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OPTIMAL MONETARY POLICY FRAMEWORK FOR UKRAINE

I. Introduction

Monetary policy plays an important role in the performance of the economy of any state. The consensus in the literature on economics is that, in long-run monetary policy is neutral relative to output, so it doesn’t influence potential economic growth with its nominal instruments. The main goal of central bank today is maintaining stable macroeconomic environment what is associated with price stability and a safe and efficient payment system. But the framework for the most optimal implementation of central bank functions is under the question.

In this paper we provide a short description of the current state of monetary policy in Ukraine and alternatives for the future. Ukraine, like many other transition economies, faces a choice – to continue with a de-facto nominal exchange rate peg (allowing fluctuations in a narrow range) or to make a transition to a new regime with flexible exchange rate and more active monetary policy. From our point of view inflation targeting appears to be the best choice. But there are a lot of complications in adopting this framework in Ukraine. In current conditions, which are characterized by fiscal deficits, continuing political uncertainty, as well as an underdeveloped and not perfectly sound financial system it is very risky to leave a reliable nominal anchor, in this case the exchange rate. But macroeconomic trends show that NBU should do this to avoid macroeconomic and financial difficulties in the future.

II. Current monetary policy framework in Ukraine

Under the article 99 of the Constitution of Ukraine, the main function of the National Bank of Ukraine is the maintenance of the stability of the national currency, the Hryvnia. Under the Law of Ukraine “On the National Bank of Ukraine” to fulfil this function the National Bank of Ukraine should use its powers to promote the stability of the banking system as well as price stability.

The goal of banking system stability is achieved through the supervision and regulation of and appropriate capital requirements for banks.

Under the second goal it is natural to understand the achievement of low and stable inflation though the law assumes that the goal should be maintaining the stable price level (the
Reasons commonly used in the literature comprise of nominal rigidities, biases in CPI calculations, zero bound of interest rates and risks of deflation. But unfortunately there is still no agreement (in the form of a strategic document or legislatively approved program) on a medium-term target for inflation as well as on the way to achieve it over time. The quantitative targets of the National bank of Ukraine for the following year are stated in “The Main Guidelines of Monetary policy”. For instance in “The Main Guidelines of Monetary policy for 2007” there are targets for inflation (7.5%), money growth (28-33%), the average exchange rate UAH/USD (4.95-5.25) with the main emphasis on inflation control and stability of exchange rate. De-facto, the nominal exchange rate is assumed to be a nominal anchor for price control in the long-run.

Beginning in 2000, the National Bank of Ukraine announced a managed float of the exchange rate that is currently de jure in effect. However, from the moment it was announced, this regime has been a de facto strict pegging of the national currency to the U.S. dollar, within an exchange rate corridor of approximately 1% (figure 1). A stable exchange rate is supported with the help of NBU interventions on the foreign exchange market and by controls on capital flows. After a lengthy decline in the money supply, Ukraine had significant room for re-monetization that would not be inflationary. Thus, a significant part of the interventions was not sterilized and the monetary aggregates grew rapidly without a significant impact on inflation (figure 2). It is thought that the institution of strict pegging of the Hryvnia to the U.S. dollar had a positive impact on the development of the Ukrainian economy after the 1998 crisis, due to the creation of a nominal anchor for economic agents, which made it easier to plan business activity. Along with favourable external conditions, this made it possible for the Ukrainian economy to grow rapidly, starting in 2000 at a 7.5% rate per annum on the average.

Figure 1. Exchange rate, UAH/USD, 1996-2006.
Source: NBU.
The pegging of the exchange rate, especially during the first years following the significant depreciation and escalating inflation of 1998 and 1999, played a positive role. Inflation subsided to moderate levels (in 2001–2006, the rate of inflation was 8.0% on the average). But a further fall of inflation and its stabilization at low levels appears to be impossible under the current framework of monetary policy. The negative aspects of pegging the exchange rate have been very erratic inflation – the rapid decline in inflation that began in 2000 resulted in deflation in 2002, with a subsequent return to double-digit inflation indicators (figure 2). Such variation of inflation makes short term investment relatively more attractive and does not foster investment in sectors where it takes a long period of time before invested capital begins to earn positive returns.

