THE ROLE OF THE INFLATION EXPECTATIONS IN THE MONETARY POLICY PROMOTING

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Abstract

This article reviewed the defining aspects of the inflation expectations with their repercussions on the monetary policy efficiency, being considered in the current economy a decisive channel of the monetary policy transmission mechanism to the real economy. The accents were put on the typology and the determinants of inflation expectations in the context of their estimation methods. The practical research focused on the study of inflation expectations in the light of the international experience, as well as it has been formulated some reflections on the anchoring of inflation expectations in the Republic of Moldova on the nature of their compatibility with the domestic monetary policy. The analyses conducted confirm that the inflation expectations in the Republic of Moldova are considerably dependent on the transparency of the monetary policy promoted by the National Bank of Moldova, along with the National Bank of Moldova's commitment to ensuring the inflation target goal.

Keywords: inflation, monetary policy, central bank, inflation expectations.

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Introduction

Inflation is one of the most common structural imbalances of economies in transition; it is also one of the most complex and controversial economic issues. The efforts made by both sovereign governments and continental-level unions to maintain price stability have crystallized in a modern form of monetary policy called inflation targeting. Direct inflation targeting is a monetary policy strategy characterized by the public adoption of a quantitative inflation target for one or more time horizons and the explicit assumption of price stability as the primary objective of monetary policy. The successful implementation of the inflation targeting regime involves the instrumentation and meeting of initial or preliminary conditions, grouped into *macroeconomic*, *institutional* and *operational premises*.

Macroeconomic premises such as the full commitment of the central bank to achieve price stability, a major monetary policy objective that goes beyond the targeting of any other anchors or variables, such as the exchange rate or the unemployment rate, or the institutional ones such as the independence and full freedom of the central bank to choose instruments in conducting its monetary policy, are widely discussed in the speciality literature. The operational premise, which, among other things, requires transparency, good communication capacity and an operational framework for guiding monetary policy, is less discussed in the context of communicating monetary authorities to the public in order to form a vision of its response to monetary policies. Namely, this reaction, called "inflationary expectations", also has an influence far from being neglected on the level of inflation, the size and the way of action that we are proposing to continue to demonstrate.

The Relationship between Inflation Expectations and the Level of Inflation

One of the factors generating inflation, which is particularly important in emerging economies, is that of the inflationary expectations that are reflected in the economic entities' forecasts regarding the evolution of inflationary processes in the future. Business investment decisions are directly related to expectations of future product price levels, rising prices for inputs, resources, etc. Estimates show that economic expectations have contributed an average of 40% to the formation of inflationary processes (Ticinschii, 2016), and several studies in the field assign this factor a key role in inflation management policies, underlining that inflation may become controllable only if the

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central bank can collect, assimilate, and use information from the real sector through inflationary expectations.

The inflationary expectations of economic agents determine the prices on the finished goods markets, but also on the factories' markets, first of all, on the labor market. Expecting to raise prices in the economy, people with salary in advance pay higher wages. The latter exceed the level of price increases at a higher pace than the one created in the absence of inflationary expectations. And wage increases lead to an increase in production costs, which, even in an economic competition, lead to an increase in prices for the final product. At the same time, inflationary expectations directly affect the interest rate and money demand: if interest is lower than the anticipation of inflation, it is reasonable to abandon current consumption or place investments on the financial market, opting for the real assets.

As people make different economic decisions, taking into account their ideas about the future situation, their expectations turn into a powerful factor that affects even the development of events. Inflationary challenges are particularly dangerous because they provide an intrinsic inflationary nature. For example, people living under constant expectations of general price levels will be willing to store a quantity of goods for the future, fearing that their prices will soon increase even more. Manufacturers, believing that the prices of raw materials, equipment, and components will increase, and wanting to protect themselves, will overstate the price of their products repeatedly.

A fundamental perspective of the inflationary expectations revolution is that expectations about future monetary policy have a major impact on the evolution of economic activity. As a result, the systematic component of decision-maker actions - that is, the anticipated component - plays an essential role in the conduct of monetary policy. Indeed, management of expectations about future policy has become a central element of monetary theory, as outlined in Woodford's (2003) synthesis. Although the evidence for the proposed ineffectiveness of policies proved to be weak (Barro, 1977; Mishkin, 1982a, b, 1983), the point of the revolution of reasoning expectations argued that the impact of monetary policy on the economy is substantially influenced by the fact that it is anticipated or not widely accepted.

Research in this field has highlighted the importance of anchoring inflation expectations in order to give monetary policy a maximum of efficiency and optimism, and international experience has demonstrated the need to define inflation expectations as a channel for the transmission of monetary policy decisions to the real economy. Assimilating the proper functioning of the transmission mechanism denotes the correctness of choosing the right tools to correct possible monetary policy errors with minimal costs and maximum effects.

Types of Inflation Expectations

The role that expectations play in the inflationary process lies at the heart of the differences between traditional theories of explaining inflation and theories that have emerged over the past fifty years.

The concept of "anticipation" in economic thinking has been formulated by John R. Hicks (1946), which deals with this concept in the "Value and Capital" paper.

