Monetary policy and insolvency of economic sector*

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Abstract: The main task of monetary policy of our central bank is to achieve and preserve stability of prices and currency. Targeted inflation rate has been chosen as operating instrument for gradual realization of low and stable inflation, along with elimination of inflation expectations. Also, a specific inflation corridor is chosen to ensure operations, transparency and *ex ante* effects of monetary policy. The paper presents analysis on whether there really is a restrictive monetary policy, deflections of real inflation from the programmed one, level of "restrictiveness" of monetary policy and behaviour of bank loans, money supply, nominal and real economic growth. Analysis is carried out and criticism of concepts of monetary regulation of mandatory bank reserves, blocking of financial bank potential through monetary regulation instruments, but also relations between central and business banks through open market policy. Criticism of repo operations and complete disappearance of selective credit policy is provided as well. The problem of almost embedded insolvency of economic sector is highlighted.

Key words: monetary policy, stability, currency rate, reference interest rate, restrictions, bank loan, projected inflation, overrated currency rate, mandatory reserves

Apstrakt: Osnovni zadatak monetarne politike naše centralne banke je postizanje i očuvanje stabilnosti cena i deviznog kursa. Izabrana je ciljana stopa inflacije kao operativni instrument za postepeno postizanje niske i stabilne inflacije, uz otklanjanje inflatornih očekivanja. Pri tome je izabran i određen koridor inflacije da se osigura operativnost, transparentnost i *ex ante* delovanje monetarne politike. U radu se analizira da li se stvarno vodi restriktivna monetarna politika, odstupanja stvarne od programirane inflacije, stepen "restriktivnosti" monetarne politike i ponašanje bankarskih kredita, novčane mase, nominalnog i realnog privrednog rasta. Posebno se vrši analiza i kritika koncepcija monetarnog regulisanja obaveznih rezervi banaka, blokiranje finansijskog potencijala banaka preko instrumenata monetarnog regulisanja, ali i odnosi centralne i poslovnih banaka preko politike otvorenog tržišta. Pri tome se daje kritika repo operacija i potpuni nestanak selektivne kreditne politike. Posebno je naglašen problem gotovo ugrađene nelikvidnosti privrednog sektora.

Ključne reči: monetarna politika, stabilnost, devizni kurs, referentna kamatna stopa, restrikcije, bankarski kredit, projektovana inflacija, precenjeni kurs, obavezne rezerve

1. INTRODUCTION

Monetary and credit mechanism and active monetary policy are becoming a top priority of our macroeconomic stabilisation and development policy. This is due to several reasons:

1) Criticism of selected model and instruments of monetary regulations,

2) Criticism of basic goals of monetary policy (exclusively goal of stabilisation),

3) Unsynchronization of monetary and fiscal (and other parts of macroeconomic) policy.

4) Dominant impact of foreign currency transactions to monetary policy.

5) Even more present is the issue of total monetary-credit mechanism through which monetary policy of our central bank is carried out. Is that model adjusted to conditions of our economy? Does it lead to great counter effects, along with deepening of economic crisis and creation of huge illiquidity of economic sector?

6) Price stability is an important condition for permanent economic growth, but only in case it was not realized by monetary restrictions and deflation. Opinion of monetary authorities that price stabilisation means stabilisation of economy presents fundamental economically unfounded assumption.

7) From the above stated arises the fact that change of our monetary policy model is required.

2. MONETARY STRATEGY AND MAIN OBJECTIVES OF MONETARY POLICY – INSUFFICIENT KNOWLEDGE OF EFFECTS OF MONETARY POLICY

First of all, let's review the main task and objective of monetary policy, and then basic instruments for their realization as well as its efficiency, especially regarding economic sector and its activities.

The main task of monetary policy of our central bank is "achievement and preservation of price stability" [16]. Therefore, a targeted inflation rate was selected as operating instrument for gradual realization of low and stable inflation. The selected inflation corridor should ensure operations, transparency

and very important *ex ante* effects of monetary policy (along with mitigation o or neutralisation of inflation expectations).

During introduction of a new strategy of operating monetary policy, the following inflation corridor was defined, in order to gradually reduce targeted inflation rates.

Table 1. - "Squeezing" inflation into corridor and real inflation rate - in % -

		Inflation corridor	Projected inflation	Real inflation rate
2006.	7-9	9,3	6,6	11,0
2007.	4-8	6,5	10,1	10,5
2008	3-6	6,0	8,6	17,75
2009.	2-5	7,5	6,6	10,0
2010.	2-4	6,0	10,3	11,5
2011.	2-4	5,4	7,0	9,75

Source: (17 tab. 27A)

Inflation corridor (range) is constantly getting narrower, but also annual possible oscillation of inflation. Therefore, the main objective is to achieve and maintain price stability through targeted inflation as monetary strategy. In the selected strategy, the reference interest rate becomes the basic instrument of monetary policy, while currency rate becomes indicator of this policy, and other measures and instruments are more of ancillary character. Thus, monetary policy measures become transparent. Targeted inflation rate should ensure maintenance of medium-term price stability that would in the medium-term approach to the inflation level in the EU (2-3% annually). Range presents zone of acceptable inflation trends, which could lead to smaller temporary shocks that could cause short-term oscillations in inflation rates.

Targeted inflation rate within the range is achieved by corrections of interest rate to two-weekly repo operations, which present reference rate and key instrument of monetary policy. Other instruments and interventions of monetary policy in the foreign exchange market have ancillary role. Decision on reference interest rate is passed according to economic situation, actual economic trends, status and evaluation and forecast of real economic and inflation trends. Central bank informs the public on inflation corridor and reference interest rate for the following period [21].

The objective is to reduce inflation expectations to minimum, and to make monetary policy measures transparent for the public.

At the same time, general inflation rate can be divided into two sectors:

1) Base inflation is result of market relations on which central bank can influence with its instruments. Differentiation to total and base inflation is used for analyzing effects of supply shocks, which facilitates differentiation of temporary and permanent inflation effects. Attemps have been made to

neutralise supply shocks on inflation by using monetary policy (cost impact), which often leads to reduction of economic activity.

2) Regulated or controlled prices (by the state) on which it cannot influence enough (that are basically under competence of the government).

By transition from the initially high inflation to moderate and low stable inflation rate, monetary policy should find an answer:

1) regarding the speed of disinflation,

2) how much should monetary policy be flexible, that is, degree of adjustment to temporary shocks in order to avoid high costs due to oscillations in economic activity?

There lies the answer to question: why does not central bank achieve immediately low inflation? Reason for this is the fact that increase of costs or stabilisation price is higher rather than proportional to the disinflation rate [2].

3. RESTRICTIVENESS OF MONETARY POLICY, REALIZATION OF LOW AND TARGETED INFLATION RATE

Is restrictive monetary policy applied in our economy for years in order to achieve low and targeted inflation rate? "Restrictive" monetary policy is used to maintain stability of prices and foreign currency.

Process of gradual reduction and stability of prices should be realized without negative impact to real macroeconomic trends.

There are many basis for gross inflation to be divided into base and regulated one, because it creates foundation for separation of responsibility of central bank and the government (for regulated prices), and thus merging monetary and fiscal policy in order to control inflation.

