Memorandum
National Bank of Serbia
On the Principles of the New Monetary Policy Framework

Aiming at Low Inflation Objectives

September 2006
At its meeting on August 30 2006 the Monetary Policy Committee of the National Bank of Serbia adopted new measures and approved of new principles of monetary policy conduct aimed at achieving inflation objectives. This text summarizes the new measures and explains the new policy course to the general public.
A. Main Elements of the New Framework

Beginning with September 2006 the National Bank of Serbia (NBS) shall fulfill its constitutional mandate to achieve price stability through aiming at specific numeric inflation objectives. The objectives have been set by the NBS after consultations with the Serbian Government. The first objectives have been defined in terms of ‘core inflation’ (i.e. inflation of retail prices under the influence of NBS instruments) and set as follows:

- December 2006: 7-9% year-on-year
- December 2007: 4-8% year-on-year

The specified inflation objectives are the only numerical guidelines for the monetary policy of the NBS. The monetary policy of the NBS will pursue other goals only to the extent that the fulfillment of inflation objectives is not threatened.1

The NBS will achieve the inflation objectives by changing the interest rate on its 2-week (2W) repo operations as its key policy interest rate and the main monetary policy instrument. Other monetary policy instruments will have supportive roles; they should contribute to a smooth transmission of the key policy rate in the market and balanced development of financial markets without threatening the stability of the financial system.

The Monetary Policy Committee of the NBS (MPC) will take decisions on the changes in the key policy rate at the pre-announced dates based on staff economic and inflation outlook. The results and substance of the MPC deliberations will be announced and explained to the public.

The NBS is committed to pursue a flexible foreign exchange (FX) regime. In particular, the NBS will gradually withdraw from its operations with FX bureaus, reduce its presence in the FX market and implement a new system of infrequent FX interventions through other market players.

NBS will regularly inform the public about the objectives fulfillment and steps taken to meet them in the future. The quarterly Inflation Report and press conferences after MPC decision meetings will become the main vehicles for communicating with the public.

Technical arrangements are being made to strengthen the capacity to meet inflation objectives in the areas of monetary and FX operations, and interest rate decision making. These arrangements will be introduced in several phases in the course of 2006 and 2007.

It is envisaged that the NBS adopts a formal regime of Inflation Targeting in the future, once the pre-conditions have been fulfilled and the essential elements have been put in place.

---

1 This is without prejudice to the institutional mandate to preserve financial stability that is being pursued simultaneously to the price stability mandate.
B. Motivation for the New Framework

The new framework is being introduced as a part of the program to
• to build an environment of low and stable inflation compatible with EU accession
  criteria,
• to strengthen the use of and trust into the domestic currency,
• to increase the flexibility of adjustment against temporary domestic and external
  shocks and changes in economic fundamentals that are expected as Serbia approaches
  the EU and improves its income levels.

A monetary policy actively responding to shocks threatening low inflation is needed to
achieve price stability in Serbia, while fluctuations of nominal exchange rate should provide
the main buffer of adjustment against these shocks. In the coming years, Serbian economy is
likely to experience massive structural changes, some which can put upward pressure on the
prices. In addition, progressive opening of the Serbian economy (spurred further by the
envisaged integration into the EU) and a high degree of euroization make transmission of
inflation shocks particularly fast. Under these circumstances, preserving a fixed exchange
rate regime or targeting monetary aggregates (as it had been done in the past) is unlikely to
secure stable low levels of inflation.

In other words, the NBS is building an environment, in which
• inflation will no longer be a major concern for households and businesses; pensioners
  and socially weak groups will not have to fear for the real value of their incomes,
• savings in dinars rather than foreign currency will pay off,
• households and businesses will have to be prepared for potentially large fluctuations
  in the exchange rate, and for the fluctuations in value of their savings and debts
  denominated in foreign currency.

A more flexible FX has already been introduced earlier this year as the first step in this
program and also as a response to problems under large capital inflows. In particular, the
capital inflows have exposed the difficulties in simultaneous targeting of low inflation and
external balance and complicated implementation of autonomous monetary policy under a
fixed or highly managed FX regime pursued before.

As a result of these first steps, today already, the exchange rate moves in response to the
monetary policy actions (and not the other way round), and inflation began to decline in
response to the monetary policy measures taken earlier this year.

