Abstract. Proactive forward-looking monetary policy aims to anchor inflation expectations and temper volatility generated by economic developments. The purpose of this article was to make an assessment of the inflation targeting strategy in Romania through an analysis of the evolution of the inflation rate in Romania, correlated with the inflation target, the evolution of the monetary policy interest rate and the economic growth rate. I believe that this topic is important, as in the contemporary economy, achieving a low level of inflation creates a new economic climate, which reconsiders the relationship between price stability and financial stability. These aspects ensure the psychological and material “comfort” of the population, which is currently in a phase of misinformation.

Keywords: monetary policy strategy, monetary policy interest rate, inflation rate, inflation target, economic growth rate.

JEL Classification: E50, E51, E52, E58.
1. Introduction

The actuality of the topic is that the National Bank of Romania is the “backbone” of the Romanian economy, ensuring transparency and institutional accountability. It determines the adjustment of economic structures to a certain model of market economy through the policies of macro-stabilization and economic growth. At present, macroeconomic stability seems to have, more or less, been achieved. On the other hand, major problems still persist, raising questions about monetary and exchange rate policy. This is the central reason why I chose to analyze important aspects of the monetary policy promoted by the BNR, in this article, especially in the context of the Direct Inflation Targeting Strategy.

2. Literature review

With its own specific instruments, monetary policy does not have the strength to exert a full systematic influence on economic developments, aiming exclusively at price stability. This policy is neutral in the long run, which means that it cannot directly positively change the basic indicators of the economy in the long run: the total level of GDP and its growth rate, which in fact means economic growth.

“If it had been possible to generate long-term economic growth by simply printing money, we would have long ago created substantially improved living standards through monetization” (Meyer, 1996)

However, the monetary policy determines in the long run, the evolution of prices and implicitly the inflation rate in the economy. “Inflation is always and everywhere a monetary phenomenon in the sense that it can only be the result of a faster expansion of money than of production” (Friedman, 1970)

Sustainable economic growth cannot be ensured in the absence of price stability. Therefore, the de facto conduct of central banks is not indifferent to the developments of real macroeconomic variables. Central bankers are not “crazy about inflation” (King, 1997)

3. The evolution and influence of the monetary policy interest rate on the money supply and on the economic growth

The monetary policy interest rate is the interest rate used for the main money market operations of the BNR. Currently, these are one-week repo operations, carried out through a fixed interest rate auction.
The reference interest rate in Romania became, starting with September 1, 2011, the monetary policy interest rate. The change in the value of the monetary policy interest rate in both directions is an excellent economic and financial indicator, which can quickly and undoubtedly signal the state of health of the economy.

The amount of currency in circulation can also be influenced by changing the monetary policy interest rate (the average interest rate charged on lending facilities and the interest rate on the deposit facility). If the BNR reduces the monetary policy interest rate, the banks will be interested in refinancing, which means they will apply for more loans, which will be used to lend to the national economy, the money supply increases. Similarly, if BNR decreases the monetary policy interest rate, practically its credit is “expensive”, the banks in the system being discouraged from resorting to refinancing, the final effect being the reduction of the credit potential of the economy, because the demand for credits from the companies will also be reduced.

As can be seen from Table 1 and Chart 1, after the global economic crisis in 2007-2008, the monetary policy interest rate registered a downward trend. During these years, the BNR promoted an expansionary monetary policy, in order to stimulate consumption leading to economic growth.

As can be seen from the chart, the monetary policy interest rate decreased by 0.25 pp in May 2015, respectively from 2% to 1.75%, reaching the minimum level in history. Then it is observed that there was an upward trend in the monetary policy interest rate to avoid economic overheating and implicitly to be able to reach the inflation target, reaching 2.5% in 2018. Currently, starting with March 2020, the monetary policy interest rate has decreased from 2.5% to 2%, in the context of the current COVID 19 pandemic, more precisely the interest rate on the credit facility falling from 3.5% to 2.5%. Later, at the end of May, the monetary policy rate drops to a minimum of 1.75%.

