# The Actuality of Macroeconomic Imbalances

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Abstract: Of all the current macroeconomic imbalances, the inflationary phenomenon is one of the most difficult to combat. In some countries, inflation was the main enemy of economic progress. The effects of this phenomenon are largely dependent on the intensity of expectations as well as on the ability to be kept under control by monetary authorities. Lately there has been a significant decline in inflation in both developed and developing countries, as well as increasing commitment of monetary authorities in obtaining the lowest rates of inflation. This article aims to analyze the pillars of direct inflation targeting strategy, prerequisites and developments of new directions of monetary, pointing to the experience of countries that have adopted inflation targeting strategy from 1990 to present. Capturing the coordinates of inflation targeting strategy in Romania tracked the factors that led to changing the previous strategy and prerequisites for adopting new strategies to combat inflation.

Keywords: inflation, economic growth, monetary aggregate.

**JEL codes:** E31; F41; O11.

## 1. Introduction

Inflation is a general, long time rise in prices of goods and services that has many negative effects, including: lowering the value of money, reduced purchasing power, discouraging savings and investment. Inflation is determined using a consumer price index, which is determined by a basket of goods and services considered relevant for the average consumer. Price stability attracts more and more attention due to the positive effects it has on the economy, which is why central banks of more countries are considering price stability as the final goal of monetary policy.

To achieve the ultimate objective of monetary policy, central banks use the following strategies: exchange rate targeting, monetary targeting and inflation targeting. The most recent implemented strategy is the direct inflation targeting. Central Bank estimates and publishes the inflation target set, and through the monetary policy instruments used it tries to bring the inflation rate in the established target.

After World War I, with the crisis caused by the collapse of the gold standard, policies to combat inflation by targeting the price level or the inflation rate instead of exchange rate were developed.

Since 1990, central banks not only in developed countries but also in emerging or developing countries have adopted inflation targeting strategy.

The first country to adopt inflation targeting strategy was New Zealand in 1989. "On the other hand, Armenia, Czech Republic, Poland and Hungary have adopted inflation targeting as a monetary policy strategy while they were still in transition from a planned economy to a market economy." The crisis of 1997 caused many emerging economies to adopt this strategy, but countries that use fixed exchange rate regimes have been forced to adopt floating regimes. Recent studies have shown that the adoption of inflation targeting strategy has proven to be the most effective alternative to combat inflationary pressures. Because "inflation targeting also depends on the monetary policy transmission channel, namely the interest rate channel, some emerging economies have strengthened the financial sector."

Central banks in developed countries - the European Central Bank (ECB), the U.S. Federal Reserve (FED), the Bank of Japan, National Bank of Sweden - have adopted some of the key elements of inflation targeting. Although their goal is to reach a threshold as low inflation, they do not publicly announce a numerical target, nor have other milestones, such as a rate as low unemployment and long-term maintenance of a moderate rate of interest.

Inflation targeting strategy was adopted in Romania in August 2005<sup>46</sup>, when the preconditions necessary for the application of this strategy were satisfied. To facilitate the transition to the monetary policy regime, in November 2004 the National Bank of Romania stopped announcing the targets of real appreciation of the exchange rate and reduced foreign exchange market interventions.<sup>47</sup> Basically, Romania passed from managed floating exchange rate regime to the free rate.

Changing monetary policy strategy for the adoption of inflation targeting was motivated by the fact that monetary targeting lose effectiveness, meaning that the link between monetary aggregates has become increasingly unpredictable. Control of monetary aggregates has been weakened due to restructuring and capitalization of two of the largest state-owned banks (Agricultural Bank and Bancorex), who were in bankruptcy. Possibility of changing monetary policy strategy was first mentioned in 2001. Debated by the National Bank of Romania since 2000, it was agreed that inflation targeting strategy can be successfully implemented only in terms of promoting a coherent economic policy. Thus, a major problem for Romania was achieving a balance on setting interest rate policy so the inflation targets to be achieved without generating a surplus of capital inflows that could adversely affect the external competitiveness of the economy and prospects for long-term growth.

There were two categories of factors due to which in 2005 the National Bank of Romania has decided to adopt inflation targeting strategy, namely price stability and weakening money-inflation aggregate relationship. Giving up monetary targeting, Central

http://www.bnr.ro/Tintirea-directa-a-inflatiei-711.aspx, accessed 15 Nov 2013

<sup>48</sup> Idem 6, p. 249

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Sarwat, Jahan - *Inflation Targeting: Holding the Line* (<a href="http://www.imf.org/external/pubs/ft/fandd/basics/target.htm">http://www.imf.org/external/pubs/ft/fandd/basics/target.htm</a>)

<sup>45</sup> Idem 1

Dinu, M., Socol, C., Niculescu, A., (2005), Economia României. O viziune asupra tranziției postcomuniste, Economic Publishing House, Bucharest, p. 251

Bank has not reduced attention on the development and monitoring of these aggregates, regarded as part of substantiation for monetary policy decisions.