Central bank can influence market prices (money supply, interest rate, foreign currency, demand, etc.) by using restrictive monetary policy and money scarcity, but with difficulties and restrictions can influence prices regulated by some other parts of macroeconomic policy of the state. This is basis for increase of inflation of costs on which monetary policy can have little effect without jeopardizing economic growth (this refers specifically to high real increase of public and private spending). If the bank tried to balance cost-push inflation it would regularly lead to huge insolvency, because money supply cannot follow prices inflated due to costs [3].

There are many grounds for transition to targeted inflation (that is being introduced by other countries), especially due to higher certainty, transparency of monetary policy, removal of inflation expectations, etc. However, it is difficult to apply this concept fully and without reserves into insufficiently developed economy that should develop rapidly (under high growth rates) and deal with problems such as very low

growth rates, high unemployment, high foreign debt and payment balance. In such conditions, the only objective of monetary policy cannot be price stability. that practically excludes instruments of active monetary policy (effects of money, loan, interest rate, foreign currency) as a strong motivator for economic growth and activities. This concept is accepted from fear of inflation, with thesis that price stability is assumption of economic growth. Basically, possibility of monetary recovery of economy is rejected, without danger of entering the high inflation zone. This concept in our economy is not studied enough, but a priori rejected, which is obvious strategi mistake.

It should be highlighted that monetary policy cannot achieve basic objective in situation where applied expansive fiscal policy generates cost-push inflation, against which monetary policy is inefficient. We shall see realization of this basic objective of monetary policy in the last several years, and then we shall review the real monetary policy and its basic concept.

Table 2. - Targeted, base, total and projected inflation
In % -

	Targeted inflation	Base inflation	Regulated prices	Total inflation	Projected inflation	Prices of agricultural products
2002.	-	4,4	27,3	14,8	-	13,3
2003.	-	6,1	11,1	7,8	-	6,3
2004.	-	11,0	11,0	13,7	10,0	8,4
2005.	8-10	14,5	14,5	17,7	9,0	36,1
2006.	7-9	5,9	7,4	6,6	9,3	6,7
2007.	4-8	5,4	9,0	11,0	6,5	23,7
2008.	3-6	10,1	6,8	8,6	6,0	13,5
2009.	2-5	4,1	15,5	6,6	6,0	-1,0
2010.	2-4	7,0	10,5	7,0	5,2	11,6
2011.	2-4	7,0	10,5	7,0	5,2	11,6

Source: (17 tab. 27A)

Planned inflation corridor, as we see, is constantly narrowing just like base inflation, which is the main objective of restrictive monetary policy.

Central bank in our country has been transferring since 2009 to monitoring inflation through consumer price index, instead of retail price index (which is practice in other central banks that moved to targeted inflation). Consumer price index more fully reflects inflation trends (this index includes catering and healthcare services, education services, financial services and annuities).

By shifting to consumer price index as an inflation indicator, but also because of high deflections of real inflation from the projected one and established range of targeted inflation, the central bank has been transferring since 2009 to new programmed concept and inflation ranges. We shall see now the programmed concept and ranges in the following period.

Table 3. - Annual inflation rates – new methodology
- end of period status –

	2003.	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.
Retail prices	7,8	13,7	17,7	6,6	-	-	-	-	-
Consumer prices	-	-	-	-	11,0	8,6	6,6	10,3	7,0
Base inflation	5,9	11,3	14,5	5,9	7,9	10,3	4,1	8,6	7,0

Source: (12 i 17)

Table 4. - Projected inflation, range and central value
- in % -

	Initial level	Final level	Central value		Expected inflation
			Initial	Final	
2009.	8-12	6-10	10	8	7,6
2010.	6-10	4-8	8	6	6,0
2011.	4-8	3-6	6	4,5	5,2
2012.	4-6	2-5	5	4,0	4,0

Source: (12 i 13)

Increased flexibility of monetary policy is followed by a concept of restrictions – in order to maintain monetary stability and stability of foreign currency. Basically, such concept advocates a thesis that the main objective of monetary policy is stability of prices and foreign currency (with long-term elimination of inflation expectations).

In long-term it is considered that targeted inflation should not contain conflict between stabilisation of prices and real economy. Price stability should be achieved by optimum level of economic activities. Optimum adjustment of monetary policy to inflation shocks is harder in disinflation. Monetary policy must take into account not only inflation but trends and stability of real economy. Flexibility of targeting inflation links long-term goal of monetary policy – realization of targeted inflation, and short-term goal - real economy stability, by eliminating inflation expectations. Inflation expectations must be stabilised [18].

Was disinflation followed by drop in economic growth rate, unemployment rate and high increase of insolvency, especially in economic sector, with "additional" inclusion of foreign currency reserves, but without stimulative development measures? We believe it to be one of the most important issues regarding the entire concept of monetary regulations.

Conflict does not exist in short-term because economic activities are secondary effect of demand stabilisation – since they share the same direction. With cost-push inflation (supply shocks), prices and economic activities have opposite directions.

The truth is that acceptance of "inflation corridor" and projection of inflation with reference interest rate, as a basic instrument of monetary regulations, is complemented by projection of trends of other macro aggregates.

Table 5. - Additional macroindicators of projected monetary policy - in % annual growth –

Macroindicators	2006.	2007.	2008.	2009.	2010.	2011.
Annual inflation rate	6,6	11,0	8,6	6,6	10,3	7,0
Money supply M_1	38,0	24,4	-3,1	7,3	-2,0	15,4
Money supply M_3	38,3	42,5	9,8	21,5	12,9	10,1
GDP - real	5,5	6,9	5,4	-3,5	1,0	1,9
GDP - nominal	17,3	19,4	18,1	3,9	5,6	8,9
Consolidated fiscal balance in % GDP						
- IMF Methodology	-7,4	-0,5	-3,8	-6,0	-4,8	-4,4
- NBS Methodology	-7,5	+2,3	-2,5	-5,8	-4,3	-4,5
- Real public sector deficit/GBDP	-2,0	-3,6	-4,0	-9,9	-10,0	-14,4
Balance of goods and services in % GDP	-19,8	-22,9	-22,0	-18,0	-14,0	-16,9

Source: (11 i 17)

Apart from the basic inflation indicators, the project contains several other macroindicators such as money supply changes M_1; bank loans changes; change in foreign currency reserves; changes in foreign currency rates and changes in international indebtedness; changes in structure of payment balance; changes in structure of fiscal demand. These are all assumptions to shift to regime of explicit targeting of inflation. At the same time a specific interest rates corridor and mechanism for interest rates management is introduced instead of their free creation. Globally observed since 2008, money supply (M_1) is moving quite restrictively in relation to GDP, which had to be reflected on high and increasing insolvency in economy.

If you take as an indicator of money supply in the economy ratio of money supply (m1) and GDP, then this coefficient in our economy is between 9% and 10%, while in other economies is sevral times bigger (with bigger speed of money circulation). So, in the USA it is 34,3, in Germany 43,1, France 24,4, Italy 35,8, Canada 22,2, Hungary 26,8 and China 52% (8). If you consider only ratio of money supply in economic sector, then this ratio is between 2,3 and 2,9%. Economy, simply, does not have money to perform normal business operations, it is insolvent, in deep deflation and disabled for development.

In this period money supply M_1 increased on average by rate of 4,4%, nominal GDP 9,2%, and real GDP only 1,2%. On the other hand, money supply (M_3) that moved under annual high growth rates showed that prevailing significance was given to foreign exchange deposits in this structure.