Pursuant to the implementation of the new framework, the NBS expects that the recent
decline in inflation will not be reversed and that the disinflation will continue in line with the
declared objectives. This should help anchor public's inflation expectations at the declared
inflation objectives, thereby further supporting the creation of the low inflation environment.
C. Principles of the New Framework

Setting of Inflation Objectives

Achieving low and stable inflation will be a gradual process requiring coordination between the NBS and Government. In Serbia, inflation is a matter of shared responsibility between the NBS and the Government. In the environment where a large proportion of prices is controlled by administrative regulations, the NBS can effectively control only the part of inflation that is market determined. On the other hand, the Serbian Government is responsible for the other part of inflation stemming from adjustments in administered prices and tariffs.

For start, the NBS has declared short-term inflation objectives for the end of 2006 and 2007, defined in terms of ‘core inflation’, i.e. the retail price inflation under the influence of NBS instruments (changes in the retail price index that are not caused by adjustments in regulated prices and tariffs or changes in prices of agricultural goods - see the appendix). The core inflation will be computed by the Statistical Office of the Republic of Serbia. Consultations will be held with the Government to declare objectives in terms of ‘administered’ inflation stemming from adjustments in regulated prices and tariffs, and later declare common objective in terms of headline retail price inflation.

The declared inflation objectives will not change and the objectives for the end of 2008 and 2009 will be declared in 2007. Later, it is envisaged that the horizon of the objectives will expand and the NBS and the Serbian Government will set up medium-term inflation objectives.

The first objectives for end 2006 and 2007, though short-term, reflect the aim of the NBS to gradually lower inflation in Serbia, a course that is going to continue in the future, until the achievement of the level of inflation compatible with price stability.

Achieving Inflation Objectives

The NBS will achieve the inflation objectives by changing its key policy rate; other monetary policy instruments as well as interventions at the foreign exchange market will only have supportive roles.

Adjustments in the key policy rate will be based on assessments of the current economic situation, inflation developments and their projections. Key rate will be raised if significant

2 Agricultural goods form a small but very volatile component of the retail price inflation that cannot be effectively controlled through the NBS instruments. Moreover, inflation in this component is also in part influenced by Government intervention policies on the primary agricultural markets.
and persistent threats to meeting of inflation objectives occur and vice versa. The size and timing of the adjustments will be based on a view of monetary transmission, respecting its lags and the currently dominant role of the FX channel.

For instance, the current NBS inflation projections are in line with the declared objectives, and see the headline inflation gradually falling in 2006 and 2007 below 10% (Figure 1). This means that the current mildly restrictive monetary policy stance that is behind these developments is consistent with reaching the inflation objectives: it puts an appreciation pressure on the exchange rate as well as reduces inflationary pressures of the economic activity.

The projections will be gradually updated, as new information arrive. Actions in terms of changes in the key policy rate will be taken, if projections deviate from the declared objectives and the monetary policy stance is deemed inconsistent with reaching the inflation objectives.

Figure 1

![Projected retail prices growth (yoy, in %)](chart)

Different colors in the chart reflect probability of projected inflation range scenarios. The central projection is represented in the darkest color, reflecting the greatest probability attached to this range of inflation. The probability of other scenarios lessens as they depart from the central projection (areas in lighter colors on the chart).

Other monetary policy instruments, such as issuance of longer-term papers or reserve requirements, will only have supportive role in achieving inflation objectives. They should contribute to a smooth transmission of the key policy rate in the market and balanced development of financial markets without threatening the stability of the financial system. Some of them can facilitate the monetary policy transmission in the channels involving credit growth and external balance (especially, if fiscal policies are not supportive in dealing with these issues) and some (such as reserve requirements) have an important prudential function as well.

Similarly, the FX interventions will only be an infrequent secondary instrument, supporting the transmission of the key policy rate if needed (i.e. after the potential of influencing the inflation effectively through changing the key policy rate was exhausted). In the new
monetary policy framework the FX rate is changing its role from an instrument to an indicator of monetary policy transmission. Monitoring of the FX rate developments will continue to be important for setting of key policy rates, as the FX channel is currently by far the strongest means of influencing inflation. However, no numerical objectives or targets for FX rate or its rate of change will be set in this respect.

In pursuing the inflation objectives, the NBS shall implement its policies in a sustainable, consistent and transparent manner to avoid unnecessary fluctuations in output, interest and exchange rates. In changing the key policy rate, the NBS will strive to establish a predictable pattern by responding systematically to major shocks, and equally systematically neglecting minor ones.