On the other hand, the liberalization of the capital account was not favorable to use the exchange rate as a nominal anchor for the monetary policy, risks of maintaining a fixed exchange rate was increased, especially in the case of emerging countries. Romania had no reserves required for a fixed rate regime. Thus the possibility of massive speculative capital inflows or outflows, whose impact on the evolution of the exchange rate of the national currency and inflation could be considerable.

Also, the volatile and unpredictable nature of both the velocity of money and the money multiplier, accompanied by misunderstanding by the public of appropriate nominal anchor, led to an ineffective mechanism for controlling inflation expectations.

In September 2008, the annual inflation rate reached 7.3%, down 1.31 percentage points from July (8.61%) when it reached the peak. Given the nature of supply, agricultural production recovery after suffering a negative shock in 2007, had a positive influence on the deceleration of inflation. The volatile price dynamics countered the negative effect of administered prices and fuels. Also, faster wage increases and productivity gains still cause inflationary pressures through wage pressure on excess demand. In July 2008, the National Bank of Romania decided to increase the monetary policy rate to 10.25% per year (see Figure 1).



Figure 1. Evolution of inflation rate in Romania between 2005 – 2012

**Source:** www.bnr.ro (accessed 15 Nov 2013)

In September 2009, the annual inflation rate fell to 4.94%, 0.92 percentage points below the inflation rate in July (5.86%). Low volatility in the exchange rate of the national currency contributed primarily to maintining the downward trend of the national currency exchange rate. In July-August signals of attenuation of inflationary pressures of labor cost, mainly attributed to the private sector, emerged. A significant inflationary impact was represented by a further increase in excise duty on tobacco products. The measure taken by the National Bank of Romania in 2009 to curb inflationary pressures decrease was primarily lowering the interest rate from 10.25% to 8%. The level of required reserve on liabilities in lei was reduced to 15% from 18%, and in currency to 30%, down from 40%.

In December 2011, annual inflation fell to 3.14%. Substantial decline in inflation in the second half of the year was supported by easing commodity prices and energy supply

(good agricultural production amid domestic and international level, but also driven by the price of crude oil on exernal markets), but also due to dissipation of adverse effects associated with statistical significant price increases in those markets during the third quarter of 2010 - the first quarter of 2011 and increase of share of value added tax from July 2010. The influence of these factors led NBR to decline prudent monetary policy rate, which fell by two consecutive steps of 0.25 percentage points to the level of 5.75%.

At the end of 2012, annual inflation rate was situated at 4.95%, down 0.38 percentage points below the peak for this year, but remained outside the range of variation. This decrease was partly due to sustained correction of volatile food prices, decline in international prices of oil and currency appreciation against the euro. The increase of administered prices, the gradual incorporation of higher consumer prices, rising costs of raw vegetable after substantial reduction of agricultural production and the deterioration in inflation expectations acted against the downward trend.

At the end of the first quarter of 2013, the annual inflation rate was valued at 5.25%, 0.3 percentage points higher than that recorded at the end of last year (4.95%). The main side effects were caused by electricity price increase in January, the increase in excise duties due to the change in exchange rate (used in their calculation) and the rise of oil prices on the international market in January and February. Annual growth rate of volatile prices continued to reduce inflationary pressures on account of favorable statistical effects.

In creating the organizational and technical framework necessary for the implementation of inflation targeting strategy, Romania received assistance from the International Monetary Fund (IMF), but also from the Czech National Bank .

# 2. The monetary policy strategy of the European Union

Germany had an important contribution to the drafting of the Maastricht Treaty. Considering that price stability is an important indicator of a country's macroeconomic performance, it has become one of the conditions of accession to the European Union. Acording to nominal convergence criteria, in order to join the EU a country must have an "inflation rate close to the average inflation rate in countries with the best performance to price stability"<sup>49</sup>.

Adopting the strategy of inflation targeting in 2005 had the impact of lowering inflation to a single digit value, facilitating the entry of Romania into the EU in 2007. Inflation targets are expressed with annual rate, measured by the consumer price index and are "set as the central point with a variation interval of  $\pm 1$  percentage point" (see Figure 2). Since the adoption of inflation targeting strategy in 2005, the target was reached in two years, in 2006 and 2011. Except for the years mentioned above, most of the period, inflation remained above the range of variation. Note that the target is considered achieved if inflation rate at the end of the year is within the range of variation.

