing budgetary deficit; maintenance of current account deficit within the established limits; acting as a lender of last resort due to problems derived from the unsatisfactory state of the banking system.

Consequently, inflation was maintained at high levels during the first years, being measured by three figures annually (see table 1), with most disastrous effects, both socially and economically. Only towards the end of 1993, by promoting a restrictive policy based on strict control of liquidity and rapid escalation of interest rates, NBR managed to limit the size of the inflationist process.

Nevertheless, against the slow rhythm of restructuring of the real sector and the stop-and-go character of the authorities' policies, inflation returned in 1997 to the level of three-digit figure.

Table 1: Inflation rate (%)

Year	1990	1991	1992	1993	1994	1995	1996	1997
Annual average	5.1	170.2	210.4	256.1	136.7	32.3	38.8	154.8
End of year	37.7	222.8	199.2	295.5	61.7	27.8	56.9	151.4

Source: NBR

The new laws regarding the Statute of NBR adopted in 1998 and 2004, respectively, have made a significant amendment by specifying that "the main objective of NBR is to ensure of price stability". This allowed the central bank to gradually disburden its monetary policy of multiple objectives and thus consolidate its independence. These changes created a favourable framework that made it possible for the central bank to focus on price stability.

Indeed, in the last years, there has been a clear tendency to orient the monetary policy towards the mechanism of market economy and the results obtained in inflation control are remarkable (see table 2).

Table 2: Inflation rate (%)

Year	1998	1999	2000	2001	2002	2003	2004
Annual average	59.1	45.8	45.7	34.5	22.5	15.3	11.9
End of year	40.6	54.8	40.7	30.3	17.8	14.1	9.3

Source: NBR

The strategy of monetary policy consisted in the control of monetary aggregates through the control of monetary base. The main instruments used in recent years by the central bank for controlling monetary supply were minimum reserve requirements and open market operations. Using monetary aggregates as an intermediate objective proved to be effective during the time when inflation was diminished to the one digit level. But, starting with August 2005, NBR has reshaped its monetary policy by adopting a new strategy - inflation targeting -, which represents a superior stage in maintaining inflation under control and a component of the process of economic convergence with the EU countries.

# 2. Inflation targeting in Romania

Over the past fifteen years, a significant number of industrialized countries have successfully adopted inflation targeting as a framework for monetary policy. Thus, inflation targeting has become an increasingly attractive alternative that has been adopted by a growing number of emerging market countries.

Recently, the former socialist countries, namely the Czech Republic, Poland, Hungary, Romania and Bulgaria have adopted inflation targeting. In all these countries, the inflation rate decreased after the adoption of this new strategy. The strongest evidence on that score is that, thus far at least, none of the several dozen adopters of inflation targeting has abandoned the approach.

# 2.1. The concept of inflation targeting

Inflation targeting represents a framework of policy decisions in which the central bank makes an explicit commitment to meet a publicly announced numerical inflation target within a particular time frame. Inflation targeting is characterized by five key elements [Mishkin, 2000, p. 2]:

- 1) The public announcement of medium-term numerical targets for inflation;
- 2) An institutional commitment to price stability as the primary goal of monetary policy;
- 3) A strategy that comprises not just monetary aggregates or the exchange rate but also many variables used for establishing the policy instruments;
- 4) Increased transparency of the monetary policy strategy through communication with the public and the markets about the objectives, and decisions of the central bank;
- 5) Increased accountability of the central bank for attaining the inflation targets.

We might emphasize the fact that a lot of authorities make a public announcement of numerical target for inflation, but that does not mean that they apply inflation targeting. This is because the other four elements are required for inflation targeting to be sustainable over the medium term.

Implementation of inflation targeting involves first setting a goal in terms of a specific measure of general price inflation, the most common choice being the consumer price index. Once a price index is chosen, a target is enumerated in terms of a fixed number and a band. It thus serves as a reference point against which the central bank can be judged. The timetable for achieving the inflation rate target is also announced.