Communicating Inflation Objectives Fulfillment

The NBS will remain transparent and accountable to the public in pursuing the inflation objectives. In particular, the NBS will regularly inform the public on how the inflation objectives are being fulfilled, explaining the reasons behind the developments as well as policy actions taken to ensure meeting of the inflation objectives in the future.

The NBS will communicate with the public and specific interest groups through a series of regular publications, press conferences and releases after policy decisions, as well as through irregular analytical seminars, conferences and publications on special topics.

The Inflation Report will become the main tool of communication with the general public. It will be issued quarterly and contain the assessment of the current economic situation and the monetary policy stance, their future unfolding with a special focus on the projection of inflation and the analysis of the main risks to meeting inflation objectives, as well the impacts of future developments and risks on monetary policy.

The press conferences will follow each MPC interest rate decision meeting. Adjustments in the key policy rate will take place on pre-set meetings of the Monetary Policy Committee and the outcomes of the decision meeting and their reasoning will be made known to the public.

The NBS will also play an active role in explaining the new framework and its policy actions to specific interest groups, such as economic experts, labor unions, or business associations. In particular, the NBS will attempt to influence the price formation process by engaging in discussions affecting inflation expectations of such groups.

D. Technical Arrangements Supporting the New Framework: Phase I

Technical arrangements are being made to strengthen the capacity to meet inflation objectives in the areas of monetary operations, exchange rate operations and interest rate decision making system. These arrangements will be introduced in several phases in the course of 2006 and 2007.
As a result of these arrangements, the NBS expects the commercial banks to use the 2W repo rate as the effective benchmark for their interbank and client operations. The measures should allow for a more liberal allocation of commercial banks liquidity, which could be reflected in their relying less on the O/N deposit facility as well as using more often the lombard facility of the NBS. The measures are also likely to encourage banks to trade more actively at longer maturities, developing an effective money market yield curve on the basis of expectations about the movements in the 2W repo rate. Finally, the new measures should help banks to be more active in attracting and intermediating dinar deposits from households and commercial sector.

Establishing the key policy rate

The NBS implements its policy by targeting a particular level of short-term interest rates at the inter-bank market. The establishment of the key policy rate and the interest rate corridor around it should bring short-term inter-bank market rates to about the same level as the key policy rate and effectively limit their fluctuations.

The interest rate on the 2W repo/reverse repo transactions of the NBS (2W repo rate) is the key policy rate of the NBS. In other words, it is the main instrument of monetary policy transmission, signaling the policy stance to the markets.

The key policy rate is supported by a corridor of O/N standing facilities linked to the key rate:

- O/N lombard rate : 2W + 4 pp
- O/N deposit rate : 2W – 4 pp

A number of other technical measures are being taken to strengthen the role of the 2W rate in signaling the monetary policy stance, reducing the existing asymmetries in the market, and promoting market activity and development. These include conducting the 2W and 2M (2-months) repo auctions in a price setting and price taking manner respectively, reducing and abolishing the minimum daily reserve requirements, issuing longer-term bills instead of 2M repos, and changing the timing of the maintenance period.

Reducing the NBS presence in the FX market

In the new monetary policy framework the FX is changing its role from an instrument to an indicator of monetary policy transmission. In accordance with that, the NBS regular presence in the FX market is being phased down. In particular, the NBS refrains from frequent interventions targeting a level or direction of FX movements and also continues to reduce its dealing with FX Bureaus. In this respect it has started selling 20% of the FX Bureaus purchases back through fixing sessions and commits to extend this proportion gradually to 100%. Simultaneously, the NBS reduces the FX Bureaus provisions.
After this interim period, exchange rate will float, being influenced by the economic fundamentals, inflation developments, as well as short-run developments of supply, demand and market sentiment.

The NBS will play only a secondary role in the FX market after this interim period. The NBS will put in place a new system of infrequent FX interventions conducted through market participants in order to i) limit daily volatility by ‘leaning against the wind’ (i.e. preventing excessive daily volatility, but not resisting cumulative pressures over a longer period), ii) contain threats to financial and price stability, iii) safeguard adequate level of international reserves.

The NBS will support commercial banks in developing a system of market makers that would take over the NBS dealing with the FX Bureaus and become the main channels in the new system of FX interventions.

