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OSNOVNE KARAKTERISTIKE I DOSADAŠNJE ISKUSTVO SRBIJE U SPROVOĐENJU STRATEGIJE CILJANJA INFLACIJE

Rezime

U ovom radu predstavljene su osnovne karakteristike novog okvira monetarne politike Narodne banke Srbije koja od septembra 2006. godine primenjuje režim ciljanja inflacije. Prilikom uvođenja novog okvira Narodna banka Srbije, kao ni većina drugih centralnih banaka, nije ispunjavala sve inicijalne preduslove za uvođenje novog režima. Iskustva zemalja su pokazala da ispunjenost preduslova presudno ne opredeljuje uspešnost režima. Međutim, ipak postoje elementi bez kojih jednostavno nije moguće sprovesti pomenuti okvir monetarne politike.

U radu su analizirane mogućnosti primene novog režima u slučaju Srbije, ukazano je na specifičnosti primene koncepta kao i na probleme u sprovođenju ovog koncepta monetarne politike kod nas.

U nastavku posebna pažnja posvećena je dosadašnjem iskustvu Srbije u sprovođenju ciljanja inflacije kao režima monetarne politike.

U radu su analizirani i izazovi sa kojima će se monetarne vlasti Srbije suočiti u narednom periodu.

Ključne reči: Ciljanje inflacije, monetarna politika u Srbiji, transmisioni mehanizam, referentna kamatna stopa

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MAIN CHARACTERISTICS AND PRACTICAL EXPERIENCE IN INFLATION TARGETING AS A MONETARY POLICY FRAMEWORK IN SERBIA

Summary

This work presents the main characteristics of a new monetary policy framework in Serbia, which has since September 2006 been implementing inflation targeting.

At the time of implementing this new framework, the National Bank of Serbia, just like many other central banks, did not fulfil all of the initial preconditions for introducing the regime. The experience of countries has shown that the presence of all the preconditions is not key when considering the success of implementation. However, there are elements without which it is simply not possible to apply this monetary policy framework.

This work analyzes the possibilities of implementing the new regime in the case of Serbia, and includes the specific nature of implementing the model as well as the problems in executing this concept of monetary policy here in Serbia.

Below, particular attention has been paid to the experiences of Serbia in implementing inflation targeting as a monetary policy framework.

This work also analyses the challenges that those who make the monetary policy decisions in Serbia will be faced with in the coming period.

Key words: Inflation targeting, monetary policy in Serbia, transmission mechanism, key policy rate

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Privredu Srbije u protekle dve decenije karakterisala je cenovna nestabilnost i visoke stope inflacije, neadekvatna monetarna politika i veoma slab i nerazvijen finansijski sektor. Loše stanje finansijskog sistema bilo je jedan od osnovnih uzroka loših ekonomskih i socijalnih performansi privrede. U odsustvu tržišne konkurencije i uz neadekvatno rukovodstvo, tadašnje državne banke su poslovale neefikasno što je imalo za posledicu stvaranje nepoverenja u bankarski sektor. Visok stepen monetizacije praćen periodima hiperinflacije uticao je na pad poverenja građana u domaću valutu čime je dinar, kao novac, izgubio svoje osnovne funkcije - sredstvo plaćanja i sredstvo čuvanja vrednosti.

Brojne reforme sprovedene u finansijskom sektoru (privatizacija, dolazak stranih banaka, itd.) koje su usledile u periodu od 2000. godine rezultirale su značajnim porastom poverenja građana u bankarski sektor čime je počelo da se vraća i poverenje u dinar kao domaću valutu. Dolazak stranih banaka i postojanje konkurencije imali su kritičnu ulogu u celom tom procesu.

Međutim, i pored značajnog progressa ipak, poverenje u bankarski sistem i nacionalnu valutu nije još uvek u celini obnovljeno.

U cilju vraćanja poverenja u dinar kao nacionalnu valutu monetarne vlasti u Srbiji su nastojale da izgrade okruženje sa niskom i stabilnom inflacijom kao osnovnim preduslovom za održiv ekonomski rast. Ovaj zadatak nije ni malo lak imajući u vidu turbulentnu prošlost, visok stepen evrizacije, očekivanja okrenuta ka deviznom kursu i izloženost privrede spoljnim šokovima - visok kapitalni priliv.

Upravo iz tih razloga a istovremeno imajući u vidu i specifičnost situacije u kojoj smo se nalazili dovelo je do toga da, krajem avgusta 2006. godine Narodna banka Srbije odluči da pređe na nov okvir monetarne politike kojim je cenovna stabilnost definisana kao glavni i osnovni cilj monetarne politike a svi ostali

ciljevi postaju podređeni osnovnom cilju.

Zašto baš cenovna stabilnost?

Postoji širok konsenzus mišljenja da strateški ciljevi Srbije u nekom srednjem roku, odnosno, do eventualnog pridruženja Evropskoj Uniji, treba da budu stabilan i održiv ekonomski rast uz rast zaposlenosti i unapređenje životnog standarda.

Monetarna politika sa svoje strane upravo obezbeđenjem niske i stabilne inflacije treba da potpomogne ispunjenju ovih ciljeva. Iskustva mnogih zemalja su potvrdila da je obezbeđenje cenovne stabilnosti, u nekom srednjem roku, neophodan uslov za ostvarenje svih ostalih makroekonomskih ciljeva.

Okruženje sa niskom i stabilnom inflacijom podrazumeva i poverenje u domaću valutu, stabilizaciju inflatornih očekivanja, manji rizik i transparentnije okruženje za ulaganja i štednju i stanovništva i privrede, unapređenje efektivnosti instrumenata monetarne politike, stabilnost finansijskog i bankarskog sektora i manje markoekonomske fluktuacije.

Međutim, sa druge strane često se među ekonomistima vodi polemika oko toga da obezbeđenje niske i stabilne inflacije podrazumeva žrtvovanje ekonomskog rasta. U kratkom roku, s obzirom da je efekat monetarne politike mnogo snažniji, može se reći da je to tačno. Naime, ekspanzivna monetarna politika može da po cenu više inflacije dozvoli viši ekonomski rast ali u vremenskom horizontu od maksimum godinu dana ili dve. Sa druge strane, jasno je da se u dugom vremenskom periodu od monetarne politike ne može očekivati da doprinese ekonomskom rastu zanemarujući inflaciju. Praksa mnogih zemalja uključujući i našu svedoči u prilog tome da bi takva politika za posledicu imala samo višu inflaciju bez nekog značajno velikog rasta.¹

Prema tome, u dugom roku inflacija je čisto monetarni fenomen i nema veze sa realnom ekonomijom. Drugim rečima, ne postoji dugoročna veza između ekonomskog rasta

¹ Dobar primer za to je Turska. Više od deset godina Turska je imala ekstremno visoke stope inflacije (50 - 80% godišnje) sa stopom rasta BDP-a od oko 5-6%. Posle obuzdavanja inflacije i spuštanja stope na nivo ispod 10% rast je i dalje ostao na istom nivou. Niže stope inflacije su uticale na veću atraktivnost zemlje za strane investitore i povećale njene izgleda za priključenje EU što bi u nekom narednom periodu trebalo da dovede do još bržeg ekonomskog rasta.

The economy of Serbia, over the last two decades, was characteristic for its price instability and a high inflation rate, an inadequate monetary policy and a very weak and underdeveloped financial sector. The poor condition of the financial system was one of the main causes for wanting economic and social performances of the economy. In the absence of a market driven competition and together with an inadequate management, the then state owned banks operated inefficiently having as a consequence the creation of distrust in the banking sector. The high degree of monetisation accompanied by the periods of hyperinflation impacted the fall of confidence of citizens in the local currency, causing the dinar, as money, to lose its main attributes - to serve as means of payment, and means of safeguarding value.

A number of reforms were conducted in the financial system (privatisation, the arrival of foreign banks, etc.) that followed in the period after the year 2000, and they resulted in significant confidence building of citizens in the banking sector thus regaining trust and confidence in the dinar as domestic currency. The advent of foreign banks and the presence of competition played the key role in this entire process. In spite of a significant progress achieved, however, confidence in the banking system and the national currency is not as yet fully restored.

With the objective of returning confidence in the dinar as the national currency, monetary authorities in Serbia strived to build an environment with a low and stable inflation rate, as the basis prerequisite for a sustainable economic growth. This task is very far from an easy endeavour bearing in mind the turbulent past, high degree of Euroisation, expectations turned in the direction of the foreign exchange rate, and exposure of economy to external shocks - high capital inflow.

Actually, these were the reasons, as well as the simultaneous awareness of the specificity of the situations that we were in, for prompting the National Bank of Serbia, in late August 2006, to decide to adopt a new framework of monetary policy where the price stability was defined

as the main and basic target of the monetary policy, with all the other targets subordinated to this basic designated objective.

Why insist on price stability?

There is a broad consensus of opinion that strategic targets of Serbia in a certain medium term, up to an eventual accession to the European Union, should be a stable and sustainable economic growth together with the growth of employment and upgrading of the standard of living.

Monetary policy itself, and actually on its own behalf, by securing low and stable inflation rate, should support the achievement of these targets. The experience of many countries has confirmed that securing price stability, in some medium-term, is a necessary precondition for the achievement of all the other macro-economic targets.