An anticipation is an affirmation about an unknown future event, distinguishing to a small extent from anticipation or prediction. A prediction can be considered as a more precise expectation, it is an explicit and especially quantitative form of anticipation (Muth, 1961).

Rational expectations are "inspirational predictions of future events, they are essentially similar to the predictions economic theory gives to those events." From the original wording, a decade had to pass so that the notion of reasoned expectations could be accepted by economists.

The theory of anticipation has as main supporters in **T.J Sargent**, **N. Wallace** and **Lucas R.E**. Sargent and Wallace, in the work published in 1973 "Rational Expectation and the Dynamics of Hyperinflation", define the central concept of this theory as follows: "We say that the predictions in relation to a variable are rational if they depend to the same extent on the same elements that economic theory considers to effectively determine that variable. "

The way in which individuals form their expectations of the inflationary process is still a topic of debate in the field of economic sciences. From the adaptive anticipation model, the model of rational expectations has been reached. Even the latter, although widely accepted, is adjusted to better fit reality, hence the almost rational expectations model.

Adaptive expectations are applied in the case of inflation forecasts made by economic agents. They assume that the expected inflation depends on the difference between the expected inflation for the present moment and its actual realization. Thus, future inflation is the extrapolation of past inflation information to the view of the future inflation rate of economic agents.

In the case of **rational expectations** Sargent and Wallace (1976) succeed in demonstrating that the distribution of probability for production does not depend on the rule of the supply of valid currency and the optimal rule is the one that manages to bring the value of the monetary policy target chosen to the level expected for that period; , last but not least, points out that, in the case of the choice of an interest rate as an instrument, there is no single level of price equilibrium.

Near-rational predictions in recent works, though difficult to accept in the context of such a broad recognition of rational expectations, are the premise to explain why declining inflation sometimes occurs at such a high cost.

John Roberts (1998) shows this by observing surveys on inflation expectations. He concludes that the public is not perfectly informed and that rational expectations are a little exaggerated assumption, suggesting the existence of a combination of rationality and adaptation. In addition, Roberts (1998) said that in some cases we can talk about rigid expectations. This would be the case for forecasters who are cautious in immediately recording any radical change of variable. And this also influences the forecasts of agents in the economy, as many of them form their opinions based on predictions published by media specialists.

The Role of Inflation Expectations in the Formation of Monetary Policy Decisions

Why would you need to explain so thoroughly the theory of inflation expectations? Recent experience has shown that a strategy of transparency and follow-up of simple monetary policy rules can produce considerable performance in relation to the expected outcomes of the inflation targeting regime.

An essential role in the functioning of this regime lies in the anchoring of inflation expectations at the level of the inflation target announced by the central bank and hence in effective communication with the public. In relation to this aspect, it is invoked to fulfill or to confer characteristics that can be synthesized as follows:

- External communication involves explicitly announcing the inflation target, possibly including a plus / minus margin expressed in percentage points;
- Periodical availability of clear and concise information on monetary policy conduct to the public on the basis of an inflation report but more comprehensive in terms of macroeconomic developments and shocks from the economy;
- Announcement of changes in monetary policy, mentioning the arguments and an assessment of the expected impact on inflation by operating the announced changes;
- Consider the slippage from the inflation target as a possibility, and when it comes to it, it is necessary to explain them in terms of the causes and measures proposed for remediation;
- The communication of macroeconomic policies and performance must be based on regular data analysis.

A central bank that does not pursue a policy of communicating with the public about the exerted anti-inflationary measures may have no influence on the expectations of the private sector. Thus, in the inflation forecasting model, behavioral variables are taken as exogenous data, adjusting agents' forecasts by observing the marginal cost variation directly related to production. In the case of a discrete monetary policy, the model highlights the short-term existence of a gap between the

inflation rate and the target set as long as there is demand-driven inflation. Removing this gap would only be possible in two cases: when there is no inflation by demand or when the final target is not taken into account as being important in formulating a function of social utility or loss. If one of the central bank's complementary objectives in the inflation targeting regime is also a positive development of a macroeconomic indicator (GDP achieved to exceed potential GDP), this would lead to a suboptimal situation, with the level of inflation exceeding Constant target, favoring imbalance.

However, even in a discretionary policy, if the importance given to inflation by the Central Bank's management exceeds the importance it attaches to the public, the results may be similar to a situation where the Central Bank chooses a transparency policy.

There are other dangers associated with a policy where the Central Bank does not communicate with the public. Martin Eichenbaum (1997) outlines this situation, which he calls the Expectations trap. Agents form an imperfect forecast of the inflation rate for the next period, concluding that it will increase. As an adjustment, they will raise prices and wages. At this point, the Central Bank faces a dilemma. He may choose not to comply with public expectations and risk a recession. If he does not, the only solution is to generate inflation. The only way out of such a spiral would involve long recessions, until the expectations of the private sector would adjust to reality.