**Figure 2.** Money supply growth and inflation, 2000-2006.
**Source:** State Statistics Committee, NBU.

**Figure 3.** Consumer inflation, 1999-2006.
**Source:** State Statistics Committee.
In addition, a substantial part of the Ukrainian economy, especially the export-oriented sectors, significantly depends on world prices for metals, oil and gas. Because the country’s economy is structured in this way, there is little chance for stable growth in the long-run because prices of metals, oil and gas are volatile. This was confirmed in 2005, when deteriorating terms-of-trade significantly hampered economic growth (figure 4).

![Figure 4. GDP growth, 2000-2006. Source: State Statistics Committee.](image)

At the same time, Ukraine is increasingly becoming integrated into the world economy. In terms of external trade, turnover exceeded GDP in 2006. Capital flows have also increased and this is apparent in the rapid growth of foreign direct investment and the external borrowing by the public and private sectors. The increased supplies of foreign currency can create additional pressure for Hryvnia appreciation. At the same time, these capital flows could reverse very quickly if expectations of appreciation are not fulfilled. Thus, the argument for more flexibility of the exchange rate is based on the fact that the Ukrainian economy is becoming much more open and sensitive to external shocks (that differ from those which effect the anchor currency).

On the positive side, recent economic development and the financial situation are wholly satisfactory. International reserves of NBU on 01.07.07 exceeded 25 billion USD, covered 4.5 months of imports and were larger than the monetary base. The ratio of external debt to output is presently 51%, which is a low number under international standards. However the dynamics of some indicators already give some cause for concern. Corporate debt shows rapid growth, the dollarization level is rising (figure 5), and currency mismatches are increasing sharply (figure 6). These negative facts could signal a worsening of the macroeconomic and financial performance of Ukraine in the future. All of the well-known crises in the last 15 years (1994 – Mexico, 1997 – South-Eastern Asia, 1998 – Russia and Brazil, 2002 – Argentine) started from currency crises, and then extended to the whole financial system and the economy in each country. Continuation of a rigid fixed nominal exchange rate policy can deepen unfavorable financial trends and add to financial mismatches. The resulting changes in the real exchange rate and increased openness to large capital flows increase the risk of pressure on the nominal exchange rate.
Another drawback of the current monetary framework is the lack of an independent monetary policy implemented by the NBU. Economics teaches us that it is impossible to simultaneously have

- an independent monetary policy;
- a fixed exchange rate; and
- perfect capital mobility.

In economic literature this is called the “impossible trinity”.

Figure 5. Level of financial dollarization.
Source: National Bank of Ukraine, own calculations.

Figure 6. Currency mismatches
Source: National Bank of Ukraine, own calculations.
This is why, with a fixed exchange rate and free access to foreign capital, the opportunity for the central bank to use such an instrument as an interest rate is severely limited. That is, monetary policy becomes hostage to the balance of payments, when flows of international reserves under the current and capital accounts determine the monetary base. The central bank is very limited in its ability to control the monetary base and influence the interest rate and thus inflation.

Establishing control over the emergence of inflation and reducing its rate and volatility will significantly improve the investment climate, reduce economic losses and foster the achievement of potential output in Ukraine. To achieve this goal, monetary policy in Ukraine must become more active and flexible.

III. Options for the future: advantages and disadvantages

In the last twenty years, the overall approach to monetary policy has gone through significant change. Representatives of various schools of economic thought reached a consensus that, in the long-run, central bank cannot permanently influence the rate of unemployment and economic growth by accommodative monetary policy. This principle, which is labelled the “long-run neutrality of money”, is currently regarded as an axiom macroeconomic theory. In the long-run, the central bank can only contribute to an increase in the economy’s potential by supporting a stable macroeconomic environment and low inflation is a precondition for this. Monetary policy cannot accelerate the country’s economic growth by expanding the money supply or keeping short-term interest rates at levels that are below those consistent with low inflation.