Defining optimal monetary policy according to trends of GDP, mostly real one due to the policy of price stability and low inflation, is not adequate even when you add targeted inflation. Reasons for it are as follows:

1) GDP is mostly (almost 70%) "created" in service sector, which is beyond scope of monetary policy but under influence of allocation of GDP (income). Monetary policy does not control allocation and monetary flows.

2) The biggest part of GDP is directed to public sector (budget spending), which accounts for 42-48% of gross product. Budget spending is not under influence and "support" of monetary policy.

3) Bigger part of GDP is directed to export (about 22-25%), so that big part of products is exported (but is "adjusted" by significantly bigger import that fill s up domestic market, which is not influenced by monetary policy). *Export* due to non-selective monetary policy is not supported by adequate credit support (export loans).

4) Foreign exchange inflow out of export part of GDP (money transfers, privatisation, donations, financial loans and the like) has no direct connection with GDP, except for its "additional" demand, does not increase it but produces additional issuance of primary money and big discrepancy in generation and spending (demand) of gross product. Disbalance is embedded in production and spending of GDP (in our economy it goes up to 30-35%).

Ratios between money supply (M1) and GDP are global indicator that does not show structure and allocation of money per sectors, which is very important in running operational and sufficiently stimulative (selective) monetary policy. That refers to the structure of money supply (money in cash and deposit money).

Due to the stated reasons, only selective monetary policy can have completely defined and desirable stimulative effect on economic activity. Quantitative regulations include sphere of allocation and re-allocation of incomes, i.e. blocking and immobilizing cash assets. In order to ensure such regulation, it is necessary to know and have under control all monetary, credit and financial flows. However, neoliberal model disables it completely in a non-critical manner.

Without the above mentioned we cannot talk about directed, active and efficient monetary policy functioning as reviver of economy and economic growth, but also optimal solvency of economy.

4. MONETARY DESTRUCTION OF ECONOMY - MONETARY RESTRICTIONS

Is really restrictive monetary policy used for stabilisation? Can reference interest rate calm inflation and change behaviour of bank sector? Can restrictive monetary policy ensure long-term price stability and defend highly overrated

dinar? How does long-term restrictive policy affects economic growth, especially economic sector solvency? This is very interesting question, especially its anti-recession and stimulative effects.

These are all questions of great importance for operational monetary-credit policy.

Restrictive monetary policy as basic leverage of selected strategy is less efficient when inflation causes are operating costs ("supply shocks") and during low economic growth rate – which means bigger instability of real economy. Can such linear (quantitative) monetary policy and pure quantitative regulations be efficient in curbing inflation without jeopardizing economic and especially structural growth and other basic development objectives? Quantitative monetary regulations start with implicit assumption that market automatism, rational behaviour of all entities and monetary flows ensure optimal allocation of money supply and money demand. These are mostly uncontrolled processes, irregular flows and often unexpected results that monetary authorities try to adjust *ex post*. Monetary policy is put in *ex post* position. Can "restrictive" monetary policy neutralize budget expansion and public spending, i.e. high growth of real incomes of employees? Where does this attempt lead to? Is finally restrictive monetary policy implemented, as our central bank regularly underlines. Where can restrictiveness of monetary policy be seen – in low growth of money supply, primary money, bank loans, interest rates level, bank reserves in dinars, bank solvency and the like [7].

4.1 Level of restrictiveness of monetary policy and stability of economy

Our central bank regularly states that we are "implementing restrictive monetary policy in order to calm demand and prices". Is it really? If you take nominal GDP instead of a real one as indicator of necessary money supply and optimal solvency of economy, then you could see that in 2004 money supply was increased by 12%, and nominal domestic product by 22%; in 2005 the ratio was 30,3%:23%; in 2006 it was 38,1:17,3%; in 2007 it was 24,4%:19,3% and in 2008 money supply minus 3,1% and nominal GDP was 16,9%. In 2009 real growth of GDP was minus 3,5%, money supply growth 7,2%, and nominal economic growth 1,9%. Money supply in the entire period (2003-2011) increased on average by 15%, and nominal economic growth rate (real growth increased by inflation) by 14,6%. If you add to real economic growth the level of projected inflation, then surplus of money supply exceeded such "projected" growth and inflation in 2005 was 15%, in 2006 was 23% and in 2007 was 11%. However, restrictiveness is felt in period 2008-2010 when relaxation of monetary policy occurred in 2011. Therefore, one cannot say that restrictive monetary policy was implemented as a whole in previous period. Is restrictive policy implemented through bank loans? Annual growth of bank loans is extremely high - 33% in 2003, 46,6%, in 2004, 52,2%, in 2005, 16,7% in 2006, 39,2% in 2007, 34,5% in 2008 and 16,1% in 2009. Average growth of bank loans in period 2003-2011 was 29%, and the growth of nominal GDP was 17%, and real was 3,7%. Problem is even bigger because the largest portion of increase of bank

loans refers to increase of consumer loans, which is almost 50% annually on average (since all banks are oriented to consumer loans), which basically generates final spending, demand for consumer goods and pressure on import (share of consumer goods in total import is approximately 22-25%).

We shall see the level of "restrictiveness" of monetary policy for the last several years.

Table 6. - "Restrictiveness" of monetary policy
- annual growth rates –

Macro aggregate	2003.	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.
Real economic growth	2,4	8,3	5,6	5,2	6,9	5,4	-3,5	1,0	1,9
Nominal economic growth	14,8	22,0	23,3	17,3	16,0	16,9	1,9	10,1	8,9
Money supply (M_1)	5,9	12,4	30,3	38,1	24,4	-3,1	7,3	-2,0	15,4
Money supply (M_3)	27,8	31,9	42,9	38,3	42,5	9,8	21,3	12,9	10,1
Net bank loans in dinars [*]	32,8	46,6	52,2	16,7	39,2	34,5	14,9	27,5	5,0
Inflation rate	7,8	13,7	17,7	6,6	10,1	8,6	6,6	10,3	7,0
Projected inflation	8,0	10,0	9,0	9,3	6,1	6,0	7,6	6,0	5,2

Source: (11 i 17)

* Note: Net bank loans granted to the non-governmental sector refer to gross loans reduced by loss reservations for such loans.

In the whole period, the average rate of real economic growth was 3,7%, and nominally 14,6%, while average money supply (M_1) increased by a rate of almost 15%, and consumer loans in dinars by 27%. All monetary aggregates increase significantly faster than real economic growth, and with several years in relation to nominal growth of GDP. According to the stated indicators, a restrictive monetary policy is not implemented but a more balanced and adjustable one (except in 2006 and 2007). Solvency of economic sector should be ensured and almost on optimal level, according to these relations. It would be interesting to see allocation of money and loans in the sector, especially position of economic sector (how many use bank loans, and how many "keep" money supply). What is happening with bank loans granted to economy? Where are money and loans going? That problem shall be addressed later in detail.

4.2 DIRECTION AND ADEQUACY OF MONETARY POLICY AND ITS ADJUSTMENT TO ECONOMIC ACTIVITIES

Can money supply be reliable and representative indicator in implementing adequate and desirable monetary policy? Does central bank's policy creates a special solvency? Is there a connection between primary money and credit policy of banks in the process of financing economic sector? Is optimal structure of money supply and sector solvency formed?

In the structure of money supply (M_1) the share of money in cash increased from 34% to 39%, while share of deposit money adequately decreased.