E. Going Forward

In the near future, the NBS envisages the adoption a formal regime of Inflation Targeting as the appropriate framework for preserving low and stable levels of inflation. In the interim period, the NBS will cooperate with the Ministry of Finance (MoF) and other institutions in building the appropriate institutional conditions for effective targeting of inflation.

In reinforcing its capacity to meet inflation objectives in the coming period, the National Bank of Serbia will promote strengthening of interest rates role as the main instrument of the monetary transmission mechanism, enhance the exchange rate flexibility, and pursue a systematic intervention policy, gradually reducing its involvement on the foreign exchange market. It will also work on strengthening the role of macroeconomic analysis and inflation forecasts in the process of setting key interest rates and fine-tuning its communication strategy around the new principles.

The NBS understands the new framework as an investment into ‘state of the art’ practices of running a flexible FX monetary policy adopted around the world in the last decade or so. This investment is worthwhile, as it provides for a flexible and sustainable framework in the period of the EU accession and helps to rebuild the trust in the national currency.
Appendix: CALCULATION OF CORE INFLATION
<table>
<thead>
<tr>
<th>Headline inflation (retail prices)</th>
<th>Excluded from core inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group of products</strong></td>
<td><strong>Coverage</strong></td>
</tr>
<tr>
<td><strong>Goods</strong></td>
<td></td>
</tr>
<tr>
<td>Agricultural products</td>
<td>Fresh vegetables, fruit, eggs and fish</td>
</tr>
<tr>
<td>Industrial products</td>
<td></td>
</tr>
<tr>
<td>Industrial food products</td>
<td>Wheat and wheat products, pasta</td>
</tr>
<tr>
<td></td>
<td>Processed and canned fruit and vegetables</td>
</tr>
<tr>
<td></td>
<td>Meat and meat products, fats (oil, margarine…)</td>
</tr>
<tr>
<td></td>
<td>Milk and dairy products</td>
</tr>
<tr>
<td></td>
<td>Sugar and confectionery</td>
</tr>
<tr>
<td></td>
<td>Honey, coffee, tea, spices</td>
</tr>
<tr>
<td>Beverages</td>
<td>Alcoholic and non-alcoholic beverages</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Cigarettes</td>
</tr>
<tr>
<td><strong>Industrial non-food products</strong></td>
<td></td>
</tr>
<tr>
<td>Textile products</td>
<td>Clothes, yarns, fabrics, coverings…</td>
</tr>
<tr>
<td>Leather products</td>
<td>Shoes and leatherwear</td>
</tr>
<tr>
<td>Lighting</td>
<td>Electricity, electrical material</td>
</tr>
<tr>
<td>Heating</td>
<td>Coal, wood and heating oil…</td>
</tr>
<tr>
<td>House furnishing</td>
<td>Furniture, crockery and cutlery, electrical appliances and household objects</td>
</tr>
<tr>
<td>Hygiene and health products</td>
<td>Soap, toothpaste, detergent, medications...</td>
</tr>
<tr>
<td>Education and leisure materials</td>
<td>Books, school material, newspapers and magazines…</td>
</tr>
<tr>
<td>Means of transport and spare parts</td>
<td>Automobiles, bicycles, spare parts….</td>
</tr>
<tr>
<td>Liquid fuels and lubricants</td>
<td>Petroleum products, motor oils</td>
</tr>
<tr>
<td>Work tools and intermediate material</td>
<td>Agricultural tools and devices, chemicals for plant protection</td>
</tr>
<tr>
<td>Construction material</td>
<td>Brick, cement, nails…</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td></td>
</tr>
<tr>
<td>Crafts and personal services</td>
<td>Sowing, repairs, laundry, haircuts…</td>
</tr>
<tr>
<td>Utilities and housing services</td>
<td>Water, garbage disposal, heating, wastewater</td>
</tr>
<tr>
<td>Educational and cultural services</td>
<td>Cinema, theatre, TV subscription, driver's test…</td>
</tr>
<tr>
<td>Social care services</td>
<td>Payments for kindergarten, high school student accommodation, university student accommodation</td>
</tr>
<tr>
<td>Transport services</td>
<td>City and intercity transport, railways, air travel</td>
</tr>
<tr>
<td>Postal and telecommunications services</td>
<td>Telephone - landline and mobile, letters, consignments…</td>
</tr>
</tbody>
</table>