The focusing of central banks on the goal of low inflation is explained by society’s losses from inflation. Important socio-economic impacts of inflation are the re-distribution of incomes, the hidden state confiscation of money from the population through the inflation “tax”, and growing uncertainty among business entities in the decision-making process. As a result, the propensity to save shrinks and the rate of capital accumulation subsides, which are important parameters in determining long-term economic growth.

The size of losses from inflation largely depends on whether inflation is expected. If it is fully expected, the negative consequences can be smaller, as the behaviour of economic agents is adjusted to take account of future inflation. However, even in this instance, the losses from inflation can be significant because investment and savings are lower than they otherwise would be. The negative impacts can be even more serious in the instance of unpredictable and volatile inflation. Prices are a fundamental factor for the efficient operation of a market economy: if price changes become less predictable, “price signals” do not work, which results in an inefficient allocation of resources.

In the short-run, monetary policy can be used to help stabilize output and the rate of employment and thus to smooth business cycles. This also means that during the periods of growing aggregate demand and escalating inflation, the central bank should resort to a stricter policy, while in the periods of declining aggregate demand and subsiding inflation, the central bank should resort to stimulating the economy.

The problem of creating a stable macroeconomic environment for supporting sustainable economic growth is directly related to the issue of the best monetary regime. Although the achievement of low inflation is a common high priority monetary policy goal for central banks, this goal does not exclude the choice of a monetary regime that will best serve the achievement of
the announced goal. The choice among alternative monetary frameworks or regimes is a subject for discussion.

In this context, the main two competing approaches are narrowed to the debate on the choice between discretion, that is, the freedom of implementing monetary policy, and clear-cut rules.

Supporters of the first approach are convinced that the freedom of choice has the advantage, as the basis of monetary policy is mainly opinions related to analyzing a significant number of indicators that identify the inflationary trend. Politicians observe a large number of factors and, guided by their own interpretation, decide what measures will hold inflation in check more effectively.

To the contrary, supporters of the second approach decisively support the adoption of clearly identified goals (specifically, intermediary targets) and the rules for achieving them. Such a clearly identified legislative and technical procedure helps control inflation, raises confidence in the central bank and monetary policy, and is based on consistency, the fulfilment of obligations and transparency, what, in its turn, provides for accountability and arises from the announcement of evident goals. It is possible to examine three basic options for choosing a suitable monetary regime to control the rate of inflation. These are defined by different intermediate monetary policy goals: monetary targeting, exchange rate targeting or inflation targeting.

The regime of monetary targeting is an orthodox one and is based on the quantity theory of money (that is, a quantitative intermediate goal is established for a particular monetary aggregate that is used as the nominal price anchor). This approach works if there is a stable relationship between a change in the money supply and inflation in the economy. It turns out that this is more of an exception than a rule even in developed countries. Due to high volatility and unpredictably of money demand in Ukraine, the probability that such a framework can be successful is too small (figure 7). Another problem of monetary targeting is that it may be difficult for a central bank to control the supply of money due to changes in the behaviour of financial institutions.