At the same time, share of money supply M_1 in aggregate M_3 rapidly decreased from around 32% to only 18%. This happened due to effects of sudden increase of foreign exchange deposits. Structure of total liquid funds worsened suddenly, thus making possibility to implement directed monetary policy very limited. If big portion of foreign currency funds is used as "parallel money" and payment means, then it is obvious highly disturbed relation between commodity supply and purchase funds on the market. Foreign currency cannot be used for payment in domestic market, otherwise it would require fundamental change of the concept of monetary regulations and aggregates. Hence the general request for "deeuroisation" in our economy.

Allocation of money supply in the sector (M_1) and bank loans is a better indicator of direction and adequacy of monetary policy and its adjustment to economic activities. First we shall see allocation of money supply – liquidity in sector.

Table 7. - Money supply – sectoral allocation - amounts in billions dinars –

	Total (M_1)	Enterprises in economy	Share in %	Public enterprises	Population	Share in %	Other fin. organisations	Local government	Non-profit organi-sations
2005	144,9	55,2	37,0	9,9	67,1	46,6	5,3	5,9	5,3
2006	200,1	81,7	40,8	9,3	89,8	44,9	6,0	9,5	6,0
2007	248,9	108,0	43,4	14,8	104,6	42,0	7,3	9,9	7,3
2008	240,7	76,6	31,8	9,3	132,0	54,8	4,6	11,3	4,6
2009	258,4	83,0	32,1	11,1	144,7	56,0	5,7	8,8	5,6
2010	253,3	79,8	31,5	10,2	139,2	55,0	5,6	9,1	5,9
2011	293,3	89,0	30,3	8,5	174,2	59,4	6,0	8,4	6,0

Source: (17)

Economic sector (enterprises) participates in money supply with only 30,3%, and tendency to decrease, while population sector participates with almost 60%. In period 2005-2011 money supply in sector of enterprises increased by only 34

billion, in population sector by 107 billion and in other sectors around 7 billion dinars. Share of economic sector in total money supply was reduced from 37-43% from previous years to only 30%, while share of population sector increased from 46% to 59,4%. Out of reproduction sphere money went to sphere of final spending, mostly in form of money in cash in population sector.

Finally, let us see credit activity of banks and orientation of their credit potential. Economic sector (enterprises) must be permanently illiquid and huge amounts of debts and receivables.

Table 8. - Increase of bank credits and structure per basic sectors
- mounts in billions of dinars –

	Total credits non-govt. sector	Growth rate (%)	Credits for enterprises	Growth rate	Share in %	Credits for population	Growth rate	Share in total credits
2003.	237,5	30,8	197,3	28,4	83	29,5	83,2	12
2004.	342,7	44,2	248,3	25,8	72	66,5	125,4	19
2005.	518,3	51,2	351,4	41,5	68	132,1	98,6	26
2006.	60,92	17,5	364,3	3,7	60	203,6	54,1	33
2007.	834,2	36,9	490,1	35,4	59	305,9	50,2	37
2008.	1.124,8	34,8	638,5	30,2	56	428,7	40,1	38
2009.	1.306,1	16,1	756,5	18,5	57	463,0	8,1	35
2010.	1.656,9	26,9	961,2	27,0	58	571,9	23,5	35
2011.	1.784,2	7,6	1.013,4	5,4	56	602,5	5,4	34

Source: (Based on the data from 17)

Bank credits for economic sector increased by relatively high annual rates (except in 2006 and 2011), so that supply of economy with necessary funds should be significantly higher. Share of credits granted to economy had a drop fall from 83% in 2003 and total to 56% in 2011, while share of credits granted to population increased from 12% to almost 35%. Structure of bank placements is essentially changed.

Whom did business banks grant credits (in dinars and foreign currency) per industry branches within economic sector? Did they direct their credit potential towards enterprises? Do banks support economy and its activities? Does the economy create sufficient liquidity with use of bank credits? We shall see some basic data.

Table 9. - Credits and deposits of enterprises with commercial banks
- in billions of dinars –

	Transaction deposits	Term deposits	Foreign curr-ency deposits	Total	Dinar credits	Fore-ign currency credits	Total
Agriculture, forestry and water industry	3,8	3,2	1,4	8,4	44,7	1,9	46,6
Processing industry	22,1	24,0	48,6	94,7	220,1	34,3	254,4
Production of el. energy, gas and water	7,8	3,9	4,9	16,6	10,6	5,4	16,0
Civil engineering	10,5	7,2	10,0	27,7	76,6	2,6	79,2
Trade	25,6	22,8	33,4	81,8	248,8	14,6	262,7
Hotels and restaurants, traffic	6,6	12,8	19,6	39,0	57,1	4,3	61,4
Education, healthcare and social work	1,3	1,9	0,7	3,9	3,3	-	3,3
Real estate, public utilities, personal and service activities	15,8	35,8	21,9	73,5	77,1	2,1	79,2
Entrepreneurs	9,7	0,6	1,0	11,3	43,9	0,1	44,0
TOTAL	103,8	113,4	143,6	360,8	783,8	65,5	849,7

S*ource: (17)*

These data per credit users and creation of transaction deposits (part of money supply M_1) and term deposits do not need special comments. Transaction deposits (as indicator of liquidity of economy), along with high amount of short-term credits in dinars, simply occur and outflow in other sectors and for other purposes.

We shall first see where are placements, credits of banks in economic sector per branches and areas due to their importance for creating GDP, contribution to economic growth, technological characteristics and speed of money circulation.

Allocation of credits per branches and areas of economic sector is not reflection of directed and planned policy nor a selective (stimulative) policy, but almost uncontrolled processes and autonomous factors. It can be clearly seen from previous review. Since business banks and central bank are oriented firstly to repo transactions (operations of open market) and crediting of final spending through granting credits to population sector, there is not enough stimulative and designed (controlled) monetary policy. Quantitative regulations lead to uncontrolled processes in monetary flows and "incorporated" illiquidity of economy.

Table 10. - Banks receivables from economy per branches and areas - in dinars**

	2010.	2011.	Structure in 2011 (%)
Agriculture, forestry, fishing	53.032	55.648	5,4
Processing industry, mining	295.168	308.924	29,8
Electric energy	9.864	10.417	1,0
Civil engineering	117.437	119.432	11,5
Trade	261.166	271.517	26,2
Traffic, warehousing, accommodation services	103.383	134.494	13,0
Real estate, professional and scientific branch, services	60.335	73.249	7,1
Education, healthcare and social protection	60.409	6.893	0,7
TOTAL RECEIVABLES FROM ECONOMY	951,82	1.036.060	100

Source: *(17)*

** Note: The table does not include receivables of entreprises connected with public enterprises that enter and do not enter int consolidation circle, as well as other receivables.

Table 11. - Level of liquidity of total economy and economic sector - in billions of dinars

	GDP	Total money (M1)	Money supply in economic sector (M1P)	Liquidity rate of total economy (M1/GDP)	Liquidity rate of economic sector (MP/GDP	Speed of money circulation in economic sector
2001.	762,2	56,2	17,9	7,4	2,8	42,6
2002.	972,6	93,8	26,5	9,6	2,7	36,7
2003.	1.125,8	99,3	34,8	8,8	3,0	32,3
2004.	1.380,7	111,3	36,6	8,1	2,6	37,7
2005.	1.683,5	144,9	55,2	8,6	3,2	30,5
2006.	1.962,0	200,1	81,7	10,2	4,1	24,0
2007.	2.276,9	248,9	107,9	10,9	4,7	21,0
2008.	2.661,4	240,7	76,6	9,0	2,8	34,7
2009.	2.793,2	258,4	83,0	9,5	3,0	32,6
2010.	2.986,6	253,3	79,9	8,5	2,7	37,4
2011.	3.359,2	293,3	89,0	8,7	2,6	37,7

Source: (17, Tab. 2 i 22.)