An environment with low and stable inflation rate also provides confidence in local currency, stabilisation of inflationary expectations, lower risk and more transparent climate for investments and savings, both of households and businesses, promotion of effectiveness of monetary policy instruments, stability of financial and banking sector, and lower macro-economic fluctuations.

On the other hand, however, there are frequent polemics amongst the economists arguing that when low and stable inflation is secured it is done at the sacrifice of the economic growth. Over a short-term period, bearing in mind that effects of monetary policies are much stronger, one may say that this is true. Namely, an expansive monetary policy may, at the price of higher inflation, allow for a higher economic growth, but within a time horizon of a maximum of one or two years. On the other hand, it is clear that over a long-term period of time, it is not possible to expect that monetary policy can bring about economic growth whilst neglecting inflation. Practice in many countries, including ours, bears witness in favour of the fact that such a policy would result only in a higher inflation without any truly significant growth.¹

¹ Good example here is Turkey. Over ten years Turkey had an extremely high inflation rate (50 - 80% annually), with a growth rate of the GDP of some 5-6%. After subduing the inflation and lowering its rate to below 10%, GDP growth still remained at the same level. Lower inflation rates impacted high attraction of the country for foreign investors and increased its prospects for accession to the EU, which should bring about in the forthcoming period to an even faster economic growth.

i inflacije, odnosno čak i ako postoji ona je negativna u smislu da okruženje sa niskom i stabilnom inflacijom podrazumeva i viši životni standard, manju neizvesnost i veću atraktivnost za ulaganja čime se podržava i rast privrede.

Politika Narodne banke Srbije u periodu 2001-2006. godine

Postizanje održive stabilnosti cena je kompleksan zadatak svake privrede. Imajući u vidu da smo u dugom vremenskom periodu vodili borbu sa enormno visokim stopama inflacije kao i to da je period iza nas karakterisao izuzetno nizak stepen poverenja u nacionalnu valutu i monetarnu politiku, visok stepen evrzigacije kao i snažan i stalan priliv kapitala jasno je da je obaranje stope inflacije i obezbeđenje stabilnosti cena veoma težak zadatak koji su nosioci monetarne politike trebali da reše.

U traženju adekvatne strategije kojom bi se obezbedila cenovna stabilnost NBS se u mnogome oslanjala na iskustva drugih zemalja, posebno Centralne i Istočne Evrope imajući u vidu da je svaka od tih zemalja ipak priča za sebe i uzimajući njihova iskustva s određenom dozom rezerve.

Cenovnu stabilnost monetarne vlasti u principu najefikasnije mogu ostvariti na dva načina: fiksirajući devizni kurs ili nezavisnom monetarnom politikom kojom će se striktno držati strategije ciljanja inflacije. Svako međurešenje ne bi predstavljalo i dobro rešenje o čemu svedoči i naš primer u periodu početkom 2000-tih.

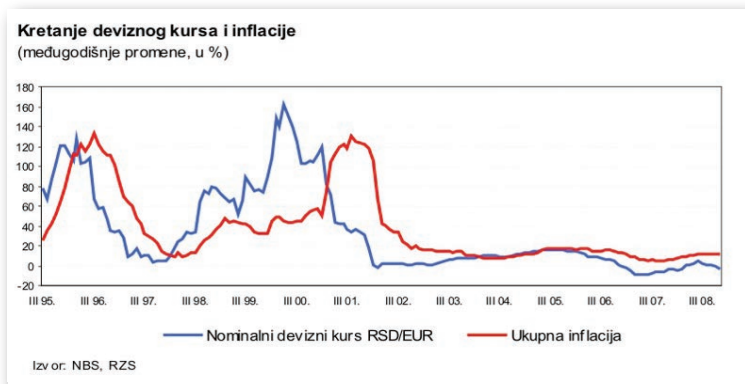
Sa određenog aspekta s obzirom na transparentnost deviznog kursa i njegovu korelisanost sa inflacijom, fiksni ili čvrsto rukovođeni devizni kurs predstavlja najprirodnije rešenje obezbeđenja cenovne stabilnosti posebno u zemljama u tranziciji u početnim fazama tranzicije.

Problem cenovne nestabilnosti u Srbiji koja je kulminirala hiperinflacijom u prvoj polovini 90-tih uz postojanje visokog stepena korelisanosti u kretanju deviznog kursa i cena je bio i glavni razlog zbog čega je kod nas devizni

kurs dugo vremena korišćen kao nominalno sidro u suzbijanju inflatornih pritisaka.

Kao privreda koja je visoko uvezno zavisna, Srbija ima visok "pass-through" efekat deviznog kursa na cene, odnosno visok stepen korelisanosti u kretanju deviznog kursa i cena.

Sa grafikona se može uočiti da se u celom posmatranom periodu deprecijacija deviznog kursa veoma brzo prelivala na cene. Veći pomak u delovanju deviznog kursa na inflaciju uočljiv je jedino u periodu 1999-2000. kada se efekti deprecijacije iz 1999. godine nisu odmah odrazili i na cene s obzirom da su one tada u velikoj meri bile fiksirane. Naime, efekti te deprecijacije su se osetili u punoj meri tek nakon liberalizacije cena u oktobru 2000. godine.



Istraživanja koja su rađena u NBS su takođe potvrdila visok efekat uticaja deviznog kursa na cene. Rezultati koji su dobijeni na osnovu analize rađene za period od 2001. godine ukazuju na koeficijent elastičnosti u kratkom roku od 0,3 a u dugom roku 0,6 što govori o tome da se promene deviznog kursa veoma brzo odražavaju na cene.

Korišćenjem deviznog kursa kao nominalnog sidra u periodu posle petooktobarskih promena 2000. godine monetarne vlasti su uspele da smanje inflatorna očekivanja i spuste inflaciju na nivo ispod 10% do sredine 2003. godine. Međutim, od 2003. godine postepena deprecijacija prekinula je proces dezinflacije i bila glavni uzročnik ponovnog rasta inflacije u 2004. godini.

Therefore, over a long-term period, inflation is a purely monetary phenomenon which has no connection with real economy. In other words, there is no long-term connection between economic growth and inflation, i.e. even if it should exist, it is negative in the sense that an environment with a low and stable inflation rate also means a higher standard of living, lower uncertainty and higher attraction for investments in terms of supporting growth of its economy.

Policy of the national bank of serbia in the period 2001-2006

To achieve sustainable price stability, it is a rather complex task for any national economy. Mindful of the fact that over a long period of time we were struggling with enormously high inflation rates and that the period behind us was characteristic for an extremely low degree of confidence in the national currency and monetary policies, together with a high degree of Euroisation and a strong and constant capital inflow, it is clear that bringing down of the inflation rate and securing price stability was a very demanding task that the monetary policy makers had to resolve.

In their quest for an adequate strategy that would secure price stability, the National Bank of Serbia heavily relied on the experiences of other countries, especially those of Central and Eastern Europe, well aware that every one of these countries is nevertheless a story unto itself, and taking their respective experiences with a certain dose of reserve.

In principle, monetary authorities can most efficiently achieve the price stability in two ways: by fixing the foreign exchange rate, or by an independent monetary policy that would strictly adhere to the strategy of targeted inflation. Any halfway solution would not be a good solution as is best witness by our own case in the period of early 2000s.

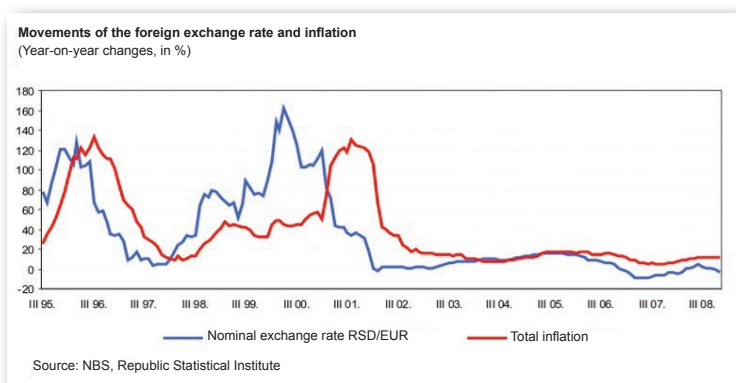
In certain aspects and in view of the need for transparency of the foreign exchange rate and its correlation with the inflation, fixed or

strictly managed foreign exchange rate became the most natural solution of all for providing price stability, especially in the countries in transition in the early transition phases.

The problem of price instability in Serbia, which culminated with a hyperinflation in the first half of 1990s, together with the presence of a high degree of correlation with the movements of the foreign exchange rate and prices, was the main reason why our foreign exchange rate was for a very long period of time used as a nominal anchor in fighting inflationary pressures.

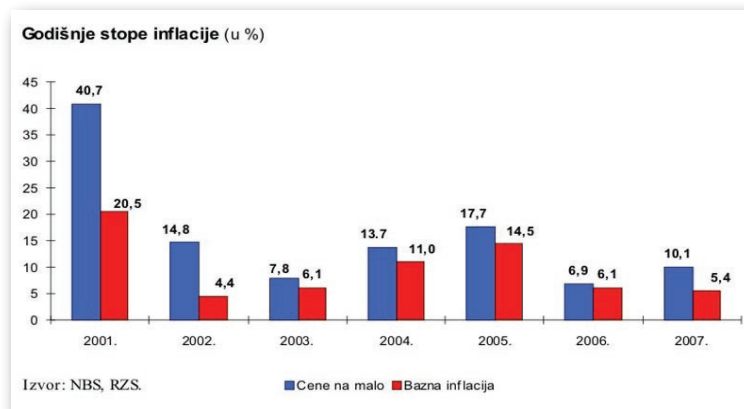
Being a highly import-dependent economy, Serbia has a high "pass-through" effect of the exchange rate on prices, i.e. a high degree of correlation between trends in foreign exchange rates and prices.