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<sup>&</sup>lt;sup>49</sup> Angelescu, C., Socol, C., Socol, A., (2009) *Politici economice*, Economic Publishing House, Bucharest

<sup>&</sup>lt;sup>50</sup> http://bnr.ro/Tintele-de-inflatie-3325.aspx (accesed 15 Nov 2013)

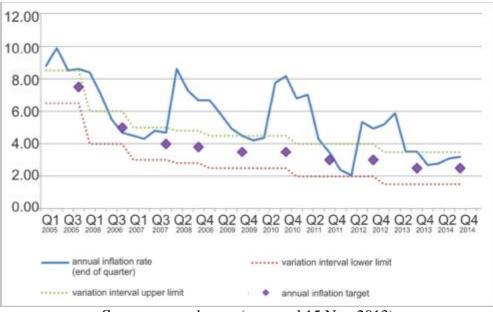


Figure 2. Evolution of annual inflation rate

**Source:** www.bnr.ro (accessed 15 Nov 2013)

In 2005, the year of adoption of the new monetary policy strategy, the target of 7.5% was missed only 0.1 percentage points (see Table 1). In 2006, inflation had a downward trend, facilitating reaching the target of 5%. The next year, and in 2008 as well, we can see that inflation has fluctuated a lot, missing the target by 1.57 percentage points and 1.5 percentage points respectively.

In 2009, the target was missed again by very little, only 0.2 percentage points, unlike in 2010 when inflation fluctuated by 3.46 percentage points above the inflation target. In 2012 the target was missed, but at a lower level than in previous years, and in 2013, in May, the difference between the actual level of inflation and the upper limit of the range of variation was about 2 percentage points.

**Table 1. Reaching inflation targets** 

Year	Target	Result	
2005	7,50%	NOT REACHED	8,6%
2006	5%	REACHED	4,78%
2007	4%	NOT REACHED	6,57%
2008	3,80%	NOT REACHED	6,3%
2009	3,50%	NOT REACHED	4,74%
2010	3,50%	NOT REACHED	7,96%
2011	3%	REACHED	3,14%
2012	3%	NOT REACHED	4,95%
2013	2,50%	-	5,32% 51

Source: www.bnr.ro (accessed 15 Nov 2013)

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<sup>&</sup>lt;sup>51</sup> Inflația pe luna mai, <u>www.bnr.ro</u>

In order to fulfill the objectives of fiscal policy and public sector revenues established by multilateral agreement with the IMF and EU, Romanian Government decided on 26 June 2010 to increase the VAT rate from 19% to 24%. This government measure has the impact of increase in retail price and thus increasing short-term inflation measured by the CPI.

VAT rate increase has a permanent impact on prices and a temporary impact on inflation. Suppose that T is the quarter in which the measure of increase in VAT. This measure affects: the quarterly rate of inflation in the quarter in which it is applied and incorporated increase prices, the annual inflation rate over four quarters, until the base effect is removed. 52

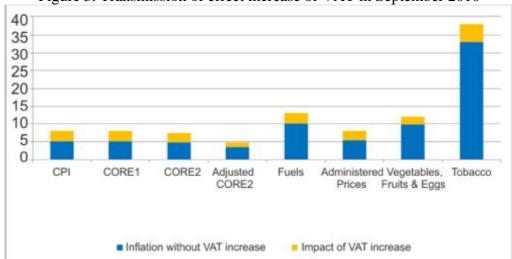


Figure 3. Transmission of effect increase of VAT in September 2010

Source: www.bnr.ro (accessed 15 Nov 2013)

The 5 percentage points increase was sent in stages, but in different proportions to CPI components by the end of the third quarter, affecting goods and services with a share in the consumption basket of about 91 %. The remaining 9 % are goods and services to which a reduced rate of VAT applies (newspapers , medicines, temporary housing) or no VAT applies, namely: healthcare , financial and lease services. The largest effects are in prices of tobacco products , as can be seen (see Figure 3). In the first months of the implementation of the new rate of 24% , there was a direct effect on inflation lower than forecasted by the National Bank of Romania (61% versus 75%). Transmission of fiscal shock had a relative low influence for non-food goods. With regard to volatile price developments, even if the impact of the tax measure was low (below average), they increased from 8.3% to 12.6% in September. Floods in Romania and other European countries in June and July have caused significant losses of agricultural production in the segment of fruits and vegetables. This loss was felt both in domestic producer prices and in foreign prices .

The inflation target has been reached twice in the 8 years since the adoption of the new monetary policy strategy, inflation targeting strategy. Although there were factors that hindered deflation (the removal of the subsidies from the state budget for heating, and the nominal depreciation of the leu against the euro and especially against the U.S. dollar), factors helping to reach the target of inflation were predominant: depletion of the effect of VAT increase, the favorable impact of a good agricultural year, especially in the fruit and

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<sup>&</sup>lt;sup>52</sup> Efect de bază = inflația din anul curent este influențată de modificarea prețurilor din anul de bază

vegetables prices, easing international markets of agricultural commodities and energy and elimination of the adverse effects associated with price increases in those markets in the last quarter of 2010; persistent negative deviation of actual GDP compared to the potential, lowering inflation expectations of consumers; "53 increased competition in retail trade.