In period 2001-2011, total money supply increased by 237 billion dinars, while in the economic sector only by 71 billion. Liquidity rate of economic sector is very low and does not increase. Economy simply does not have money for normal

business operations, it is illiquid and in great deflation, disabled for development. It is important to stress the speed of money circulation per sectors, which is different and highly affects liquidity.

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5. MONETARY POLICY, BLOCKING BANKS' FUNDS AND ILLIQUIDITY OF ECONOMIC SECTOR

Concept and instruments of monetary policy, we stress again, affect economic sector in limiting and almost blocking manner.

We shall se credit activity of business banks in previous period. From 2003 until 2011 credits granted to population increased from 30 billion to 603 billion or by 573 billion, while credits to enterprises in the same period increased from 197 to 1.013 billion or by 816 billion dinars. That lead to change between sectoral structure of money supply, which in population sector increased from 67 to 174 billion or by 107 billion, while in enterprises sector money supply increased from 55 to 89 billion or by 34 billion dinars. It is not illogical that economic sector is mostly illiquid, apart from use of great number of bank credits, and with enormous debts (non-payment). Average growth rate of total credits granted by banks in period 2003-2011 is 25%, credits granted to population sector are 54%, and in economic sec 23%. Economic sector is mostly illiquid, apart from use of bank credits (69.500 enterprises), and with enormous debts (over 260 billion dinars). Average growth rate of total bank credits in period 2003-2009 is 33%, population credits 63% and economic sector credits only 27%.

There are 23.800 blocked companies that owe 207 billion dinars and 40.639 enterprises with 19,5 billion dinars (all without charged interest rate). Automatic bankruptcy await 19.402 companies, and 9.534 companies have been wound up. Also, the public sector owes to economy 100 billion dinars. Average collection period is between 120 and 300 days.

We shall see short-term credits granted to economy and money supply in this sector in the past few years.

Thus designed and implemented monetary policy is not functioning as a reviver of economy and internal growth factors, but business banks (mostly in foreign capital) and final spending. Economic sector is not capable to "keep" used bank credits circulating within the sector – they outflow to other sectors of real spending by generating final demand and not liquidity of reproduction of an enterprise.

Credits of enterprises "fill" channels of other sectors in which income should circulate. Monetary policy cannot have stabilizing function without being extremely restrictive, thus jeopardizing in the first phase liquidity of economic sector (with increase of costs), and then production and turnover, i.e. economic growth [5].

Table 12. - Money supply and short-term credits in dinars granted to enterprises
- in billions of dinars, status at the end of period –

	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.
Money supply In enterprises sector	36,6	55,2	81,7	108,0	85,6	92,7	79,8	89,0
Short-term credits granted to economy	101,5	150,1	156,5	219,4	286,6	346,5	465,9	398,9
Out flow from economy to other sectors	-64,9	-94,9	-74,8	-111,4	-201,0	-253,8	-386,1	309,9

Source: (17)

Money supply in sector of enterprises is increased in the stated period from 36,6 to 89 billion dinars, (52,4 billion), while short-term bank credits in this sector increased from 102 to 399 billion (297 billion). Economic sector is not capable to "keep" transaction money in circulation, its great portion is out flowing through allocation and payments to other sectors and spending. At the end of 2009, the outflow of money (credit) amounted 253 billion dinars, in 2010 around 386 billion dinars or in 2011 it was 310 billion. Central bank is not capable to regulate allocation area, where fiscal policy and income policy prevail. Therefore, money supply cannot be real indicator of money supply to economy, it becomes more and more a bank credit. This specifically refers to sectoral allocation of money supply (M1).

It is outflow of credits so far.

Clearer picture can be seen once you take into account ratios of annual changes in this aggregate.

Table 13. - Annual changes in money supply in economy and short-term bank credits granted to economy - in billions of dinars -

	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.
Money supply (M_1)	1,8	18,6	26,5	26,3	-22,4	7,1	-12,0	9,2
Short-term credits	25,7	48,6	6,4	62,9	67,2	59,9	119,4	-67,0
Outflow of money from sector of enterprises	-23,9	-30,0	+20,1	-36,6	-89,6	-52,8	-131,4	-57,8

Source: Data from previous table.

In period 2004-1011, net increase of money supply in economic sector amounted to 55 billion dinars, while short-term credits used by economy in the same period amounted to 323 billion dinars. In order to prevent outflow of credits from the sector of enterprises, with greater control of the use of credits, it would be necessary to keep short-term bank credits, as part of current account of the enterprise, on a special analytical account.

Is it unusual for sector of enterprises to be illiquid? It is not unusual that "illiquidity of economy is the biggest problem of our economy" as a whole. Did monetary policy contribute to spread of already chronic economical problem? The answer can only be affirmative. This is especially due to the fact that central bank does not control banks with majority of foreign capital, that have their own credit policy and input money from abroad due to our far more higher interest rates compared to the EU states (reference interest rate in our country was both 15,75% and 17,75%, and in the EU was 4,25%, currently it is ratio 9%:1%). Further increase of interest rates would only stimulate such foreign inflow as form of "hot money" that has no function in development, but is a strong inflation factor (external debt accrued to over 33 billion dollars, i.e. from 10,8 to 33,8 billion in the last ten years).

High difference in reference interest rate and interest rate for credits, compared to the EU states, lead do inflow of risk capital by direct external indebtedness of banks, enterprises and the state. High profits of purely speculative character are realized based on difference between interest rates and very high net interest margin. Net interest margin in our banking sector is between 9% and 11%, which is extremely high, while in other developed economies margin is about 1-2,5% [1].

In order to neutralize increased dinar liquidity (by borrowing abroad and selling foreign currency to the central bank), the central bank sells securities to banks through repo operations. In order to be attractive for purchase (and keeping up to expiry of deadline) these securities have very high reference interest rate.

Repo transactions become the main channel of relations between the central bank and business banks. Big portion of liquid bank potential with the central bank has been permanently immobilized.

Repo transactions are used, through treasory notes and other securities, not only to sterilize surplus of liquidity but to great extent to finance budget expenditure. In that manner banks, through attractive and safe placements, instead of crediting enterprises actually finance public expenditure, which "pumps" inflation of costs. Thus economy becomes illiquid, pressure due to costs increase and economic growth rate decreases.

Table 14. - Restrictiveness of monetary policy and channels for withdrawal of money - in millions of dinars -

	2008.	2009.	2010.
Selling foreign currency of the NBS to market (in millions of Euros)	1.407,0	**716,0**	1.815,0
Dinar counter value – money withdrawal (current exchange rate)	124.660	68.606	190.575
Repo transactions in a year	5.239.000	3.122.000	2.150.000
Average status in a year of repo receivables of banks	184.386	126.950	139.134
Repo receivables of banks at the end of year	77.838	151.741	105.756
Sterilization of liquid funds in banking system	309.046	195.556	329.709

Source: (17)

Obviously, reference interest rates cannot through repo transactions to ensure required financial resources for the economic sector. On the contrary, these operations "take away" money to relations between central bank – business banks, and with business banks [9]. Where is economy in that? Where are production and turnover and their support through bank credit policy, but with primary issuance by central bank?