![Figure 7](image-url)  
*Figure 7. Money velocity in Ukraine (ratio of output to broad money).  
Source: National Bank of Ukraine, own calculations.*
The second monetary regime is based on targeting the nominal exchange rate (which can take different forms, from crawling peg and narrow bands to currency boards and full dollarization) and uses it as the nominal anchor of inflation (through the control of prices for non-tradable goods). The main advantage of this framework consists in anchoring expectations of economic agents if they are confident in the central bank's ability to keep the exchange rate stable. But, as was mentioned above, Ukraine’s economy is vulnerable to large terms-of-trade fluctuations and increasingly to shifts in capital flows. In such circumstances, maintaining a peg leads to a loss of an independent monetary policy and makes it impossible to significantly influence the domestic economy by monetary instruments. In the case of Ukraine, a nominal peg is not likely to deliver low and stable inflation and will encourage excessive risk-taking by unhedged borrowers. Another issue is the choice of the anchor currency, because in Ukraine the US dollar is still the main factor in economic agents’ expectations and the principal numeraire for international transactions, even though the Euro and Russian ruble are more important from the standpoint of competitiveness. The Hryvnia actually floats against the Euro and the Ruble.

The third regime is based on a really effective strategy that is becoming more and more popular— inflation targeting where the nominal anchor is a publicly announced target rate of inflation and the central bank is obliged to implement monetary policy in such a manner so as to achieve it. The intermediate goal in this case is the deviation of forecast inflation from the target indicator.

For the purpose of the successful operation of each of the above monetary regimes, ceteris paribus, it makes sense to consider the degree of the economy’s openness, the stability of the ratio between monetary aggregates and inflation and the degree of the impact of the central bank’s interest rates on the economic process in the country.

In recent years, the National Bank of Ukraine has actually used the policy of a managed exchange rate with a small corridor for deviations. However, more and more domestic experts and decision-makers recognize the need to reform the current monetary policy framework. Changes are needed because the current monetary framework is oriented towards ensuring stabilization of a post-crisis economic growth model, but not on sustainable economic development in long-run.

From our point of view, the most effective policy is a monetary policy with transparent rules aimed at the future, but sufficiently flexible to resolve the dilemma between long-term price stability and the goal of also stabilizing cycles of economic growth. In particular, inflation targeting matches the objectives regarding the solution of the above dilemma to the greatest extent.

First, unlike pegging the nominal exchange rate, inflation targeting requires that the central bank focus on the internal stability of the economy and respond to various shocks that threaten the economy. Moreover, using the inflation targeting regime, central banks receive significant opportunities to use their instruments to manoeuvre for the purpose of stabilizing the volatility of economic growth. At the same time, there are no simple, “mechanical” instructions on how the central bank should implement monetary policy. To the contrary, this regime requires that the central bank should use all available information in order to identify the most acceptable steps to achieve inflation targets. Unlike simple policy rules, e.g. the pegging of the exchange rate, inflation targeting does not require that the central bank should ignore all economic information.
and focus only on one variable. As noted in Bernanke and Mishkin\(^1\) inflation targeting is a policy framework, not a rule.

Secondly, unlike monetary targeting, inflation targeting does not require a clear and stable relationship between money and inflation. This regime is not based on the stability of the demand for money, but uses all available information to identify the optimal path for policy instruments. Also, a key advantage of inflation targeting is its transparency and the comprehensibility of the goal of low inflation for society.

However, despite this flexibility, the essence of an inflation targeting strategy lies in actually achieving a more stable and lower rate of inflation in the long-run. This regime focuses the attention of policy makers on the prospective long run development of the economy thanks to low and predictable inflation as opposed to the solution of current problems with temporarily faster economic growth.

Transparency of inflation targeting, on one hand, raises confidence in the central bank and its monetary policy and, on the other, requires accountability of the central bank, which to a certain extent, limits its freedom to respond to political pressure or to resolve current economic problems at a cost to low inflation and sustainable economic growth over time.