## 2.2. Pre-requisites for inflation targeting

For the adoption of inflation targeting the central bank should consider the fulfilment of the following main pre-requisites [Masson et al., 1998, p.35]:

- The central bank should have a considerable degree of independence and not be constrained to finance the government budget. There must be a strong institutional commitment to make price stability the primary goal of the central bank.
- Monetary authority should refrain from targeting the level or path of any other nominal variable, such as wages or the nominal exchange

- rate. Inflation targeting has always been associated with a high degree of exchange rate flexibility.
- The central bank must have an effective monetary policy instrument like the short-term interest rate that is fully market determined.
- Transparency, accountability and communication with the public of the central bank are essential to anchor inflationary expectations.
- The central bank must possess the ability to forecast inflation and to assess the impact of monetary policy on inflationary expectations.
- The country adopting inflation targeting has to select the relevant price index that is to be targeted.
- The inflation targeting framework should be forward looking as any monetary policy action has a lagged effect.

# 2.3. The fulfilment of pre-requisites for inflation targeting in Romania

The decision for adopting inflation targeting in Romania was based on the following premises [Isărescu, June 2005, p.6]:

- At the end of 2004, the inflation rate reached a one-digit value (9.3%) for the first time after 1990.
- Since the summer of 2004, the NBR has been benefiting from a complete operational independence.
- The successful des-inflationist process recorded through the last years has increased the credibility of the central bank.
- Fiscal dominance has ceased to be a problem given the abovementioned legal independence of the central bank, the relatively low public deficit and the more and more consistent mix of financial policies.
- After several years of continuous development and appropriate supervision, the financial sector is stable and sound, but exhibits low financial depth.
- Nominal exchange rate flexibility is compatible with inflation targeting.
- For many years, the central bank has informed the public on the economic development and monetary policy decisions through the publication of periodical reports and press releases; in addition, since 2003 the NBR has published periodical reports on inflation.
- Since 2004, the central bank has been testing an econometrical model for forecasting purposes, which has been adjusted by the NBR specialists to the specific conditions existing in our country

The inflation targeting strategy applied by the NBR is based on the following coordinates:

- The targeted price index is the consumer price index; the inflation target is set as a fixed number within a band (+/-1%);
- For analytical purposes, the central bank will calculate the core inflation, defined as:
  - □ CORE 1 = Consumer price index administrate prices;
  - □ CORE 2 = CORE 1 highly volatile prices;
- The ex ante definition by the NBR of some exemption stipulations refers to [Isărescu, November 2005, p.20-24]:
  - □ Substantial growth in the external prices of energy sources;
  - □ Natural catastrophes with strong impact on inflation through costs and demand;
  - ☐ Considerable fluctuations of the exchange rate of RON caused by factors outside the national economic and monetary policy;

- ☐ Major deviation of the prices from the schedule of price corrections announced by the Government in terms of value and timetable of implementation;
- fluor Deviation of fiscal and income policy from the schedule of their implementation.

The central banks, which adopted inflation targeting, had to choose between the following two alternatives in order to exclude the effects of unexpected events: either to define some exemption stipulations or to establish the inflation target using other index than the consumer price index (e.g. core inflation). The NBR chose the first solution because it considered that using another index than the consumer price index for inflation target might confuse the public, which is already familiar with the consumer price index.

## 2.4. The prospect of inflation in Romania

The adoption of inflation targeting allowed the reduction inflation. Measured at the end of the year, the inflation rate was 8.6% in 2005 and 4.87% in 2006. The annual rate was 9.0% in 2005 and 6.56% in 2006. The des-inflationist process was accelerated in 2006 due to the restrictive monetary and fiscal policies, deflation of volatile prices of food products, the reduction in the pace of growth of administrative prices, and the appreciation of our national currency. The performance of 2006 is remarkable the more so as the result of 4.87% was under the inflation target of 5% for that year. inflation targets set for the following years are quite challenging (4%+/-1% for 2007 and 3.8%=/-1% for 2008), but they can be attained through a consistent anti-inflationist monetary policy, supported by the other component of the mix of macroeconomic policies. In March 2007, the annual inflation rate was 3.66 % (March 2007/March 2006), a record low level for the post-1990 period. This performance increases the possibility for the achievement of the inflation target set for the current year.