Here should be pointed out the fact that allocated resources for mandatory reserves in dinars were left on the bank's direct transfer account, which enabled them to place these resources. By incorporating mandatory reserve in dinars to bank's direct transfer account, banks are enabled to perform credit expansion, which distorts real picture of banks' liquidity and structure of primary money. Hence, mandatory reserve in dinars is neutralized as a monetary instrument and practically disappeared. We shall se those relations in balance of banks.

Table 15. - Placement of banks' mandatory reserve in dinars
- in billions of dinars, end-of-period data -

	2007.	2008.	2009.	2010.	2011.
Mandatory reserve	30,4	165,2	111,9	65,1	69,5
Direct transfer account	-8,8	29,4	14,8	-7,0	-1,6
Cash money	15,6	18,7	17,4	17,9	21,4
Deposit surplus of banks	44,9	5,5	7,0	11,4	1,0
Total	82,1	218,9	151,0	87,4	90,3
Used mandatory reserves in placements	30,4	135,8	97,1	65,1	69,1
Minus on direct transfer account	-8,8	-	-	-7,0	-1,6
Excessive use of bank's funds	39,2	135,8	97,1	72,1	70,7

Source: *(17,* Tabela 1, 3, 4 i 5.*)*

There are grounds for official cancellation or conversion of mandatory reserves for dinars into short-term securities with different maturity dates.

6. PRIMARY MONEY, MANDATORY RESERVES AND DEPOSITS OF PUBLIC SECTOR

Primary money concept of the central bank is inadequate. It was taken from other countries, although basically does not show much and its structure is not homogenous and even hard to accept as a concept.

Bank reserves (mandatory reserve, direct transfer accounts, deposit surplus of banks and other deposits in dinars, but also mandatory reserve in foreign currency) cannot be considered as primary money, but as a reserve or regulatory money. It cannot be considered as monetary base, but as an instrument of monetary policy and regulation. Functionally, primary money of the central bank can be circulating money in cash, bank credits granted to other sectors and change of foreign currency reserves (but not mandatory foreign currency reserve of banks). Operations with foreign currency reserves (purchase and sale) are channel of primary issuance and withdrawal of money.

Basically, primary money can be only circulating money in cash and credits that central banks granted to business banks (and other sectors), that is, changes in foreign currency reserves of the central bank (and not completely). It is unusual that allocated banks' mandatory reserve is kept on direct transfer account of banks, which enables them to use it permanently and leads to minus on their accounts (see Table 15), and in 2010 7 billion dinars. If you want bigger independence of business

banks and cheaper credits (decrease of interest rates), then you should cancel mandatory reserve in dinars because many countries have done so.

Table 16. - Primary money - functional structure

	2008.	2009.	2010.	2011.
PRIMARY MONEY-DINARS	319,8	254,3	188,2	227,1
Money in cash in circulation***	90,1	95,5	91,8	114,0
Bank reserves in dinars	218,9	151,0	65,1	71,2
- Mandatory bank reserve	165,2	111,9	65,1	71,2
- Direct transfer account	29,4	14,8	-7,0	3,5
- Ready money	18,7	17,4	17,9	18,4
- Deposit surplus of banks	5,5	6,9	11,4	11,7
Other deposits in dinars	10,8	7,7	9,0	8,3
FOREIGN DEPOSITS OF BANKS (mandatory reserve in foreign currency)	194,3	279,5	349,1	385,7
PRIMARY MONEY	514,1	533,8	537,3	612,8

Source: *Izvor*: (17, Tab. 2. str. 20.)

*** Note: Circulating money in cash is part of money supply, but using it makes extremely difficult monetary management and control of monetary flows. That requires that money in cash is even more connected to monetary structure of the population sector. Money in cash is more in function of spending (money out of banks and post offices, mainly in hands of citizens), and less in liquidity of economy. Due to stated reason, comparison of trends of money supply and GDP is not adequate indicator for supply of economy with liquid funds.

Mandatory reserve immobilized (blocked) in 2008 average of 165 billion dinars and in 2011 around 70 billion. Mandatory reserve has "ancillary role" in monetary regulations, with dominant reference interest rate. High and complex mandatory reserve in dinars not only should be reduced, which was anticipated for 2010, but to gradually be cancelled. So, in March 2010 this rate was reduced to 5% (and to foreign currency base 25%). There is no need for this instrument and immobilisation of big portion of banks' deposits (which makes loans adequately more expensive), especially in situation of high capitalisation of business banks. At the same time, mandatory reserve in foreign currency should be cancelled with central bank, but that amount must be directed through banks in order to stimulate export, preparation for export and agriculture – as branches of future and stability of society. [1] Mandatory foreign currency reserve is reduced to 25%. Banks are not obliged to allocate funds for additional external indebtedness and newly collected foreign currency savings (if previiously allocated reserve funds are bigger that the new calculation). Any surplus will be returned to banks in three instalments starting with February 2011). In that manner banks are stimulated to collect foreign currency savings and additionally borrow foreign currency in order to credit private sector.

Recently, there are suggestions th at mandatory foreign currency reserve should be reduced and thus released funds should be "pumped" in economy. However, funds released in such manner and in situation of uncontrolled monetary flows woul very

quickly outflow to sphere of final spending, repo transactions of business banks or to foreign exchange market thus jeopardizing stability of foreign currency rate.

It is unusual that central bank still sticks to the concept that is not adequate for our economy. By inclusion of mandatory reserve into direct transfer account of banks, a path into open credit expansion of business banks is opened. In this manner liquidity of banking sector is artificially increased, which distorts real picture of banks' liquidity.

Here we shall indicate that inclusion of public sector deposit (the state) in central bank balance is a path to extraction of stable and cheap deposits from business banks' balance, which creates their bigger dependence on repo transactions of central bank, i.e. bigger additional external indebtedness that leads to additional increase in price of credits.

7. MONETARY POLICY IS NOT IN FUNCTION OF ECONOMIC SECTOR AND DEVELOPMENT

Monetary policy is not in function of economy and development, necessarily supported by right and oriented credit policy of banks, but mostly in function of relations between central and business banks and generation of final spending, that is, "sterilisation" of money surplus of business banks. Here, monetary policy lost its main function – support of economic processes, development and liquidity of economy, and it turned to consequences in form of support to stability of prices and foreign exchange rate. Price stability as the main goal of monetary policy can be selected as exclusive goal by highly developed countries, but not by insufficiently developed countries and developing countries. The entire concept of monetary regulations compared to economic sector and development is wrong. Concept was borrowed from developed economies that does not suit our economy [19].

We shall see credits of our central bank.