The majority of research on the impact of instituting inflation targeting agrees that the main impact is the shrinking rate and volatility of inflation and inflation expectations (Corbo, Landerretche and Schmidt-Hebbel (2002), Petersson (2004))\(^2\). The results on the impact on real GDP are not as strong. However, there are no facts to suggest that countries with inflation targeting have lower or more volatile growth. Another important result is a significantly better performance of real GDP in countries with inflation targeting in the face of macroeconomic shocks. Thus, the studies reveal better macroeconomic indicators in developing countries with inflation targeting compared with countries that do not use inflation targeting. However, the results are on the edge of statistical significance because the history of inflation targeting is comparatively short. The reasons behind the growing popularity of this regime are explained primarily by the fact that inflation targeting combines two aspects that are considered very important for successful monetary policy: the provision of a reliable medium-term anchor for inflationary expectations and a sufficiently flexible policy to respond to short-term shocks without the risk of losing confidence in this monetary regime. An additional factor of the success is that the institution of this regime fosters positive changes in policy implementation (the growing independence of central banks, growing accountability and transparency and the development of an analysis and forecasting system to support the decision-making process).

### IV. Practical issues of transition to IT in Ukraine

Recognising the need to increase the effectiveness of monetary policy, the National Bank of Ukraine started to establish preconditions for a gradual transition to monetary policy with the explicit goal of low inflation. The first records of this transition appear in the Main Guidelines for Monetary Policy for 2002. Each year the emphasis on this issue increases.


Transition to inflation targeting requires the fulfillment of macroeconomic and institutional conditions, such as strengthening central bank independence, effective cooperation between the Government and the NBU, the development of a transmission mechanism, improvements in central bank’s communications, a gradual transition to greater exchange rate flexibility and an increasing role for interest rate policy.

A road-map for preparing the transition to a monetary framework directed at low inflation was approved by decree of the NBU Board at the beginning of 2006.

The main results since then are:

1. Basic components of the analysis and forecasting system were established. The core of this system, the Quarterly Projection Model, is a small structural model, which is now used to analyze the impact of monetary policy on the real sector of economy, for comparing different scenarios and to assess necessary policy actions to achieve announced goals, i.e. for inflation. Also an additional model, based on the Kalman filter algorithm for distinguishing trend and cyclical components of main macroeconomic variables was developed to assess the current state of the economy and its position in the business-cycle. These elements of the analysis and forecasting system are now actively used for medium-term forecasts provided in the quarterly document “Macroeconomic Forecast”. To familiarize experts of other organizations with NBU’s forecasting capacities a number of presentations were conducted and a number of papers were published in scientific journals.

NBU staff produces an internal document “Macroeconomic Forecast” each quarter, which consists of a comprehensive analysis of the monetary sector, the real economy, the state of fiscal policy and the external environment with emphasis on indicators and events of the last quarter as well as forecast of the economy for the following 8 quarters, concentrating principal attention on inflation. The main use of “Macroeconomic Forecast” is to support the decision making process for monetary policy. This document is expected to be the basis for a public document “Inflation Report”, which will be one of the most important communication tools of the NBU.

Furthermore, each month NBU staff prepares a document “Macroeconomic Overview”, which contains the most recent data and results of economic developments as well as forecasts for the next 2 quarters.

2. Regular surveys of enterprise presidents and managers about their assessments of current and future business activity, inflation and exchange rates, and changes of the business environment in the country has been held each quarter since 2006. More than 1,200 enterprises from all regions are interviewed. They represent the principal types of economic activity, forms of ownership, and size measured by the number of employees. The results of these surveys are published in an analytical document for internal use “Business Outlook Survey”, and the public version of it is available for on the NBU web-site. Also press-releases about survey outcomes are prepared and published in mass media. To share outcomes of the surveys, meetings with business and authorities representatives were conducted as well as press-conferences. Thus, the surveys are

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an additional communication channel for the NBU to increase public confidence in monetary policy.

3. A number of articles by NBU staff about monetary policy based on price stability including world experience, perspectives and consequences were published in the scientific journals and business editions.

4. NBU staff prepared and made proposals for the project on the Law of Ukraine; “On putting forward the changes the Law of Ukraine ‘On the National Bank of Ukraine’” which are directed at strengthening the independence of NBU, while also increasing its accountability and transparency.