On the graph one can see that during the entire observation period the exchange rate depreciation was promptly spilling over on prices. A major shift in the exchange rate impact on inflation was observed only in the period 1999-2000, when the depreciation effects from the year 1999 did not have an immediate reflection on prices in view of the fact that at the time they were mostly fixed prices. Namely, the effects of that depreciation were impacted fully only after the liberalisation of prices in October 2000.



Research conducted at the NBS also confirmed a high effect of the foreign exchange rate impact on prices. Results obtained on the basis of an analysis made for the period from the year 2001 indicate an elasticity ratio of 0.3 short-term and 0.6 long-term, which speaks of the fact that the changes in the exchange rate are very quickly reflected on the prices.

When using the exchange rate as a nominal anchor in the period after October 5th changes



Rastuća inflacija i snažan i visok priliv kapitala su ujedno bili i glavni motivi zbog kojeg je krajem 2005. godine NBS odlučila da napusti politiku rukovođenog deviznog kursa i založi se za veći stepen oscilacija u njegovom kretanju u skladu sa tržišnim uslovima. Visok priliv kapitala koji je usledio u periodu posle 2005. godine doveo je do aprecijacije deviznog kursa što je u narednom periodu imalo dezinflatoran uticaj i rezultiralo obaranjem inflacije krajem 2006. godine na nivo od 6,6%. Međutim, poljoprivredni šok i enormno visok rast cena nafte na svetskim tržištima započeti u drugoj polovini 2007. godine izazvali su velike inflatorne pritiske i rezultirali višim stopama inflacije na kraju pomenute godine.²

Iskustva mnogih tranzicionih zemalja, takođe, ukazuju da su one sagledavanjem odnosa troškova i koristi vođenja politike fiksnog deviznog kursa promenile ili modifikovale svoje strategije ostvarenja cenovne stabilnosti pošto je posle određenog perioda fiksni devizni kurs u ovim zemljama prestao da bude efikasno nominalno sidro s obzirom da je inflacija počela ponovo da raste. Takođe, uprkos strategiji fiksnog deviznog kursa odnosno njegovoj deprecijaciji u najvećem broju slučajeva došlo je do pogoršanja i trgovinskog bilansa.

Različite zemlje su na ovakvu situaciju reagovala različito. Mnoge od njih su napustile rukovođene režime deviznog kursa stavljajući naglasak na veći stepen fleksibilnosti kursa

i najčešće usvajajući inflatorno targetiranje kao strategiju da se ostvari i održi niska i stabilna inflacija.

Druge zemlje su se opredelile za stabilnost deviznog kursa kroz "currency board" ili evrizaciju. Ovo je najčešće bio slučaj u zemljama u kojima se vođenje nezavisne monetarne politike i fleksibilan devizni kurs smatralo veoma skupim i u kojima je to

zahtevalo dug vremenski period pripreme dok je monetarno sidro bilo neophodno što pre (Bugarska, Crna Gora, Baltičke zemlje).

U slučaju Srbije, smatralo se da, evrizacija ne bi bila dobro rešenje za obezbeđenje cenovne stabilnosti iz više razloga. Pre svega, jer u dugom vremenskom roku fiksni devizni kurs ne bi obezbedio efikasnu kontrolu inflacije. Smatra se da autonomna monetarna politika svojim instrumentima treba da reaguje na šokove koji prete da ugroze ostvarivanje definisanog cilja u pogledu visine inflacije, dok fluktuacije deviznog kursa treba da budu glavni amortizer prilagođavanja na te šokove.

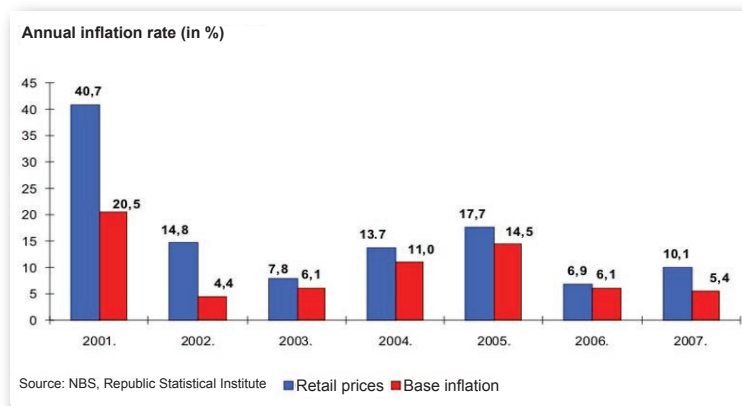
S obzirom na činjenicu da su Srbiju tada očekivale masivne strukturne promene od kojih se znalo da će neke imati inflatorne pritiske, da je u toku bilo progresivno otvaranje ekonomije i prisutan visok stepen evrizacije režim fiksnog deviznog kursa ili targetiranje monetarnih agregata (zvaničan režim 2000-2006. godine) bi imajući sve to u vidu, malo verovatno obezbedilo stabilnu i nisku inflaciju. Upravo iz tih razloga strategija inflatornog targetiranja u cilju obezbeđenja niske i stabilne inflacije je praktično bila jedina alternativa evrizaciji u našem slučaju.

NBS je tako odmah početkom 2006. godine nastojala da se postepeno povlači sa deviznog tržišta³ u smislu da ne vrši česte i značajne intervencije s ciljem postizanja određenog nivoa ili pravca kretanja deviznog kursa. Ovo nastojanje NBS rezultiralo je većim stepenom

² Treba napomenuti da je NBS u toku 2007. godine već sprovodila režim ciljanja inflacije i godinu ipak završila sa baznom inflacijom u okviru definisanog ciljanog raspona za tu godinu (4-8%).

³ U januaru 2006. godine učešće NBS u ukupnom prometu na međubankarskom deviznom tržištu (MDT-u) iznosilo je 54% a od sredine maja do početka avgusta 2008. godine NBS se nije pojavljivala na MDT-u i devizni kurs se u potpunosti formirao na osnovu trgovine devizama između poslovnih banaka.

in 2000, monetary authorities succeeded in reducing inflationary expectations and pushing down inflation at a level below 10% by the middle of 2003. However, from the year 2003 gradual depreciation interrupted the disinflation process and was the main cause of a renewed inflation growth in the year 2004.



Growing inflation and a strong and high capital inflow were at the same time the main causes for making the NBS in late 2005 decide to abandon the policy of managed foreign exchange rate and strive for a higher degree of oscillation in its movement in line with market conditions. High capital inflow that took place in the period after the year 2005, brought about appreciation of the exchange rate which thereupon had a disinflation impact and resulted in bringing down inflation by the end of 2006 to the level of 6.6%. However, agricultural shock and an enormous jump in oil prices on the world markets started in the second half of 2007 caused major inflationary pressure and resulted in higher inflation rates at the end of that year.²

The experiences of many countries in transition also indicate that they, by assessing the ratio between costs and benefits of conducting the fixed exchange rate policy, changed or modified their strategies for the achievement of price stability, as after a certain period the fixed exchange rate in these countries stopped being an efficient nominal anchor in the light of the fact that the inflation started to grow again. In addition, in spite of the fixed exchange rate

strategy, i.e. its depreciation in the majority of cases, there was deterioration also in the trade balance.

Different countries reacted to such a situation differently. Many of them abandoned managed exchange rate regimes and placed their emphasis on a higher degree of exchange rate flexibility and most often adopted the inflation targeting as their strategy for achieving and maintaining a low and stable inflation.

Some other countries decided in favour of the exchange rate stability through the “*currency board*” of Euroisation. This was most often the case in countries where conducting an independent monetary policy and a flexible exchange rate was

deemed to be a very costly affair, and where this would have required a long period of time for preparations, while the monetary anchor was necessary as soon as possible (Bulgaria, Montenegro, Baltic countries).

In case of Serbia, the idea was that Euroisation would not be a good solution for securing price stability and this for a number of reasons. First of all, because over a long period of time fixed exchange rate would not secure control over inflation. It is assumed that monetary policy should react with its instruments against shocks threatening to jeopardise the realization of the defined level of inflation target, while the exchange rate fluctuations should serve as the main dumper for adjustment to such shocks.

In light of the fact that Serbia was at that time awaiting massive structural changes where it was known that some of them shall have inflationary pressures, that progressive opening of the economy was in progress and that there was a high degree present of Euroisation, the fixed exchange rate regime or targeting of monetary aggregates (the official regime in the period 2000-2006) would, with all the earlier stated in mind, have low probability

² It should be noted that the NBS during the year 2007 already conducted the regime of targeted inflation and ended the year with base inflation within the defined targeted range for that year (4-8%).