Dinar credits of central bank to its business banks practically disappeared as well as selective instruments of monetary policy. Out of total central bank credits at the amount of 19,3 billion in 2009, credits to the state were 11,4 billion, and to business banks 0,7 billion (only 4% of credits). At the same time, the state deposits with central bank (extracted from business banks' balances) amount to almost 112 billion dinars (dinar and foreign exchange are totally 279,5 billion. Net position of the state with central bank shows that surplus of funds amounted 11,6 billion dinars in 2006, 110 billion dinars in 2007, 61 billion dinars in 2008, 109 billion dinars in 2009, 116 billion dinars in 2010 and 156 billion dinars in 2011. Data refer to the end of year, although during the year surplus of the state with banking sector (central bank) is much higher. In 2011 there is certain improvement in credit financing relations, so that around 53% of credits with central bank refers to credits to banks. Here we pose a question: what is the purpose of the funds given to banks and how did banks use them (were those

credits for certain selective purposes?). It is good that the central bank passed a decision on re-classification of risky assets and off-balance items in evaluation of credit-worthiness, which releases significant funds to banks out of totally reserved funds for losses (181 billion dinars). However, such released funds should be kept on a special account within direct transfer account of banks and control their usage (otherwise funds would go to repo transactions).

Table 17. - Predits of central bank of serbia and mandatory reserve
- in millions of dinars, end-of-period data –

	2005.	2006.	2007.	2008.	2009.	2010.	2011.
Credits to the state	16,5	16,5	10,8	10,9	11,3	1,3	1,3
Credits to banks	0,9	0,5	0,6	2,2	0,7	0,4	5,7
Credits to non-banking financial organisations	8,2	13,5	5,2	5,7	4,9	5,9	1,3
Credits to other sectors	0,5	1,1	1,5	1,9	2,4	3,4	2,4
TOTAL CREDITS	26,4	31,8	18,4	20,8	19,3	11,0	10,7
Share of credits to banks in credits of central bank	3,4%	1,6%	3,3%	10,5%	4%	0,2%	53,2
Bank reserve in dinars (mandatory reserve)	26,0	34,3	30,4	165,2	111,9	65,1	71,2
MANDATORY RESERVE IN FOREIGN EXCHANGE	147,5	253,6	270,2	194,3	279,5	349,2	385,7

Source: (17, Table 18-19 without foreign exchange credits.

Public sector deposits could remain in balance of several domestic banks – that would through competition lead to general reduction in interest rates and improvement of their position regarding foreign banks operating in our country. That means that the resources could be increased through business banks' placements, which would reduce public sector deficit and share of additional sources for budget financing.

8. EXCLUSION OF SELECTIVE AND STIMULATIVE MONETARY POLICY

In this concept of monetary regulations and policy there is no, nor can be, selective credit policy especially stimulation of export, agricultural production, any other production (e.g. preparation for export, tourism), domestic trade, stocks, support to new enterprises, production in certain regions, support to certain investments, production of scarce products, substitute of import and the

like. Everything comes down to linear monetary regulations – where central bank to a great extent lost control over dinar and foreign exchange flows of business banks (especially under control of foreign capital). Operations regarding change in reference interest rate or base interest rate is nothing important and cannot change behaviour of banks, except that it would lead to new increase of interest rates and show to the public that central bank intends to "impose strict" or "relaxed" monetary policy. Reference interest rate was changed frequently so that is not a long-term stable monetary instrument. We shall list only some data: 2006 - 14%, 2007 - 10%, 2008 - 17,75%, 2009 - 16,5% in January, 14% in April, 13% in June, 12% in July and 10% in October, while in 2010 it was reduced to 8%, and then in July increased to 8,5%. In 2011 was increased, then reduced to 10% and finally to 9,5%.

It is hard to believe in efficiency of this instrument in our credit system. Central bank is trying to "neutralise" monetary "surplus" that arose from inflow of foreign exchange due to sale of enterprises and banks or borrow foreign credit through repo operations with high interest rate of 10% to 17,6%, which caused operating loss of the central bank (with significant shifting of interest rates through central bank to business banks through repo operations).

Monetary policy as a concept and numerous instruments for its implementation require thorough reforms and its orientation towards economic growth (production and export), connecting credit policy of banks with formation of savings in certain sectors and increase of employment. Fear from initiating an inflationary spiral is mostly present with those that are not familiar enough with monetary mechanism. Along with high control of all monetary flows of banks and opening process of converting circulating money and credits to cash capital of economy it is possible to make a general turn from exclusively stabilisation function of monetary policy towards stimulative and developing one [6].

9. REPO TRANSACTIONS, IMMOBISATION OF LIQUID FUNDS AND UNAVAILABILITY OF FINANCIAL RESOURCES   TO THE ECONOMY

Mechanism of repo transactions, immobilisation and creation of "profit" of banks is now clear. Namely, due to high reference interest rate in our country, which is 2-3 times higher than the interest rate in developed European economies, both private and foreign banks in our country withdraw foreign exchange funds (by borrowing) in home countries and sell them to the central bank to buy dinars. Dinar amounts are used for purchase of securities of central bank (repo operations) and realize high difference in interest rate (profit). Central bank with that channel "enhances" foreign exchange reserves, but also pays high interest rate to business banks (which is out-flown abroad). The surplus of income of central bank is directed to private banks and abroad instead of budget. That further contributes to the growth of budget deficit. Where is economy in these

transactions? The economy is constantly illiquid, while banks invest "surplus" of funds to central bank – by demonetization.

Here we should have in mind the following effects which were not much publicly discussed.

Repo operations (re-purchase of securities from central bank) immobilized and cancelled 126 billion of circulating (transaction) money from banks with central bank in 2009, based on sales of foreign exchange by central bank to banks (to settle due liabilities of enterprises and banks toward foreign countries) of additional 69 billion in 2009. In total that amounted to 195 billion dinars. During 2010 repo operations sterilised 139 billion, and by big sale of foreign exchange by the central bank in foreign exchange market at amount of 1,8 billion Euros that additionally sterilised 190 billion. Tha is totally 329,7 billion dinars. It is not unusual that enterprises are illiquid, and banks oriented to increasing use of short-term and long-term foreign credits. In 2011 banks used 422 billion dinars in long-term and 21 billion in short-term foreign credits. Central bank should have credited enterprises, but it was transferred to foreign credits. Deeuroisation of economy and banks is advocated (at the same the biggest portion of bank credits contains foreign exchange clause).

Mandatory reserve in dinars blocks another big portion of bank potential, so that immobilised funds are very important. If we compare these funds with total short-term credits granted to economy and money supply in this sector, we get the following relations:

Table 18. - Repo transations of banks and short-term credits for economic sector - in billion of dinars, end-of-period data -

	Repo transactions	Other securities	Mandatory reserve in dinars	Total repo and blocking	Short-term credits for economy	Money supply M_1	
						Total	Economy
2005.	16,8	-	26,0	36,8	150,1	144,9	55,2
2006.	141,9	8,0	34,3	174,2	156,5	200,1	81,7
2007.	207,9	9,8	30,3	248,1	219,4	248,9	108,0
2008.	89,8	9,7	165,2	284,7	298,0	241,1	85,6
2009.	151,7	12,6	111,9	276,2	359,6	258,4	92,7
2010.	105,7	11,0	65,1	201,6	466,6	253,3	80,0
2011.	120,6	11,4	71,2	203,2	398,9	293,3	89,0

Source: (17, Tab. 2)

Blocked and immobilised funds are almost equal to total number of short-term credits granted to economy, in some years are bigger than total money supply (M_1) and 3 times bigger than money supply in economic sector. That forced

banks and enterprises to take big foreign credits and led to sudden increase in foreign indebtedness (of banks and enterprises). We shall see banks' indebtedness.