The monetary policy instruments used by the central bank are the open market operations (reverse transactions, outright transactions, foreign exchange swap, the collection of fixed-term deposits from commercial banks), minimum reserve requirements, and standing facilities. Among these, an important role is conferred to minimum reserve requirements, whose current rate is 20% for deposits in RON and 40% for deposits in foreign currency. As for operational instrument, the NBR uses the monetary policy interest rate.

# 3. Monetary policy towards the euro adoption

On the  $1^{\rm st}$  January 2007, Romania became a member of the EU together with Bulgaria. The next important step towards EU integration will be Romania's accession to the European Monetary Union.

# 3.1. Convergence criteria for the adopting of the euro

The adoption of the euro requires the fulfilment of certain criteria for nominal convergence, as stipulated in the Maastricht Treaty. Since the final objective is not just the adoption of the common European currency but also the generation of profits, it is also necessary for a country adopting the euro to meet some criteria for real convergence.

#### 3.1.1. Nominal convergence

The Maastricht Treaty establishes that for adopting the euro a EU member state would have to meet the following criteria for nominal convergence [Brociner 1999, pp. 22-24]:

- Inflation rate criterion: the inflation rate should be no more than 1.5% higher than the average inflation rate of the three best-performing EU members in terms of price stability;
- Long-term interest rate criterion: long term interest rate should not exceed more than 2% the average rate of the three best-performing EU countries in terms of price stability;
- Budgetary deficit criterion: budgetary deficit should not exceed 3% of GDP;
- Government debt criterion: government debt should not exceed 60% of GDP;
- Exchange rate criterion: exchange rate should remain within the normal fluctuation margins (+/-15%) of the Exchange Rate Mechanism II (ERM II) without severe tensions for at least two years.

After the new EU candidate states become EU members, they will participate in ERM II, and then, after they fulfil the nominal convergence criteria, they will adopt the single European currency.

#### 3.1.2 Real convergence

The Maastricht Traty does not make references to the real convergence criteria to certify a hight degree of similarity among the economic structures of the EU member states.

Real convergence became a significant issue especially when the accession of the Central and Eastern European countries was taken into account. The most important convergence criteria are [Stoica 2005, p. 931:

- Degree of economic openness: the weight of exports and imports in the Gross Domestic Product (GDP);
- Weight of bilateral trade with the EU member states in the whole volume of international trade;
- Economic structure: the contribution of the principal sectors to the creation of GDP:
- Level of GDP/inhabitant.

Real convergence is as important as nominal convergence, as, according to the Optimal Currency Area Theory, the states in a group cannot mutually gain from a common currency unless their economic structures are similar and when there is no risk of asymmetric shocks to affect only some of these countries [Isărescu 2004, p.3]. The final objective is not just the adoption of the euro but also the generation of profits.

# 3.2. An analysis of the fulfilment of the convergence criteria

# 3.2.1. The stage of nominal convergence criteria

Off all nominal convergence criteria Romania has fulfilled only those regarding the budgetary deficit and public debt (see table 3). Thus, Romania differs from the majority of the countries in Central and Eastern Europe, which encounter problems precisely relating to this criterion.

Concerning the budgetary deficit and the public debt, the performance is favourable, as in the last years both have been beneath the reference value established by the Maastricht Treaty.

Table 3: The state of public finance (%)

Years	2004	2005	2006
Budgetary deficit/GDP	1.4	0.8	2.4
Public debt/GDP	18.5	15.9	12.8

Source: NBR, National Institute of Statistics

By contrast, Romania's situation in terms of the inflation rate is much weaker. Although the results reached in latest years are remarkable (see table 4), Romania is ranked above the reference value of 2.8% (1.3% average rate plus 1.5%) [ECB, 2006, p.8]. The slow process of price liberalization and the implementation of strategy for gradual decrease of inflation can explicate this situation.

Table 4: Inflation rate (%)

Year		2004	2005	2006
Ann	Annual	11.9	9.0	6.56
average	)			
End of	year	9.3	8.6	4.87

Source: NBR

As for the long-term interest rate on government securities, government bonds in euro with 10-year maturity were issued on the foreign markets just in 2002. The interest rate of the last government bonds issue (August 2005) was 7.49%, a rate superior to the reference value of 6.2% (average rate of 4.2% plus 2%) [ECB, 2006, p.13].