Pregled režima monetarne politike, period od 2000. godine

Režim monetarne politike	Operativni target	Režim deviznog kursa	Instrumenti monetarne politike	Kontrola kapitala
Monetarno targetiranje (2000-2006) ³	Neto domaća aktiva (plafon) Neto strana aktiva (pod)	Rukovođeno fluktuirajući	Intervencije na deviznom tržištu, Stopa obavezne rezerve, Operacije na otvorenom tržištu	Da (kratak rok)
Inflatorno targetiranje (septembar 2006)	Kratkoročne kamratne stope	Rukovođeno fluktuiraju i sa tendencijom ka slobodnom fluktuiranju	Dvonedeljna repo stopa - osnovni instrument, pomoćni - Intervencije na deviznom tržištu, prudencijalne mere - Stopa obavezne rezerve	Da (kratak rok)

volatlnosti deviznog kursa što je predstavljalo prvi korak u sprovođenju novog okvira. Nov okvir monetarne politike podrazumeva postojanje slobodno fluktuirajućeg deviznog kursa sa mogućnošću povremenih intervencija i to samo u cilju ublažavanja negativnih efekata privremenih šokova i sprečavanja preteranih dnevnih oscilacija.

Krajem avgusta 2006. godine NBS se opredelila za strategiju ciljanja inflacije kao nov režim monetarne politike.

Prelazak na nov okvir monetarne politike podrazumevao je značajne napore i ulaganja i izgradnju kapaciteta koji su neophodni da bi se efikasno sprovodila nova strategija i olakšalo njeno formalno usvajanje. Izgradnja i neprestano unapređenje ovih kapaciteta su ono što Srbiji može obezbediti trajnije i fleksibilnije rešenje za obezbeđenje srednjoročne makroekonomske stabilnosti.

Karakteristike novog okvira

U trenutku uvođenja novog okvira u Srbiji se kao zvanična mera ukupne inflacije koristio Indeks cena na malo ("Retail Price Index" - RPI). S obzirom na to da su regulisane cene činile skoro polovinu ovog indeksa kao i to da su cene poljoprivrednih proizvoda kao veoma nestabilna komponenta indeksa cena na malo mnogo više pod uticajem administrativnih i

sezonskih nego tržišnih faktora NBS je mogla da snosi odgovornost samo za onaj deo cena koje su tržišno određene tj. za baznu inflaciju. To je ujedno i bio razlog zbog čega je na samom početku NBS definisala svoje ciljeve za baznu inflaciju u vidu raspona za kraj godine.

Decembar 2006:

7-9%, međugodišnja stopa,

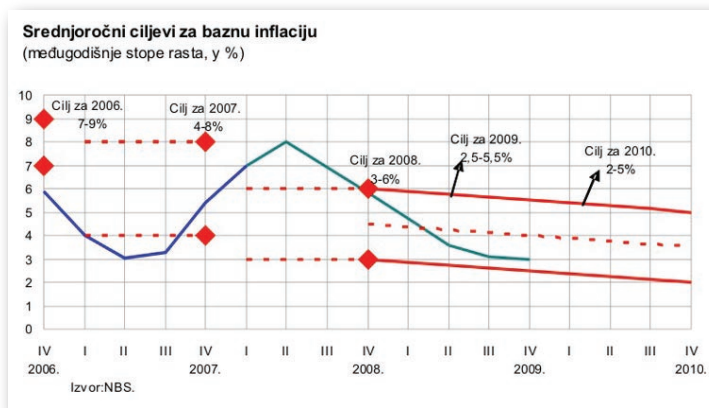
Decembar 2007:

4-8%, međugodišnja stopa,

dok je u 2007. godini objavila ciljeve za

Decembar 2008: 3-6%, međugodišnja stopa,

Decembar 2009: 2-5%, međugodišnja stopa.



Na početku 2008. godine u Memorandumu NBS definisana je ciljana stopa inflacije za 2009. i 2010. godinu u vidu linearno opadajućeg raspona međugodišnje stope bazne inflacije:⁴

- početni nivo 2009. godine: 3-6% sa

⁴ Međutim, krajem 2008. godine NBS odlučuje da od početka 2009. godine krene sa ciljanjem ukupne inflacije merene Indeksom potrošačkih cena (CPI) i ciljeve definiše u vidu linearno opadajućeg raspona međugodišnje stope ukupne inflacije za naredne tri godine.

Survey of the monetary policy regimes, period from the year 2000

Monetary policy regime	Operational target	Foreign exchange rate regime	Monetary policy instruments	Capital control
Monetary targeting (2000-2006) ³	Net domestic assets (ceiling) Net foreign assets (bottom)	Managed fluctuating	Interventions on the foreign exchange market. Required reserves rate. Operations on the open market.	Yes (short term)
Inflation targeting (September 2006)	Short-term interest rates	Managed fluctuating with the tendency towards free fluctuation	Fortnightly repo rate - basic instrument, auxiliary - Interventions on the foreign exchange market, prudential measures - required reserves rate	Yes (short term)

of securing a stable and low inflation. It was for this reason that the strategy of inflation targeting for purpose of securing low and stable inflation practically was the only alternative to Euroisation in our particular case.

Thus the National Bank of Serbia, promptly at the beginning of the year 2006, started its gradual withdrawal from the foreign exchange market,³ in the sense of the absence of frequent and substantial interventions, with the objective of raising a certain level or direction of movement of the exchange rate. Such attempts of the NBS resulted in a higher degree of volatility of the exchange rate which was the first step in the implementation of the new framework. The new monetary policy framework means the existence of a freely fluctuating exchange rate with the option of occasional interventions but only for purpose of mitigating negative effects of temporary shocks and prevention of excessive daily oscillations. By the end of August 2006, NBS decided in favour of the targeted inflation strategy as a new monetary policy regime.

The transition on to this new monetary policy framework involved significant efforts and investments and also capacity building necessary for efficient implementation of the new strategy and facilitation of its formal adoption. Capacity building and their continuous upgrading are the actions that can provide for Serbia a more lasting and flexible

solution for securing medium-term macro-economic stability.

New framework characteristics

At the time of introduction of the new framework, the official measure applied for assessment of the total inflation in Serbia was the "Retail Price Index" - RPI. As the regulated prices made up almost one half of this index and as the agricultural products prices, as a very unstable component of the retail price index, were much more under the influence of administrative and seasonal factors rather than the market factors, the National Bank of Serbia was in the position to be held responsible only for that part of prices that were market priced, i.e. for the base inflation. At the same time, this was the reason why the NBS, from the very beginning, defined its objectives for the base (core) inflation in the form of inflation range for the end of the year.

December 2006:

7-9%, year-on-year rate,

December 2007:

4-8%, year-on-year rate,

while in the year 2007 it published its targets for

December 2008: 3-6%, year-on-year rate,

December 2009: 2-5%, year-on-year rate.

³ In January 2006, participation of the NBS in the total turnover on the Interbank foreign exchange market was 54%, and as of mid-May and until the beginning of August 2008, NBS did not appear again on the Interbank foreign exchange market, so that the exchange rate was formed totally on the basis of the Forex trading between business banks.

centralnom vrednošću od 4,5%,

- kraj 2009. godine: 2,5-5,5% sa centralnom vrednošću od 4%,
- kraj 2010. godine: 2-5% sa centralnom vrednošću od 3,5%.

Sa prelaskom na nov okvir monetarne politike NBS se ujedno opredelila za dvonedeljnu repo stopu kao glavni instrument monetarne politike kojim će nastojati da ostvari svoj osnovni cilj - održavanje cenovne stabilnosti u okvirima definisanog inflatornog koridora dok će sve ostale mere monetarne politike koristi kao pomoćni instrumentarijum⁵ (intervencije na deviznom tržištu, stopa obavezne rezerve, itd.).

Korekcije referentne stope zasnovane su na oceni trenutne ekonomske situacije, oceni budućeg kretanja inflacije i njihovoj projekciji. Razmere i vreme korekcija prate tok monetarne transmisije uzimajući u obzir i vremenski pomak koji transmisija podrazumeva kao i još uvek dominantnu ulogu kanala deviznog kursa.

Odluke o promeni referentne stope se donose na sednicama Monetarnog odbora koje su se u početku održavale krajem meseca (u vanrednim situacijama do promene je moglo doći i sredinom meseca) i uvek su bile praćene pres - konferencijom i obrazloženjem za javnost.

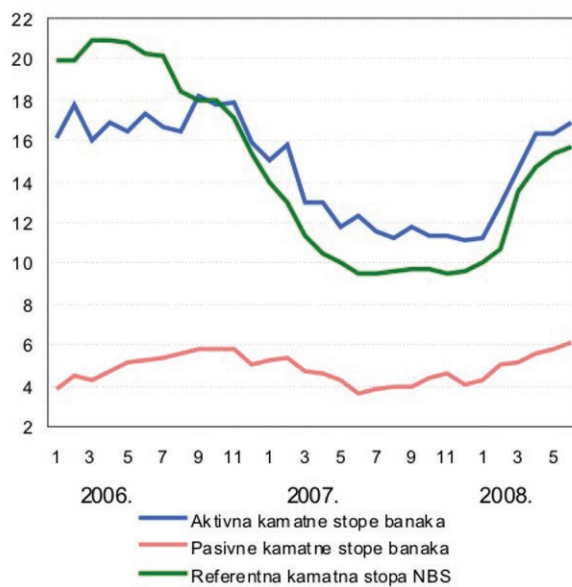
Ostali instrumenti monetarne politike (intervencije na deviznom tržištu, stopa obavezne rezerve, itd.) treba da imaju pomoćnu ulogu u ostvarenju ciljeva u pogledu inflacije. Oni bi trebalo da doprinesu nesmetanoj transmisiji referentne stope na tržište i uravnoteženom razvoju finansijskih tržišta.