5. Along with the national statistics agency (the State Statistics Committee of Ukraine) a new methodology to calculate core inflation was developed. The State Statistics Committee of Ukraine will start to use the new calculations and publish core inflation in 2008.

6. Seminars on inflation targeting were conducted for staff at branches of the NBU and for staff at commercial banks.

Unfortunately, the transition to an active monetary policy last years has been tremendously complicated by political instability and the lack of significant progress in the development of financial markets and institutions. The NBU has developed a list of actions to help with this and is now implementing them:

- effective cooperation between the Government and the NBU;
- development of the channels of a monetary transmission mechanism;
- increasing role of interest rate policy and the gradual transition to greater flexibility of exchange rate;
- strengthening NBU independence;
- improving NBU communications with the public.

V. Conclusions

For a central bank, the best way to support sustainable economic growth is to simply support a macroeconomic environment characterized by low inflation. This is based on an understanding of inflation-induced losses for society and also on the conviction that the principal contribution to economic policy that can be made by monetary policy in the long-run is to keep inflation low and stable. As economic theory and world experience show, the optimal monetary policy regime in this situation is inflation targeting. In countries that use this regime, the macroeconomic situation is described by lower and more stable inflation, more stable economic growth and less vulnerability to external shocks. In the environment of continuing price increases for energy, the cyclical dynamic of prices for Ukrainian exports, the stronger integration of the country into global financial markets, the National Bank of Ukraine must focus primarily on creating a macroeconomic basis for faster economic growth in the long-run and not on providing incentives for near term growth that can at best be temporary and at worst inflationary.

The current state of the Ukrainian economy indicates that a gradual adoption of inflation targeting would be the most appropriate course of action from the point of view of macroeconomic stability. The high degree of domestic dependency on external factors, the increasing openness of the economy to large flows of goods and services and labour raise its vulnerability to external risks. In this context, efforts aimed at creating stronger domestic financial markets and conditions of low inflation can reduce the sensitivity of the economy to external economic shocks. Of course, a prudent fiscal policy would provide an additional guarantee of
macroeconomic stability under any exchange rate policy, but a hard peg under conditions of an expansionary fiscal policy would introduce the risk of financial crisis.

The absence of some necessary conditions for successful inflation targeting today cannot serve as a reason to reject a transition to this monetary framework. Rather, if the government and the NBU can establish a goal for inflation, it will encourage the faster establishment of the institutional, economic and technical requirements for inflation targeting and better macroeconomic management. Most developing countries that implemented inflation targeting did not well developed and deep financial markets, a reliable analytical and forecasting system, developed market infrastructure and de-facto central bank independence from fiscal and policy pressure with legislative mandate to achieve price stability at the time they made the transition. There are also cases where countries missed the opportunity and were forced, at a later stage, to replace their foreign exchange regimes under much less favourable conditions or even under financial crises with much higher costs for the economy.

The appropriate technical conditions are important but not crucial factors for the successful introduction of inflation targeting, and these conditions can be created more quickly when a transition is in process. Also, financial markets and institutions, as well as other conditions discussed in this article, are important for any monetary policy framework. Creating them will be faster and more effective when the authorities declare a transition to inflation targeting and follow the road-map. The most important condition from our point of view is desire of the authorities to decrease inflation and maintain an environment for sustainable growth in long-run.

RAMY OPTYMALNEJ POLITYKI MONETARNEJ DLA UKRAINY

Streszczenie

Polityka monetarna odgrywa ważną rolę w oddziaływaniu na gospodarkę każdego kraju. Autorzy zaprezentowali w pracy krótki opis bieżącej polityki monetarnej na Ukrainie, ponadto przesłanki, uwarunkowania makroekonomiczne oraz warianty alternatywne i perspektywy przyszłego rozwoju tej polityki. Ukazali też rolę Narodowego Banku Ukraińcy w kształtowaniu polityki monetarnej, zorientowanej na osiąganie celu inflacyjnego.