Regarding the exchange rate, the maximum variation of ROL against the euro from the annual average was +7.9/-2.2% in 2004 [Isărescu June 2005, p.15]. For 2005-2006, the maximum appreciation/depreciation of RON exchange rate against the euro in comparison with the average per this period was of +10.0/-6.1%, within the fluctuation margins of ERM II [Isărescu 2007, p.24].

In comparison with Bulgaria, which joined the EU at the same time as Romania, our country's stage of fulfilment of nominal convergence criteria is more advanced than Bulgaria's at the end of 2006. There is an exception that Bulgaria recorded only budgetary excedents and Romania recorded budgetary deficits, but their levels are inferior to the reference value (see the table 5).

Table 5: Nominal convergence criteria in Romania and Bulgaria (%)

Indicators	Romania			Bulgaria		
	2004	2005	2006	2004	2005	2006
Inflation rate 1)	9.3	8.6	4.87	4.0	6.5	6.5
Inflation rate <sup>2)</sup>	11.9	9.0	6.56	6.1	5.0	7.3
Budgetary deficit (excedent)/GDP	-1.4	-0.8	-2.4	1.7	3.1	3.6
Public debt/GDP	18.5	15.9	12.8	40.1	31.3	24.7
Long term interest rate	-	-	4.18*	-	_	7.42*

Source: NBR, Bulgarian National Bank, ECB

It is very useful to make a comparison with the countries that joined the EU on 1 May 2004 and are more advanced than Romania on the

 $<sup>^{1)}</sup>$  End of the year;  $^{2)}$  Annual average; \*December 2006

monetary integration track, in order to know what differences must be recuperated by our country.

As we can see in table 6, most of these countries recorded better results than Romania in terms of inflation (measured through HICP - Harmonized Index Consumer Prices) and long-term interest rate. Nevertheless, Romania's performance is ahead of most of these countries in terms of public finance.

Table 6: Economic indicators of convergence (December 2006)(%)

Country	HICP	Long term	General	Government
	inflation	interest	Government	debt
		rate	surplus or	
			deficit	
Czech	2.2	3.8	-3.5	30.9
Republic				
Estonia	4.3	ı	2.5	4.0
Cyprus	2.3	4.1	-1.9	64.8
Latvia	6.7	3.9	1.0	11.1
Hungary	3.5	7.1	-10.1	67.6
Malta	3.1	4.3	-2.9	69.6
Poland	1.2	5.2	-2.2	42.4
Slovakia	4.3	4.3	-3.4	33.0
Slovenia	1.5	3.7	2.8	46.7
Reference	2.8	6.2	-3%	60%
value				

Source: ECB, Convergence Report, December 2006, p. 20

# 3.2.2. The stage of real convergence criteria

The situation is poorer in connection with the criteria of real convergence (see table 7).

The openness of our economy diminished easily in the last years. The weight of trade with the EU in the whole foreign trade has decreased too. Moreover, the structure of our foreign trade in unsatisfactory, as it is based on low-processed products (clothes, mineral products, chemicals and plastic materials).

In terms of the structure of GDP, the agriculture still has too much weight and services are relatively underdeveloped.

Table 7: Indicators for real convergence (%)

Years	2004	2005	2006
Openness of economy	80.9	76.6	76.7
Weight of trade with EU	68.4	64.5	64.6
Structure of GDP by sectors:			
Industry and constructions	33.1	30.4	30.9
Agriculture	13.0	8.5	8.0
Services	42.1	49.4	49.6
Others	11.8	11.7	11.4

Source: NBR, National Institute of Statistics

The GDP per capita is the most synthetic criterion of real convergence. Expressed at the nominal exchange rate, its value ranks Romania at 20% lower than the average of the EU. The GDP per capita is more relevant if expressed through the purchasing power parity (PPP). Its value situates Romania 30% behind the European average level in the last years (see table 8). Therefore, the mission of surpassing

this handicap constitutes a real challenge for our country for the following period.