U novom okviru monetarne politike referentna stopa kao glavni instrument transmisije monetarne politike NBS bi trebalo da predstavlja signal za tržišta u pogledu monetarne politike. Naime, svaka promena referentne stope bi trebalo da se odrazi na kamatne stope međubankarskom novčanom tržištu, koje se smatraju merom oportunitetnog troška kreditiranja privrede i stanovništva, čije

će promene zatim imati odraza i na kretanje aktivnih i pasivnih kamatnih stopa banaka.

Prelaskom NBS na nov monetarni okvir i ostvarivanjem većeg stepena oscilacija u kretanju deviznog kursa, kratkoročne tržišne kamatne stope su postale glavni operativni target.

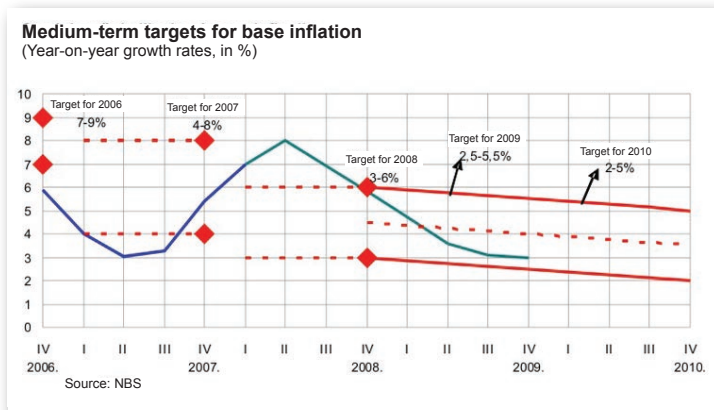
Referentna kamatna stopa NBS i kamatne stope poslovnih banaka
(ponderisani prosek, na godišnjem nivou, u %)



Međutim, sagledavanje efikasnosti referentne kamatne stope kroz praćenje njenog uticaja na kamatne stope banaka ima smisla, u slučaju Srbije, jedino za kamatne stope na međubankarskom novčanom tržištu, budući da se ove kamatne stope obračunavaju na dinarska sredstva. Od uvođenja novog okvira monetarne politike, kamatne stope na međubankarskom novčanom tržištu **Beonia** i **Belibor** su preuzele ulogu operativnog targeta i značajnije prate kretanje referentne kamatne stope (posebno vidljivo od kraja novembra 2006. godine).

Praćenje reakcije kamatnih stopa banaka na kredite klijentima nije pouzdano, budući da banke još uvek ne iskazuju posebno kredite sa valutnom klauzulom, već ih uključuju u dinarske kredite, pri čemu je većina ovih kredita odobrena sa valutnom klauzulom. S obzirom da

⁵ Od 2000. godine pa do početka 2005. godine NBS je, u cilju povlačenja viška likvidnosti iz bankarskog sistema, sporovodila operacije na otvorenom tržištu samo putem trajnih transakcija. Prva repo aukcija održana je 31. januara 2005. godine. NBS dva puta nedeljno organizuje redovne repo aukcije na kojima privremeno prodaje hartije od vrednosti na rok od četrnaest dana.



At the beginning of the year 2008, in its Memorandum, NBS defined the targeted inflation rate for the years 2009 and 2010 in the form of a linear downturn range of the year-on-year basic inflation rate:⁴

- Starting level for the year 2009: 3-6% with the central value of 4.5%,
- End of year 2009: 2.5-5.5% with the central value of 4%,
- End of year 2010: 2-5% with the central value of 3.5%.

With the transition to the new monetary policy framework NBS at the same time decided in favour of a fortnightly repo rate as the main monetary policy instrument in the attempts to achieve its main target - maintaining price stability within the range of defined inflation corridor, while all the other monetary policy measures were to be used as an auxiliary instrumentarium⁵ (foreign exchange market interventions, required reserves rate, etc.).

Reference rate corrections are based on the actually present economic situation, estimation of future inflation trends and their projection. Correction range and time are following trends of monetary transmission taking into consideration also the time shift which the transmission covers, and also the still predominant role of the exchange rate channel.

The decisions on changes in the reference interest rate are being made at the sessions

of the Monetary Board that were initially held by the end of the month (in extraordinary circumstances changes could be made also by the middle of the month) and are always accompanied by a press conference and communiqué release for the public.

Other monetary policy instruments (interventions on the foreign exchange market, required reserves rate, etc.) should have

only an auxiliary role in the achievement of inflation targets. They should facilitate a smooth transmission of the reference rate on to the market and a well-balanced development of financial markets.

In the new monetary policy framework reference interest rate, as the key NBS monetary policy transmission instrument, should be a signal for the market regarding the monetary policy. Namely, every change in the interest rate should be reflected on the interest rates on the Interbank money market, which are deemed to be a measure of opportunity cost for crediting both corporate and retail sectors, and whose changes shall thereupon be reflected also on the movement of active and passive interest rates of banks.

With the NBS transition to the new monetary framework and the achievement of a high degree of oscillation in the exchange rate trends, short-term market interest rates have become the key operational target.

⁴ However, by the end of 2008, NBS decided to start from the beginning of the year 2009 with the targeted total inflation measured by the Consumer Price Index - CPI, and to define its targets in the form of a linear downturn range of the year-on-year total inflation for the next three years.

⁵ From the year 2000 and up to the beginning of the year 2005, NBS for purpose of withdrawing surplus liquidity from the banking system, started implementation of the operations on the open market only through permanent transactions. The first repo auction was held on 31 January 2005. NBS holds regular repo auctions twice a week where it sells temporarily securities for fourteen days.

je većina kredita sa deviznom klauzulom banke odluke o nivou aktivnih i pasivnih kamatnih stopa pre svega donose imajući u vidu kretanje kamatnih stopa na međunarodnim tržištima (*Libor, Euribor*).

Nedovoljna efikasnost kanala kamatne stope posledica je činjenice da smo u prethodnom periodu primenjivali druge režime monetarne politike i da kamatna stopa nije bila značajnije korišćena kao instrument, ali i visokog stepena evrizacije domaće ekonomije.

Visok stepen evrizacije u ekonomiji u uslovima kada se zemlja nalazi u režimu ciljanja inflacije može da zadaje ozbiljne probleme monetarnim vlastima s obzirom da povećava pass-through deviznog kursa čineći tako inflaciju nestabilnijom i osetljivijom na promene deviznog kursa. Takođe, dovodi do slabljenja kanala kamate stope s obzirom da su novčani tokovi (kreditni, štednja) najvećim delom u stranoj valuti i samim tim velikim delom van kontrole monetarnih vlasti usled čega su oni prinuđeni da se preterano oslanjaju na administrativne i prudencijalne mere kako bi povratili poverenje u domaću valutu. To je ujedno bila praksa i u slučaju Srbije.

Transmisioni mehanizam

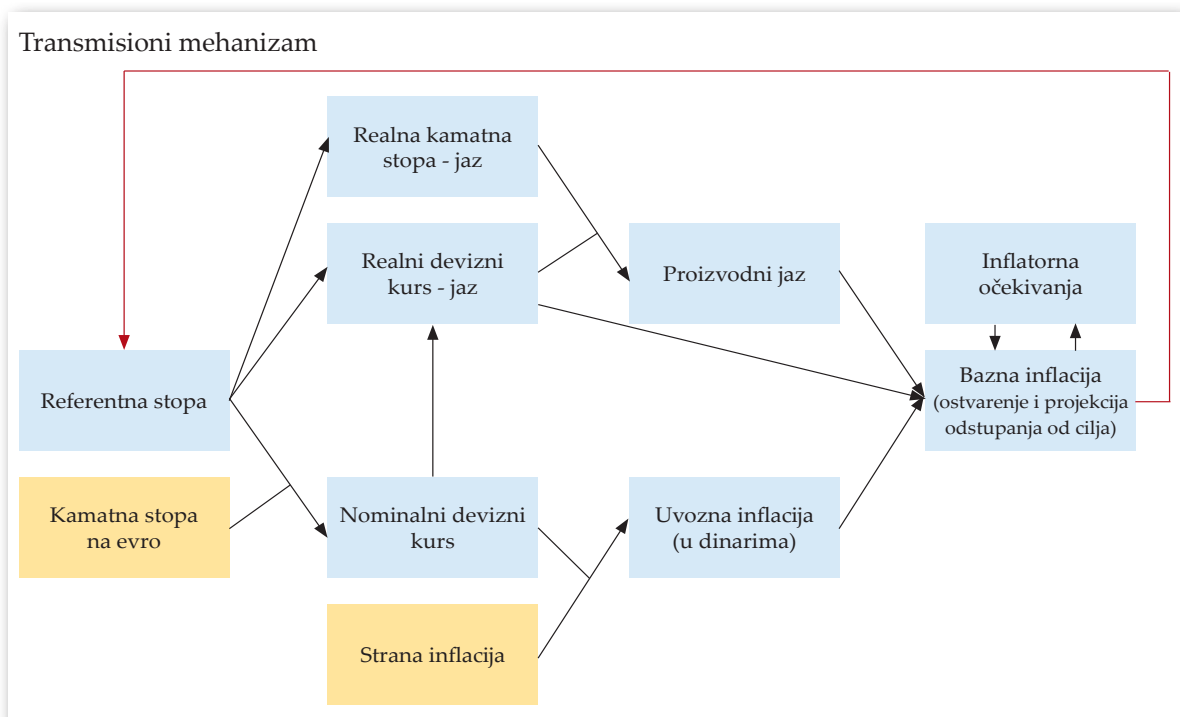
Transmisioni mehanizam monetarne politike podrazumeva proces putem kojeg monetarna