When the monetary policy interest rate is low, there is an increase in confidence in the national economy, so credits in the national currency are kept at a low interest rate, resulting in increased demand for credits (more credits in lei are granted to economic operators) with a direct effect on the increase in consumption and thus economic growth. It is noted that the monetary policy interest rate appears as an arithmetic average between the interest rate on the deposit facility and the interest rate on the credit facility) the difference being a symmetrical one.
### Table 1. Monetary policy interest rate, interest rates on the lending facility and the deposit facility

<table>
<thead>
<tr>
<th>Valid from</th>
<th>Monetary policy interest rate</th>
<th>Interest rate on the credit facility</th>
<th>Interest rate on the deposit facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>23rd of March 2020</td>
<td>2%</td>
<td>2.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>8th of May 2018</td>
<td>2.5%</td>
<td>3.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>8th of February 2018</td>
<td>2.25%</td>
<td>3.25%</td>
<td>1.25%</td>
</tr>
<tr>
<td>9th of January 2018</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>8th of November 2017</td>
<td>1.75%</td>
<td>2.75%</td>
<td>0.75%</td>
</tr>
<tr>
<td>4th of October 2017</td>
<td>1.75%</td>
<td>3%</td>
<td>0.5%</td>
</tr>
<tr>
<td>7th of May 2015</td>
<td>1.75%</td>
<td>3.25%</td>
<td>0.25%</td>
</tr>
<tr>
<td>1st of April 2015</td>
<td>2%</td>
<td>3.75%</td>
<td>0.25%</td>
</tr>
<tr>
<td>8th of February 2015</td>
<td>2.25%</td>
<td>4.25%</td>
<td>0.25%</td>
</tr>
<tr>
<td>8th of January 2015</td>
<td>2.5%</td>
<td>4.75%</td>
<td>0.25%</td>
</tr>
<tr>
<td>5th of November 2014</td>
<td>2.75%</td>
<td>5.25%</td>
<td>0.25%</td>
</tr>
</tbody>
</table>

### Chart 1. Monetary policy interest rate, interest rates on the lending facility and the deposit facility

Source: Own processing (in Excel file) according to data provided by BNR.

#### 4. Analysis of the evolution of the inflation rate in Romania compared to the inflation targets set, the evolution of the monetary policy interest rate and the economic growth rate

The inflation target is set differently from one country to another. In the UK, the inflation target is set by the Ministry of Finance with a margin of variation of ±1 pp; when this margin is exceeded, the central bank must provide an explanatory note to the Minister of Finance.

In Romania, the inflation target is set by the BNR in collaboration with the government, with a margin of variation of ±1 pp. Under these conditions, inflation targeting can be assessed as a specific framework for the application of monetary policy in a supervised freedom regime, a framework that takes into account certain rules.

These regulations are necessary because the setting of an explicit inflation target obliges the central bank to initiate and develop a rigorous monetary policy. However, the rules...
introduced leave the central bank the freedom to choose the optimal way to use the instruments at its disposal, in this way the BNR had a margin of maneuver so that it could cope in the event of endogenous and exogenous shocks.

In Romania, the adoption of the inflation targeting strategy was achieved with a certain delay compared to other countries in Central and Eastern Europe. The inflation rate in Romania was an unfavorable indicator for the economy, with considerable fluctuations immediately after the communist period. More specifically, in 1993 the inflation rate reached the maximum value for the country's history of 256%.

A disinflationary trend appeared in the following years, only to reach another extreme value in 1997 of 155%. The disinflationary process started in 2000, so the consumer price index was no longer at hyperinflationary values, but on the contrary the improvement of price instability was supported by the transition to the direct inflation targeting regime by the central bank of Romania, on August 1, 2005.

Chart 2. Evolution of the monetary policy interest rate, the average inflation rate and the economic growth rate in the period 2005-2020
Table 2. Evolution of the average inflation rate and the consumer price index in Romania, period 2000-2019