Table 8: GDP per capita

Years	EUR			PPP		
	2004	2005	2006	2004	2005	2006
UE - 15	25 800	26 500	27 600	24 700	25 400	26 500
Romania	2 805	3 668	4 508	7 400	8 000	8 800
% in UE - 15	10.9	13.8	16.3	30.0	31.5	33.2

Source: EOROSTAT, NBR

In a scenario with a 4% difference in the long-term GDP growth (i.e. 1.5% average annual growth of European GDP and 5.5% growth of Romania's GDP), it would take 60 years to recover the gap without taking into account the appreciation of our currency against the Euro. In these conditions, the answer could be a decrease in the time horizon by adding a level of about 3-4% annual real appreciation to the difference in GDP growth until stage ERM II begins. According to this scenario, Romania would reach the average level of GDP per capita in the EU around 2044 [Isărescu 2004, pp.6-7].

It is interesting to make a comparison related to real convergence criteria with Bulgaria and Slovenia, which adopted the Euro in January 2007. Romania's and Bulgaria's performance concerning all real convergence criteria is much weaker than Slovenia's, as the table below shows.

Table 9: Real convergence criteria at the end of 2005

Indicators	Romania	Bulgaria	Slovenia
Openness of economy	76.4	138.2	129.7
The structure of GDP by sectors*:			
Agriculture, fishing, forestry	14.3	10.9	2.7
Industry (including constructions)	36.8	29.8	36.3
Services	48.1	58.3	62.3
GDP per capita - EUR	3 700	2 800	13 800
GDP per capita (PPP) - % EU 25	34.7	32.1	80.6

Source: ECB

\*Based on real value added. Data refer to 2004 for agriculture, fishing, and forestry and to 2003 for industry (including construction) and services (including non-market services).

#### 3.3 The transition to the common European currency

The transition to the common European currency represents a great challenge for the Romanian economy and society. The euro adoption has been established for 2014. Between 2007 and 2010, the major priorities of our monetary policy are: 1) the consolidation of low inflation (sustainable disinflation); 2) the creation of long-term capital domestic market and the convergence of interest rate; 3) the relative stability of the exchange rate of RON on the market (in the conditions of full convertibility) around its long-term equilibrium level (sustainable exchange rate) [Georgescu, 2007, p.42]. The achievement of these objectives will permit the fulfilment of nominal convergence criteria.

As we all know, ERM II constitutes a stage towards the adoption of the euro. Romania should not hasten the process of joining the Eurozone since it has to make much more considerable efforts than the countries

that joined the EU in May 2004. The date for Romania's participation in ERM II is forecast for 2012 and it will last for two years. The transition to ERM II is conditioned by the achievement of the nominal convergence criteria and by the progress made in connection with the real convergence process. The nominal convergence criteria as well as those of real convergence can be met only on the basis of long-term consistent efforts. Even if the nominal convergence criteria are reached in a shorter time, its sustainability is guaranteed by the achievement of real convergence.

#### Conclusions

of exchange rate.

Setting price stability as the main goal of our central bank's monetary policy makes it more credible and accountable. In addition to the public announcement of goals, Romania has also granted the central bank greater autonomy and has implemented measures to enhance transparency in monetary policy deliberations. The evidence confirms that the adoption of this policy has permitted our country to reduce the inflation rate.

The main task of monetary policy in the following years is to diminish the inflation rate toward the European average, since one of the criteria for the adoption of the euro regards the inflation rate. Inflation targeting ensures the gradual achievement of the Maastricht criteria, concomitantly supporting the process of real convergence. Inflation targeting is to be maintained at least until ERM II entry because the co-existence of inflation targeting with an explicit exchange rate objective might be problematic. At that moment, NBR will be preoccupied by the stability of our currency. And it is well known that inflation targeting is compatible only with a great flexibility

Regarding our monetary integration, it requires the simultaneous achievement of both nominal convergence (Maastricht criteria) and real convergence (improvement of living standards, sustainable economic growth, and reduction of the discrepancy between Romania and the EU standards). Of all the nominal convergence criteria Romania meets only those concerning the budgetary deficit and public debt. The achievement of inflation and interest rate criteria is problematic.

The position is also unfavourable in connection with the real convergence criteria, Romania's performance being weaker than that of the other Central and Eastern European countries. The fulfilment of nominal and real convergence criteria represents a big challenge for the following period. The nominal convergence criteria as well as those of real convergence can be met only on the basis of long-term sustainable efforts along radical economic restructuring and the realization of investment programmes that will bring Romania closer to the EU standards in this respect.

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