The inflation targeting strategy puts a special emphasis on the revival of the mechanism of transmission of monetary policy impulses through the central bank's interest rate channel. The interest rate set by monetary policy decisions directly affects money market interest and indirectly interest rates on deposits and loans provided by banks to customers. Anticipations to monetary policy rate changes affect long-term interest rates, driven by market expectations of short-term interest rates. Then the transparent central bank's monetary policy is a guide in the expectations of economic agents about the future of inflation and, implicitly, the evolution of prices.

Through the permanent information relationship it maintains with the public, the Central Bank has the possibility to shape the population's expectations, but only if it convinces through credibility. It follows that a high level of central bank credibility has the special quality to set expectations in terms of price stability, in which case economic agents will not operate on rising prices for fear of inflation or will reduce them due to disinflation.

The interest channel as a mechanism for the transmission of monetary policy is not lacking and some imperfections. The first is that the inflation rate responds with a considerable 1-2-year time lag to monetary policy measures. As a result, the cost of the information needed to use such a channel may reach an appreciable value, superior to an alternative solution that may be applied by the central bank. Secondly, due to the considerable lag, the public can not directly see the effectiveness of the measures taken, which can lead to the loss of the Central Bank's credibility.

In order to exclude these imperfections, there are many solutions in economic theory. For example, Svensson (1996) suggests establishing the inflation projected by the Central Bank as an intermediate target. Such a measure is perfectly consistent with the transparency policy and the rational expectations hypothesis, as the Central Bank experts' forecasts are used. And unlike the final target, the intermediate target can be controlled and observable. In some cases, however, this method has its imperfections, in particular through the multitude of intermediate target formulation templates, and as a result of the difference between the estimates made by the public compared to those of the central bank. Bernanke and Woodford (1997) analyze in particular whether the intermediate target is the population's expectations. They insist on the idea that, as it tends to balance, agents have less and less reason to keep themselves as informed. This makes their expectations more and more inaccurate and useless as information. Secondly, targeting forecasts does not lead to a balance in rational expectation hypothesis. The authors also state that the central bank would act better if it used information from various sources and would not tie monetary policy too closely to variables that depended largely on public expectations.

Another solution would be to adjust monetary policy in response to changes in financial market prices, excluding the interest rate (financial assets, bonds, futures, etc.). The third option is to target your own rate of inflation, as is the case in the UK or New Zealand.

The history of economic performance as a result of inflation targeting shows that, as a rule, central banks have succeeded in lowering inflation, together with an appreciable gain in their credibility,

only by applying transparency in its actions and by communicating permanently to the public. Regardless of the instruments selected under the inflation targeting regime, transmission channels and set objectives, the central bank must communicate with those who are ultimately affected by the purchasing power of the currency and ensure that its actions are understood as approved. By ensuring a high level of transparency at monetary policy level by explaining to the general public as much as possible the strategies and measures adopted and, last but not least, by taking responsibility for the measures adopted, the central bank may find it desirable to adopt inflation targeting as a monetary policy strategy.

Conclusions

In order to optimize monetary policy, the central bank of a particular state must take into account a complex set of aspects and factors that may affect the achievement of the objective proposed by the monetary authority. Studying theories associated with inflationary expectations have demonstrated their indispensable role, especially the increased importance of rational expectations in the current modern economy. International theory and practice has demonstrated that the channel of inflation expectations plays a decisive role in promoting an adequate monetary policy capable of delivering the proposed objectives such as price stability and medium-term sustainable economic growth.

Anchoring inflation expectations and effectively managing them is grounded in the process of communication, transparency and accountability of the monetary authority. International experience has demonstrated the importance of communication and transparency in reaching the inflation target.

Bibliography

Bernake, B., Woodford, M. 1997. Inflation Forecasts and Monetary Policy. NBER Working Paper Series

Clarida, R., Gali, J.& Gertler, M. (1999) The Science of Monetary Policy: A New Keynesian Perspective. Journal of Economic Literature, 37(4): 1661-1707.

Eichenbaum, M. (1997) Some Thoughts on Practical Stabilization Policy. The American Economic Review 87(2):236-239.

Hichs, J.R., Value and Capital: An Inquiry Into Some Fundamental Principles of Economic Theory, Oxford, Clarendon Press,1946, reprodus după Beaud, M.; Dostaler, G., op. cit., p 293

Muth, J.F., Rational expectation and the Theory of Price Movements, reprodus după Frisch, Helmut, https://pdfs.semanticscholar.org/492b/16a3b0d5e439b592515175374e7dc594888d.pdf

Roberts, John M. 1998. Inflation Expectations and the Transmission of Monetary Policy. Federal Reserve Board

Sargent, T. & Wallace, N. (1975) „Rational” expectations, the optimal monetary instrument and the optimal money supply rule. The Journal of Political Economy, 83(2):241-254.

Svensson, L., 1996. Inflation Forecast Targeting: Implementing and Monitoring Inflation Targets, NBER Working Paper

Ticinschii D., Impactul anticipațiilor sociale asupra proceselor economice http://netess.ru/3sotsiologiya/14156-1-vliyanie-socialnih-ozhidaniy-process-inflyacii-rossii.php, p.28