<table>
<thead>
<tr>
<th>Year</th>
<th>CPI% (t/t-1)</th>
<th>Inflation target +/- 1pp</th>
<th>Average inflation rate % (t/t-1)</th>
<th>Year</th>
<th>CPI% (t/t-1)</th>
<th>Inflation target +/- 1pp</th>
<th>Average inflation rate % (t/t-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>145.7</td>
<td>-</td>
<td>45.7</td>
<td>2010</td>
<td>106.09</td>
<td>3.5%</td>
<td>6.1</td>
</tr>
<tr>
<td>2001</td>
<td>134.5</td>
<td>-</td>
<td>34.5</td>
<td>2011</td>
<td>105.79</td>
<td>3%</td>
<td>5.8</td>
</tr>
<tr>
<td>2002</td>
<td>122.5</td>
<td>-</td>
<td>22.5</td>
<td>2012</td>
<td>103.33</td>
<td>3%</td>
<td>3.3</td>
</tr>
<tr>
<td>2003</td>
<td>116.3</td>
<td>-</td>
<td>15.3</td>
<td>2013</td>
<td>103.98</td>
<td>2.5%</td>
<td>4.0</td>
</tr>
<tr>
<td>2004</td>
<td>111.9</td>
<td>-</td>
<td>11.9</td>
<td>2014</td>
<td>101.07</td>
<td>2.5%</td>
<td>1.1</td>
</tr>
<tr>
<td>2005</td>
<td>109.0</td>
<td>7.5%</td>
<td>9.1</td>
<td>2015</td>
<td>99.41</td>
<td>2.5%</td>
<td>-0.6</td>
</tr>
<tr>
<td>2006</td>
<td>106.56</td>
<td>5%</td>
<td>6.6</td>
<td>2016</td>
<td>98.45</td>
<td>2.5%</td>
<td>-1.5</td>
</tr>
<tr>
<td>2007</td>
<td>104.84</td>
<td>4%</td>
<td>4.9</td>
<td>2017</td>
<td>101.34</td>
<td>2.5%</td>
<td>1.3</td>
</tr>
<tr>
<td>2008</td>
<td>107.85</td>
<td>3.8%</td>
<td>7.9</td>
<td>2018</td>
<td>104.63</td>
<td>2.5%</td>
<td>4.6</td>
</tr>
<tr>
<td>2009</td>
<td>104.74</td>
<td>3.5%</td>
<td>5.6</td>
<td>2019</td>
<td>103.8</td>
<td>2.5%</td>
<td>3.6</td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

Note: The annual index of consumer prices is used to measure the evolution of prices for goods that are part of the consumer basket, in the current year compared to the previous one (or another year chosen as the reference basis). This index is expressed as a percentage and calculated as the ratio between the ratio between the current average price index (current year) and the average index of the previous year (or another year chosen as the reference basis). The difference between the CPI and 100% gives the annual inflation rate.

Source: Own processing (data collected and processed in Excel file) based on data provided by INS.

From the data presented in the previous table, it is observed that starting with 2005 (when Romania switched from the strategy of targeting monetary aggregates to the strategy of direct inflation targeting), the inflation target was reached only in 2007 and 2012, although we can distinguish periods when economic development was favorable in terms of the trend of the inflation rate, so that in the period 2000-2007 we witnessed a disinflation process until 2007, reaching even a single-digit inflation rate. In 2008, against the background of the global economic crisis, it is observed that the inflation rate increased from 4.9% in 2007 to 7.9% in 2008, thus showing an inflection point in the trend of the evolution of the inflation rate up to then.

In 2014, there was an unexpected historical minimum, when annual inflation fell to around 1%, after hyperinflation in the early 1990s. Thus, after a continuous struggle with high prices for about 20 years, the BNR had reached the situation of trying to avoid deflation, in 2005 the inflation rate became negative.

Although the economic and financial specialists have correctly intuition that the disinflation process that appeared in 2014 will accelerate, leading to an annual rate below the BNR stationary target range of 2.5% ± one percentage point, however, the decrease in the annual inflation rate after a monthly inflation of -0.1% was recorded in December, surprised everyone.

The National Bank of Romania thus missed the inflation target, after reaching the inflation target in 2013, deflation occurred in 2015 and 2016, respectively an inflation rate of -0.6%
Aspects and evolutions specific to monetary policy in Romania. A complex topical analysis

In 2015 and -1.5% in 2016, so that the inflation target of 2.5% could not be reached with the corresponding margin of ±1 pp.

In 2017 and 2018, the upward trend of price growth resumed, so that there was an inflationary process with inflation rates of 1.3% and 4.6%, respectively.

Romania had the highest inflation in the European Union in 2019. This was largely due to external influences, such as the increase in the price per barrel of oil or the prices of natural gas, electricity, etc.

It should be noted that the annual inflation rate in the European Union decreased in July 2019 to 1.4% from 1.6%, while in the euro area inflation fell to 1% from a level of 1.3% registered in June. Among the EU member states, the highest annual inflation rate is registered in Romania, 4.1%, Hungary, 3.3%, Latvia and Slovakia, both 3%.

In these conditions, the analysis of the choice of an effective monetary policy strategy appears to be an urgent necessity, especially as we are also facing the negative economic effects of the current COVID-19 pandemic, when the BNR had to intervene through numerous measures such as lowering the monetary policy interest rate from 2.5% to 1.75% and granting delays from the payment of the credit installments contracted by the companies so that they could support the continuation of economic activity and the guarantee of a decent living life.