Analysing the components of the Consumer Price Index (CPI) in the last three years, ie the period March 2010 - March 2013, volatile prices had the largest share. As can be seen in Figure 4, volatile prices have had a negative influence on inflation in the first quarter of 2012. In 2011, the year the inflation target has been reached, it can be seen that the lowest weight they had tobacco products and alcoholic beverages, and volatile prices had the highest value of all analized time.

At the end of the fourth quarter of 2010, the annual rate of inflation measured by the CPI stood at 7.96% with 3 percentage points above the annual target of 3.5%. Increase in VAT rate was still the main factor in the failure of monetary policy program established by the National Bank of Romania. At the end of the first quarter of 2011, the annual inflation rate calculated using the CPI registered a value of 8.01%. Volatile prices recorded the largest growth rate in the last seven years, reaching 28.2% in March. Aggregate supply contraction in agriculture amid adverse weather conditions in the summer of 2010 stands behind this record value.

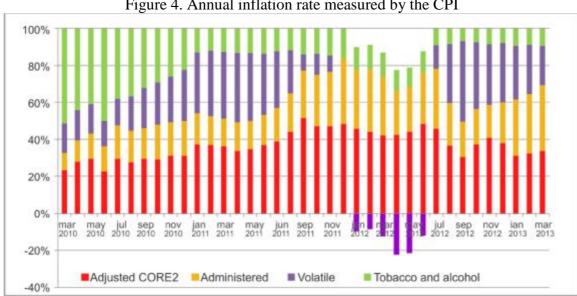


Figure 4. Annual inflation rate measured by the CPI

Source: www.bnr.ro (accessed 15 Nov 2013)

Administered prices have slowed growth by almost 1.6 percentage points in March 2011 to December 2010, reaching a value of 7.2%. During this period there was a slowdown in the annual growth rate in the case of tobacco products (-13.4 percentage points). At the end of the second quarter of 2011, annual inflation stood at 7.93%. Volatile prices brought the main contribution to moderating inflation, recording a value of 23% - by 5 percentage points down from the previous quarter. Administered prices contributed 1 percentage point to the inflation rate, reaching a value of 7.7% compared to 7.2% in March. This increase is due to a change of 5 percentage points electricity tariff as a result of the introduction from 1 April 2011 of a contribution to support energy production in cogeneration.

<sup>&</sup>lt;sup>53</sup> Raport asupra inflației – februarie 2012, Conferință de presă, București 2013

Prices of tobacco products also contributed to slowing inflation, manufacturers seeking restoration of margins affected by past increases in excise duties. During the third quarter, the annual inflation rate has recorded a strong downward trend, returning inside the variation range corresponding to the annual target of 3%. Inflation rate at the end of the analyzed period inflation (3.45%) is the lowest level recorded since the 90s. Volatile prices continued to be the main source of moderation in inflationary pressures, reaching negative values of -10.7 %. These values were mainly due to the abundant supply of the domestic market. Fuel price increases were mainly due the depreciation of the national currency against the U.S. dollar . The fuel prices reached a value of -6.3 % in September compared to June 2011. This value offset the downward trend in oil prices internationally.

On the other hand, tobacco products dropped to 6.4% in September, from 15.2% in June. These values are due to base effect associated with the increase in the VAT rate, boosted by increased excise duty on this category of goods. In December 2011, the inflation rate reached 3.14%, being close to the inflation target of 2013. Substantial decline in the second half was due to easing tensions in food commodity and energy markets.

#### 3. Conclusions

The experience of countries that have adopted inflation targeting strategy was useful in outlining the steps to be followed by Romania in changing monetary policy strategy. The main challenge they faced was gaining credibility of Central Bank and establishing a strong communication relationship with the public through quarterly reporting publicly available, designed to ensure transparency of the central bank.

As a country in transition, Romania is advised to use a strict inflation targeting at the beginning of period immediately after adopting the new monetary policy strategy. This action aims to stabilize prices. Even if the output gap can fluctuate significantly during this period, after stabilizing prices the move to flexible inflation targeting can be done, when the central bank may also focus on stabilizing the output gap.

Prior to the adoption of inflation targeting strategy fulfillinf certain preconditions is necessary: securing price stability as the main objective of monetary policy, the lack of fiscal dominance, central bank independence and proper functioning of the financial system and markets. The main factors that contributed to the inflation targets were agricultural production amid a good agricultural year and fuel prices that have been significantly reduced at international level. The effect of increasing the VAT rate was gradually transmitted to components of core inflation and absorbed very quickly by the economy.

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