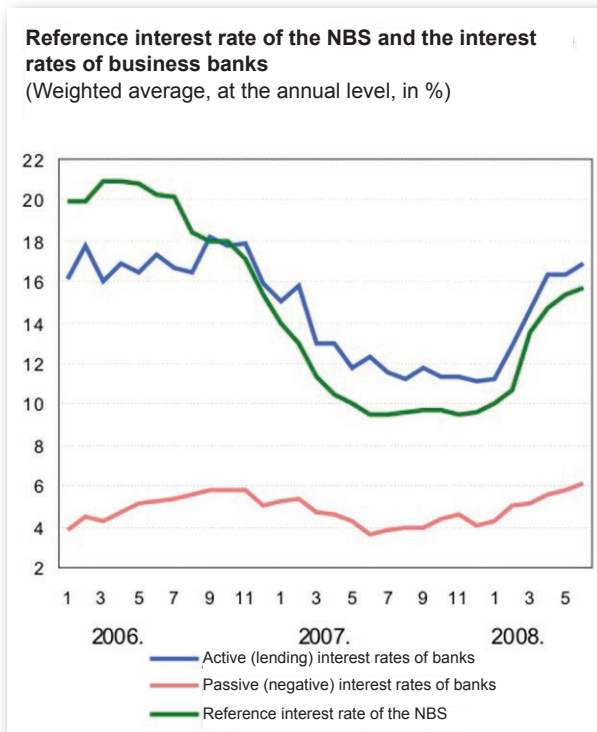
politika svojim instrumentima i merama utiče na makroekonomske veličine - agregatnu tražnju, proizvodnju i cene. Suština delovanja transmisionog mehanizma sastoji se u tome da se monetarnom politikom preko tržišta novca i finansijskog tržišta utiče na tržište roba i usluga a zatim i na agregatnu tražnju, proizvodnju i cene. Postoji više kanala putem kojih se taj efekat ostvaruje i oni podrazumevaju različitu brzinu i različit intenzitet - kanal kamatne stope, kanal deviznog kursa, kanal cena aktive, kreditni kanal.

Na sledećoj slici je predstavljena suština **transmisionog mehanizma modela koji koristi NBS**. To je zapravo pojednostavljena slika modela gde su prikazane najvažnije veze i relacije koje su zastupljene u modelu.

Osnovu za donošenje odluke o visini referentne stope, predstavlja očekivano (pod sadašnjim uslovima) odstupanje bazne inflacije od ciljane. Odnosno koliko se očekuje da će pod sadašnjim uslovima inflacija da odstupi od cilja.

Na ovoj slici se vidi da referentna stopa deluje na inflaciju preko dva kanala: nominalnog i realnog. Prvi nominalni kanal se ispoljava preko nominalnog deviznog kursa (brz i dominantan), drugi realni kanal se odražava kroz realnu ekonomiju preko jaza realnog deviznog kursa i realne kamatne stope (ovo je spor kanal, ali deluje).





However, the assessment of efficacy of the reference interest rate through the follow up of its impact on the interest rates of banks is meaningful, in case of Serbia, only for the interest rates on the Interbank money market, because these interest rates are being calculated on dinar funds. From the introduction of the new monetary policy framework, interest rates on the Interbank money market, **Beonia** and **Belibor**, have taken over the role of operational target and more significantly are following the changes of the reference interest rate (especially visible from the end of November 2006).

Monitoring of the reaction of interest rates of banks on credits granted to customers is not reliable as the banks are still not disclosing separately credits with the currency clause, but are including them in the dinar loans, where the majority of these loans are approved with the currency clause. In view of the fact that the majority of bank loans have the currency clause, banks are making decisions on the level of active and passive interest rates mainly bearing in mind the movements of the interest rates on the international markets (*Libor*, *Euribor*).

Insufficient efficacy of the interest rate channel is the result of the fact that in the previous period we have been applying other monetary policy regimes and that the interest rate was not substantially deployed as an instrument, but it is also the consequence of

a high degree of Euroisation of the national economy.

High degree of Euroisation in the economy, in the situation when the country is in the targeted inflation regime, may cause serious problems to the monetary authorities as it increases the pass-through of the exchange rate thus making the inflation unstable and more sensitive to the foreign exchange rate changes. In addition, it leads to the weakening of the interest rate channel because the cash flows (loans, savings) in most part are in foreign currency and this in itself renders them largely beyond the control of monetary authorities, forcing them in turn to rely excessively on administrative and prudential measures in order to return confidence in the local currency. This was also the practise experienced in the case of Serbia.

Transmission mechanism

Monetary policy transmission mechanism designates a process through which the monetary policy, with its instruments and measures, is impacting macro-economic size - aggregate demand, production and prices. The essence of transmission mechanism function is that in this way monetary policy, through the money market and financial market is impacting goods and services market, and in turn, is acting on the aggregate demand, production and prices. There are several channels for achieving this effect and they imply different pace and different intensity - interest rate channel, exchange rate channel, assets pricing channel, credit channel.

The next figure presents the very essence of **transmission mechanism model applied by the NBS**. This is actually a simplified picture of the model where the most important links and relations contained in the model are presented.

Basis for decision making on the level of the reference interest rate is the anticipated (under the present conditions) digression of the base interest rate from the targeted rate. In other words, how much it is expected under the present conditions for the inflation to digress from its target.

This Figure shows that the reference

Osnovna ideja mehanizma: Referentna kamatna stopa zajedno sa **kamatnom stopom na evro** utiče na **nominalni kurs**, koji zajedno sa **stranom inflacijom** određuje **uvoznu inflaciju** (uvozne cene izražene u dinarima), koja na kraju utiče na **baznu inflaciju**. U slučaju Srbije uvozna komponenta je veoma značajna, s obzirom da smo mala i otvorena ekonomija. Drugim rečima domaće cene su visoko zavisne od uvoznih. Efekat ovog kanala je vidljiv u kratkom roku, veoma je brz i dominantan.

Sa druge strane, imamo **realni kanal**, kanal koji ide **preko realne ekonomije (realnog deviznog kursa i realne kamatne stope)**. Delovanje ovog kanala vidljivo je tek posle izvesnog vremena i njegovi efekti se mogu osetiti u dužem vremenskom periodu tako da se može reći da je ovo spor kanal.

Delovanje oba kanala se može najbolje videti na primeru 2006. godine. Naime, nominalna aprecijacija (započeta u maju 2006. godine) dovela je do pada bazne inflacije u drugoj polovini veoma brzo. Međutim, s obzirom da nominalna aprecijacija nije bila u adekvatnoj meri praćena padom inflacije došlo je sredinom 2006. godine do otvaranja aprecijacijskog jaza realnog deviznog kursa. Aprecijacijski jaz realnog kursa, koji se otvorio u drugoj polovini godine zahvaljujući restriktivnoj monetarnoj politici (procena jaza za Q1 bila je 5%) uslovio je i u narednoj godini pad bazne inflacije (kvartalna stopa bazne inflacije je bila u padu i u Q1 2007. godine i bila je negativna).

Inflatorna očekivanja predstavljaju takođe, bitan elemenat transmissionog mehanizma. Ona se u najvećoj meri formiraju na bazi ostvarenja inflacije, ali zatim ona povratno utiču na inflaciju u narednom periodu, tako da se obaranje inflacije višestruko isplati. U suštini ideja je da jednom kada se obori inflacija na nizak nivo njeno održavanje ukoliko je praćeno padom inflatornih očekivanja ne bi zahtevalo restriktivne mere. Iz

tog razloga za centralnu banku koja sprovodi režim ciljanja inflacije je veoma važno da inflatorna očekivanja budu stabilna. U tome važnu ulogu imaju stalni odnosi centralne banke sa javnošću odnosno jačanje njene transparentnosti.

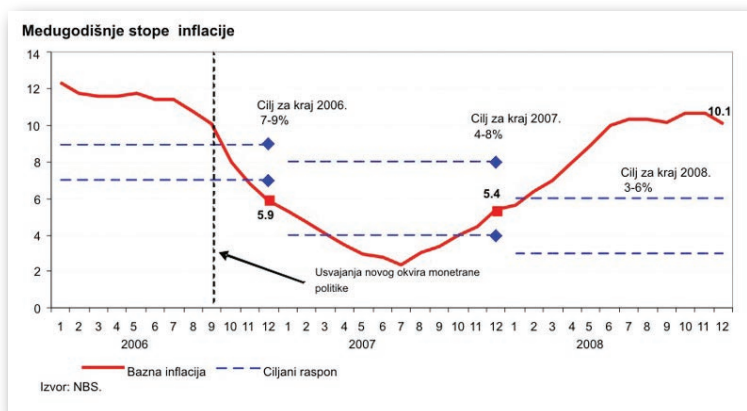
Dosadašnje iskustvo NBS u sprovođenju novog okvira

Analizirajući kratko iskustvo koje NBS ima u primeni novog okvira može se reći da je ono relativno zadovoljavajuće. U prve dve godine sprovođenja režima bazna inflacija je uspešno oborena i održavana na relativno niskom nivou.