5. Analysis of choosing an effective monetary policy strategy in Romania

The change in monetary policy strategy and the adoption of direct inflation targeting in 2005 meant a change in monetary policy strategy, a change that was necessary because the old strategy of targeting monetary aggregates was no longer as effective as in the past, given that the link between monetary aggregates in general and the inflation rate has become increasingly weak and less predictable, to which is added the fact that the demand for money has become unstable in recent years.

However, the question is whether the introduction of inflation targeting in Romania was appropriate. This must be judged by taking into account a number of characteristics of the country's monetary policy and economy.

a) The history of the respective country in terms of monetary policy

In this regard, we need to identify and analyze the weaknesses and strengths of the monetary policy in that country in the past. Internationally, practice has shown that if a strategy has ever failed, it cannot be adopted soon, even if some circumstances have changed.

In the case of Romania, the BNR used until 2005 the strategy targeting monetary aggregates, and the exchange rate was used as an anti-inflationary anchor, but the problem that arose was the possibility to increase the current account deficit and to reduce the size of foreign exchange reserves, especially in the first part of the transition. Also, the interest rate could not be used due to the fragility of the banking system and at the same time the...
Therefore, from a viable point of view, the only solution for the BNR at that time was the targeting of monetary aggregates, a strategy that resulted in a gradual disinflation process. Thus, the inflation rate fell from 295.5% in December to a rate of less than double digits only in 2004. Disinflation was also interrupted in 1993, 1996-1997 and 1999, with higher inflation than in previous years.

b) The current level of inflation
Although the inflation rate in Romania fell to a one-digit level, the inflation rate was still far from what means price stability. Inflation targeting is recommended to be introduced when the central bank has already reduced inflation to a level close to price stability, in particular it is a strategy that ensures a low inflation rate stability. One solution for such countries is to set both short-term and long-term targets, and the short-term target should be set close to the current level of inflation so that it can be achieved in order to increase the credibility of the strategy.

c) Monetary policy strategy adopted in other countries with similar conditions
In this sense, in the case of Romania, the experience of other countries that tended to move from monetary policy strategies generally based on exchange rate targeting to more flexible strategies, for example inflation targeting, could be relevant.

d) The characteristics of the country's economy:
The size and openness of that economy, the role of the banking system at macroeconomic level and its financial health, the degree of development of domestic financial markets and their integration into international financial markets.

From this point of view, Romania is a country with a small open economy, with a financial system based mostly on the banking system and to a much lesser extent on the capital market. Romania can be a good candidate for inflation targeting, without having an ideal profile for this strategy.

e) The political characteristics and the institutional framework of the country
From this point of view, it is very important if the central bank is independent both de jure and de facto, which is an essential condition in targeting inflation. Thus, it is necessary that in Romania, in addition to the de jure independence of the central bank conferred by the BNR Statute, there is also government support in terms of disinflation priority as a macroeconomic objective and coordination of government fiscal policy with monetary policy.

In a careful and brief analysis on the efficiency of the inflation targeting strategy in Romania, we highlighted the following aspects:
- it is considered very efficient by many elite economists and is successfully applied in various specific national models by most central banks at international level;
- the decisive factor that explains this is the so-called eclectic character of the strategy specific character generated by the performance approach that does not establish a
certain representative set of variables and no characteristic econometric model through which to make inflation forecasts;

- BC has a considerable margin of maneuver in formulating and explaining the forecasts regarding the inflationary evolution;
- the implicit form of the strategy is not very restrictive, as it leaves open the issue of the extent to which the interest rate must be adjusted in the event that a deviation from the inflation target is expected;
- in the case of supply-side shocks, the inflation targeting strategy does not provide for any clear prescription. Consequently, inflation targeting is a flexible monetary policy strategy.

6. Conclusions

As a general conclusion, it can be stated that in situations of severe and globalized economic crisis – regardless of the underlying cause – the reaction of central banking institutions, through monetary policy strategies, complementary to other types of policies (administrative-economic; fiscal, trade, global interbank, etc.) is essential.

A well-thought-out, coordinated and organized monetary policy strategy, accompanied by ongoing monitoring, will have the capacity to effectively support all other policies and ultimately the economic recovery itself. Both hyperinflation and disinflation can quickly generate real economic disasters, if not intervened quickly.

However, no monetary policy strategy can work wonders. It is only, as a rule, the basic piece of a whole set of macroeconomic policies.

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