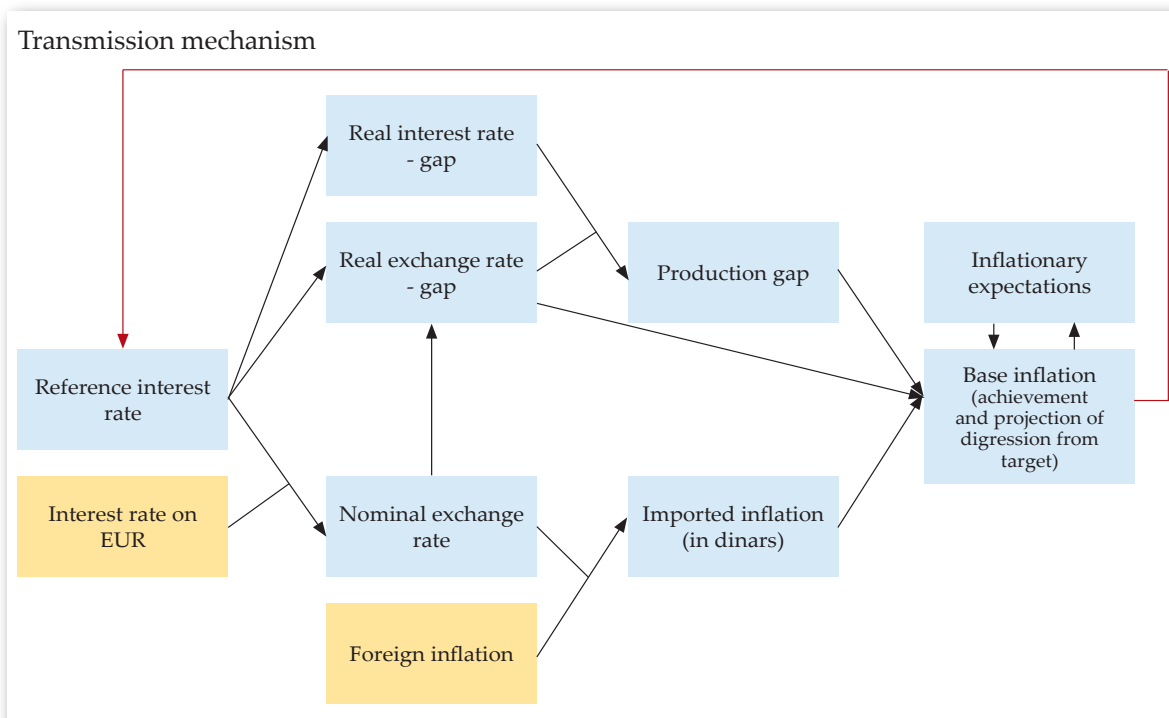
Nakon visoke bazne inflacije krajem 2005. godine došlo je do njenog značajnog usporavanja u toku naredne godine i na kraju 2006. godine bazna inflacija je bila ispod donje granice ciljanog raspona. Osnovni uzročnik usporavanja bila je značajna nominalna aprecijacija dinara posebno izražena u drugoj polovini pomenute godine.

Na kraju 2007. godine cilj je bio ostvaren i inflacija je bila u okviru granica ciljanog raspona.

Međutim, cilj za 2008. godinu nije bio ostvaren i bazna inflacija je na kraju pomenute godine bila značajno iznad gornje granice ciljanog raspona. Serija eksternih šokova⁶ u prethodnoj godini dovela je do značajnog rasta inflatornih očekivanja početkom naredne godine i bila jedan od glavnih uzročnika ubrzanja rasta inflacije.



⁶ Cena nafte je na svetskim tržištima od početka 2007. godine pa do juna 2008. godine utrostručena, dok su cene najvažnijih poljoprivrednih proizvoda u istom periodu više nego udvostručene.



interest rate is impacting inflation through two channels: nominal and real. The first, nominal channel, is manifested through the nominal foreign exchange rate (it is fast and dominant), the other one, a real channel, is manifested through the real economy in the form of a gap between the real exchange rate and the real interest rate (this is a slow channel but it functions).

The basic idea of this mechanism: Reference interest rate together with the EUR interest rate impacts the nominal exchange rate, which together with the foreign inflation determines imported inflation (import prices expressed in dinars), which ultimately impacts base inflation. In case of Serbia, the imported component is very significant because we are a small and open economy. In other words, domestic prices are highly dependent on the import prices. The effect of this channel is visible in short-term, it is very fast and dominant.

On the other hand, we also have the real channel, a channel running through the real economy (real exchange rate and real interest rate). The effects of this channel are visible only after a certain time and its impact can be felt over a longer period of time, so that we may call it a slow channel.

The effects of both of these channels can best be seen in the case of the year 2006. Namely, nominal appreciation (started in May

2006) caused the fall of base (core) inflation in the second half very quickly. However, since the nominal appreciation was not adequately followed by the fall of inflation, in mid-2006 there occurred an opening of the appreciation gap in the real exchange rate. Appreciation gap of the real rate, which opened in the second half of the year thanks to the restrictive monetary policy (gap estimate for the Q1 was 5%) caused also in the following year the fall of base (core) inflation (quarterly base inflation rate was falling and in the Q1 of the year 2007 it was negative).

Inflationary expectations represent also a significant element of transmission mechanism. They are mostly formed on the basis of achieved inflation, but in turn they have recurrent impact on the inflation in the following period, so that the bringing down of inflation offers multiple rewards. Essentially, the idea is that once the inflation is brought down to a low level, keeping it down, if followed by the fall in inflationary expectations, would not demand restrictive measures. For this reason, it is very important for the central bank implementing the regime of targeted inflation to have stable expectations. An important role here is played by the permanent relations nurtured between the central bank and the public, i.e. strengthening of its transparency.

Visoka inflatorna očekivanja dodatno su bila podstaknuta i posledicama međunarodne krize likvidnosti - nestabilnim kretanjima na deviznom tržištu, povećanjem premije rizika i drastično smanjenim prilivom kapitala koji su neutralisali dezinflatorno dejstvo po osnovu smanjenja agregatne tražnje.

Pored eksternih faktora na kretanje inflacije u 2008. godini uticali su i interni faktori - pre svega politička neizvesnost posebno izražena u prvoj polovini godine i deprecijacijski pritisci po tom osnovu kao i ekspanzivniji karakter fiskalne politike od provoditno očekivanog.

Sredinom 2008. godine bilo je već sasvim izvesno da i pored izrazito restriktivne monetarne politike Narodne banke Srbije, cilj predviđen za tu godinu neće biti ispunjen. Naime, monetarne vlasti su do oktobra ukupno pet puta povećavali referentnu kamatnu stopu (sa 10% na 15,75%). Zatim, krajem oktobra, kao reakciju na novonastale značajne depresijacijske pritiske i po tom osnovu inflatorne pritiske referentna kamatna stopa je još dodatno povećana za 200 baznih poena. Takođe, ovim potezom NBS je pokušala da eventualnim smirivanjem kursa dinara smiri i problem povlačenja devizne štednje građana. Međutim, ipak karakter monetarne politike u poslednjem tromesečju prošle godine bio je manjeg stepena restriktivnosti pre svega zbog visoke deprecijacije dinara od oko 14%. Tako je bazna inflacija na kraju 2008. godine iznosila 10,1% i bila znatno iznad gornje granice ciljanog raspona predviđenog za tu godinu (3-6%).

Ipak, treba imati u vidu da je 2008. godina bila neuspešna i za druge centralne banke koje su prihvatile režim ciljanja inflacije. Ovakav razvoj događaja trenutno među analitičarima (posebno onim koji su i u početku smatrali da nov okvir nije optimalno rešenje za Srbiju) otvara pitanje adekvatnosti izbora strategije ciljanja inflacije kao relevantne, s obzirom na okolnosti i stvara brojne kritike postojećem režimu. Međutim, takođe se postavlja pitanje šta bi eventualno bila alternativa postojećem režimu - politika fiksnog deviznog kursa? Imajući u vidu iskustva drugih zemalja (pa i naše sopstveno s početka 2000-tih) može se

zaključiti da je korišćenje ovog okvira dobro rešenje u situaciji kada želite da u kratkom vremenskom periodu spustite inflaciju sa visokih nivoa ali nije adekvatna strategija ukoliko želite da posle obaranja i održite stabilan nivo cena. Takođe, politika fiksnog deviznog kursa ne predstavlja dobro rešenje u situacijama eksternih šokova. Enormno visok rast cena nafte i drugih primarnih proizvoda započeo u 2007. godini kao i kriza na međunarodnom finansijskom tržištu doveli su do toga da su u okviru Evropske unije najveće stope inflacije, u junu 2008. godine, zabeležene u zemljama koje ne primenjuju režim ciljanja inflacije već jedan od režima fiksnog deviznog kursa - Estonija i Bugarska (*currency board*).

Ovim člankom smo, između ostalog, hteli da ukažemo i na to da ideja koncepta ciljanja inflacije i nije da inflacija po svaku cenu bude na cilju, već da monetarne vlasti snose odgovornost za ostvarenje ciljanje inflacije u srednjem roku. Odnosno, tek premašivanje cilja u dužem vremenskom periodu bi ukazivalo na neuspeh režima, što vreme treba da pokaže. Ono što je nesreća za Srbiju jeste to da je nju serija eksternih šokova zadesila odmah u drugoj godini sprovođenja novog režima dok u relativno stabilnim uslovima (2006. i 2007. godina) monetarne vlasti nisu imale problem sa inflacijom.

I pored činjenice da je dosadašnje iskustvo NBS u sprovođenju novog okvira monetarne politike relativno zadovoljavajuće ipak postoji čitav niz elemenata na čijem unapređenju monetarne vlasti još moraju da rade i čitav niz problema koji moraju da reše i unaprede, kao što su relativno visok nivo nepoverenja u domaću valutu, relativno nizak nivo kredibiliteta monetarne politike, nizak stepen koordinacije fiskalnih i monetarnih vlasti, još uvek relativno slab transmisioni mehanizam kamatne stope, visok stepen evrzacije domaće privrede. Takođe, unapređenja su neophodna i u procesu donošenja odluka kao i tehnika za sprovođenje monetarnih i deviznih operacija. Unapređujući ove elemente ujedno će se uticati i na razvoj i unapređenje domaćeg finansijskog tržišta i ojačati transmisija mera monetarne politike.

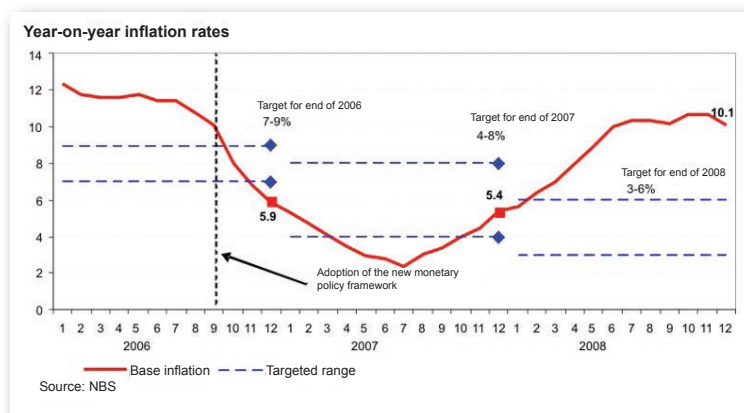
Practical experience of the nbs in the new framework implementation

An analysis of short experience that the NBS had in the implementation of the new framework leads to the conclusion that it is rather satisfactory. During the initial two years of the regime implementation the base inflation was successfully brought down and kept at a relatively low level.

After a high base inflation in late 2005 there was a significant slowing down of the base inflation during the following year and by the end of 2006 base inflation was below the floor of the targeted range. The main cause of slowing down was a significant nominal appreciation of the dinar, especially manifested in the second half of that year.

By the end of 2007, the target was reached and the base inflation remained within the targeted range.

However, the target for the year 2008 was not reached and the base inflation by the end of the said year was significantly above the upper limit of the targeted range. A series of external shocks⁶ in the previous year caused a significant growth of inflationary expectations in the beginning of the following year and was one of the main causes for accelerated inflation growth.



High inflationary expectations have additionally been fuelled by the effects of the international liquidity crisis - unstable movements on the foreign exchange market,

higher risk premiums and a drastic fall in capital inflow, which have neutralised disinflation effects based on the fall in aggregate demand.

In addition to external factors, inflation trends in the year 2008 were also impacted by the internal factors - primarily by the political uncertainties especially manifested in the first half of the year and depreciation pressures based thereupon, as well as the character of fiscal policies more expansive than previously expected.

In mid-2008 it became definitely certain that in spite of extremely restrictive monetary policy of the National Bank of Serbia, target set for that year will not be reached. Namely, monetary authorities have, up to the month of October, increased in a total of five times the reference interest rate (from 10% to 15.75%). Then in late October, as a reaction to the newly arrived significant depreciation pressures and on that ground the inflationary pressures, reference interest rate was yet additionally increased for 200 basis points. In addition, National Bank of Serbia, by making this move, tried through calming down of the dinar exchange rate to pacify also the problem of withdrawal of foreign exchange savings by citizens. However, the character of monetary policy during the last quarter of the previous year still remained to a lesser degree restrictive, primarily because of

the high dinar depreciation of some 14%. Thus the base inflation at the end of 2008 reached 10.1% and was significantly above the upper limit of the targeted range forecasted for that year (3-6%).

Nevertheless, it is necessary to bear in mind that the year 2008 was unsuccessful also for some other central banks which had adopted the regime of targeted inflation. Such developments at present are opening up amongst

the analysts (especially those who have argued from the beginning that the new framework is not an optimum solution for Serbia), the question of adequacy of the choice of the

⁶ Oil prices on the world markets, from the start of the year 2007 up to June 2008, were tripled, while the prices of the most important agricultural commodities in the same period were more than doubled.

Literatura / References

1. Batini N. Laxton D. Under what conditions can inflation targeting be adopted? The experience of emerging markets, paper presented at ninth annual conference of the Central Bank of Chile, Santiago, Chile, 2005.
2. Johnson, David. "The Credibility of Monetary Policy: International Evidence Based on Surveys of Expected Inflation", in *Price stability, Inflation Targets, and Monetary Policy: Proceedings of a Conference Held by the Bank of Canada, May 1997*.
3. Leiderman, Leonardo and Gil Bufman. "Inflation Targeting Under a Crawling Band Exchange Rate Regime: Lessons from Israel", in *Inflation Targeting in Practice: Strategic and Operational Issues and Application to Emerging Market Economies, 2000*.
4. Mishkin, Federic S. "Inflation Targeting in Emerging Market Countries", NBER Working Paper No. 7618 (Cambridge, Massachusetts: National Bureau of Economic Research), 2000.
5. Leiderman, Leonardo, and Lars E. O. Svensson, Eds. *Inflation Targets* (London: Centre for Economic Policy Research), 1995.
6. Andrea Schaechter, Mark R Stone, and Mark Zelmer. *Adopting Inflation Targeting: Practical Issues for Emerging Market Countries*.
7. Ball Laurence, Makwin Gregory. "Relative Price Changes as Aggregate Supply Shocks," *The Quarterly Journal of Economics*, vol. CX, nr. 1, 1995.
8. Bermanke Ben, Laubach Thomas, Mishkin Frederic, Posen Adam. *"Inflation Targeting - Lessons From the International Experience"*, Princeton University Press, Chicester-West Sussex, 1999.
9. Christoffersen Peter, Wescott Robert. *"Is Poland Ready for Inflation Targeting?"*, IMF Working Paper WP/99/41, 1999.
10. Cukiermann Alex. *"Central Bank Strategy, Credibility and Independence"*, Cambridge, Mass: The MIT Press, 1992.
11. Debelle Guy. *"Inflation Targeting in Practice"*, IMF Research Department Paper No. 35 (Washington: International Monetary Fund), 1997.
12. Narodna banka Srbije, (2002 - 2007), Godišnji izveštaj.
13. Narodna banka Srbije, (2007 - 2008), Izveštaj o inflaciji

targeted inflation strategy as a relevant one in view of circumstances, and are creating numerous criticism against the present regime. However, the question is also pending as to what could have eventually been the alternative to the existing regime - the fixed exchange rate policy? Mindful of the experiences of some other countries (and even our own in the early 2000s) it may be concluded that the implementation of such a framework is a good solution in the situation when you wish to lower inflation over a short period of time from a high level, but that it is not an adequate strategy if you wish, after lowering the inflation, to maintain a stable level of prices. In addition, the fixed exchange rate policy is not a good solution in the situation of extreme shocks. An enormously high growth of oil prices and other primary commodities in the year 2007, and also the crisis on the international financial markets, have brought about the situation that within the European Union the highest inflation rates, in June 2008, were recorded in the countries which were not applying the targeted inflation regime, but one of the fixed exchange rate regimes - Estonia and Bulgaria (*currency board*).

This paper was an attempt to demonstrate, among other, that the idea of the targeted inflation is not a concept designed to have the inflation at any cost reach its target, but that the monetary authorities are vested with responsibility to see the inflation remain within targeted range over a medium-term period of

time. In other words, only the targets exceeded over a longer period of time would demonstrate the failure of the regime, and this should be left for the time to tell. What is unfortunate for Serbia is that it was impacted by a series of external shocks immediately in the second year of the implementation of the new regime, while during the relatively stable conditions (years 2006 and 2007) monetary authorities did not have a problem with inflation.

In spite of the fact that so far the practical experience of the NBS in the implementation of the new monetary policy framework is rather satisfactory, nevertheless there still remains an entire series of elements to be still worked on and upgraded by the monetary authorities, and also an entire series of problems to be resolved, together with still prevailing rather high level of lack of confidence in the local currency and monetary policy, a low degree of coordination between fiscal and monetary authorities, and still remaining relatively weak interest rate transmission mechanism, a high degree of Euroisation, and a high and constant capital inflow. In addition, upgrading is also necessary in the process of decision making and in the techniques for implementation of the monetary and foreign exchange operations. Upgrading of these elements will impact the development and promotion of the national financial market and strengthening of the transmission mechanism for the monetary policy measures.