Table 19. - Banks' external indebtedness
- in billions of dinars, end-of-period data -

	2008.	2009.	2010.	2011.	Annual increase or decrease			
					2008.	**2009.**	**2010.**	**2011.**
Short-term credits	48,1	56,6	63,6	209	10,1	10,0	7,0	-42,7
Long-term credits	49,9	253,7	373,6	421,6	14,0	119,9	48,0	48,0
Total credits	314,8	427,1	495,4	442.5	24,1	112,3	69,3	-52,9
TOTAL LIABILITIES	349,9	500,3	609,7	547,7	...	150,4	109,4	-62,0

Source: (17, Tab. 17)

Banks direct enterprises to directly take foreign credits because of own high mandatory foreign exchange reserve. Indebtedness of the sector for enterprises increased from 3,6 billion dinars from 2001 to 16 billion in 2011, so that main carriers of foreign debt became enterprises. Is the phase in which enterprises would have to pay interest rates to high debts and due repayments considered? How would that affect liquidity of enterprises and their developing capabilities, i.e. how would that generate new pressure and demand for credits.

Foreign exchange is directed to foreign exchange reserve, with allocated foreign exchange reserve (earlier it was 40%, now is 20%), while counter value in dinars is sterilised with central bank. What were effects of this operation? The first effect was increase of external debts and interest liabilities. Central bank often experienced losses due to paying high interests, while foreign exchange inflow led to increase of external indebtedness, but without effect on investments and development. Finally, a question is posed: what will happen in economy once due foreign exchange credits are repaid and interests at the amount of around 5,9 billion dinars in 2012 and 6,5 billion in 2013? What would inflation be in these years if, though unreal (overrated for about 60-80%) "stable" dinar wasn't maintained, and there is no big import (that fills in domestic demand) compared to export. The truth is that dinar exchange rate has been highly overrated for years, so that real value of Euro (real or balanced exchange rate), in order to conduct permanent exchange adjustment, would be today 143 dinars for one Euro, instead of 108 dinars. Only then a question is posed: would it be possible to have anti-inflationary and total policy with high share of im port in GDP (51,5% in 2010) and high import inflation.

Inflation is result of big discrepancies and costs (allocation) where such linear monetary policy has a very limited scope, but its negative effect on payment

balance, production and employment is extremely high. Linear monetary policy along with open market policy in an non-regulated allocation system and uncoordinated fiscal policy leads to big redistribution of funds and permanent illiquidity of enterprises [20].

There has been significant increase in share of general (public) spending in GDP compared to investments and export. Concept and instruments must be fundamentally changed if we want its greater efficiency against inflation, but also in stimulation of economic development, increase of enterprises' liquidity and restructuring of economy. The economy does not have own funds and wrong privatisation concept additionally financially and development-wise disabled enterprises (by paying privatisation funds into budget, instead of restructuring and development of enterprises). Without favourable credits, the economy does not stand a chance for development and stable business operations.

Restrictive monetary policy was applied mostly or exclusively in relation to economic sector.

10. REFERENCE INTEREST RATE, DISCOUNT RATE AND MONETARY POLICY

Monetary policy cannot be based solely on reference interest rate as the main instrument because credits and interest rates are insensitive or little sensitive to changes in reference interest rate of central bank. This happens firstly because banks are no longer dependant on central bank's credits. Decreasing reference interest rate would not cause drop in credit interest rates, but attractiveness of investments in repo operations with considerably lower reference interest would be discouraged and made unattractive. Banks should be oriented towards crediting of economy (production, export, agriculture, essential import and the like), which was expected so far, but it was left uncontrolled and without adequate "additional" central bank's measures.

Economic crisis and recession require gradual reduction in reference interest rate so that business banks could focus on directing free funds to favourable (low interest rate) credits for lagging economy instead to repo placements. Credits subsidized by the state because of the budget cannot be that since they are short-term, do not stimulate economic growth, but create even bigger deficit in budget. The economy was given about 300 million Euros in form of these credits, which meant that the state borrowed from business banks 500 million Euros. And we saw that business banks keep sterile around one billion Euros in form of repo placements with the central bank. Thus we come to a strategic turn – these funds should directly be invested in economic sector. Budget, as we see, should not borrow funds from domestic banks. Financing of budget deficit should be directed to external financing.

Therefore, we should aim at further reduction in reference interest rate according to the EU level, with addition of risk premium in the country and net interest margin as in developed economies. That would be price of primary money, but now as a right orientation regarding price of credit in dinars. Re-orientation should be done from external indebtedness (banks and enterprises) to central bank credits, which practically disappeared. In that case repo operations would lose significance and they are not in function of development and stabilisation of economy but blocking liquid funds of banks. Reason why banks directed their surplus of liquidity to treasury notes and the NBS notes instead of placements to enterprises and population with lower interest rates should be examined. The reason is not only the fact that almost 80% of bank transactions are indexed in Euros (de-indexation of placements of banks is set as urgent move). Here is necessary to incorporate additional stimulative instruments for bank placements into economic sector, and even fiscal instruments.

True, there is danger that reducing reference interest rate and immobilisation of funds from banks and population (mandatory reserves) could cause pressure on the foreign exchange market and foreign exchange with tendency to cause drop of dinar. However, enhanced control of the central bank is required in that case over banks regarding usage of funds and occasional intervention from strong foreign exchange reserves that would disable speculations. Without economic recovery and dynamic growth there is no stable dinar and stability of economy.

Finally, due to adopted model of monetary policy, discount rate is almost "forgotten" and remained completely out of monetary regulations. This rate has not changed for almost six years. Since 2004 until 2010 this rate was "nailed" at level of 8,5%. Only since May 2010 there was equalisation of discount rate and reference interest rate. Since then these two rates are identical, but instruments of monetary policy are not changing. At the end of 2011 these two rates were at about 9,75%, and in 2012 they were decreased to 9,5%.

It is mostly consequence of totally changed relations between central bank and business banks, but also mechanism of monetary regulations as a whole. As with completely neglected selective instruments, the same situation is present with discount policy, where directed and development-wise and stimulative monetary policy was unjustifiably neglected. Without the stated parts it is not possible to implement optimal monetary policy in long-term concept of stabilisation and development [10].

11. CONCLUSIONS

The main task of monetary policy of our central bank is fight against inflation, i.e. realization and maintenance of price stability and foreign exchange. Targeted inflation rate has been selected as operating instrument for gradual realization of low and stable inflation along with removal of inflationary expectations. Specific inflation corridor has been selected to ensure operations, transparency and *ex*

ante effects of monetary policy, which is very important but also is removal of big oscillations in prices and foreign exchange.

The paper examines whether there is really restrictive monetary policy, deviation of real from programmed inflation, level of "restrictiveness" of monetary policy and behaviour of bank credits, money supply, nominal and real economic growth (GDP). There is a special analysis conducted as well as criticism of concept of primary money, mandatory reserves in banks, blocking of financial potential of banks by using instruments of monetary regulations, but also new relations between central bank and business banks through open market policy. There is also a criticism of repo operations and complete disappearance of selective credit policy. Special attention was paid to problem of illiquidity of economic sector, that is automatically generated by adopted concept of monetary policy. Enterprises as main credit users in the country but also abroad, are not capable to keep money in circulation within the sector. Monetary policy and credit then become their opposite side – instead of stimulating production and commodity and monetary transactions, they regularly pump non-productive spending, independently of production trends. Therefore, linear (non-selective) withdrawal of money from banks (ultimately from enterprises as main credit users) regularly seems as a monetary shock, which increases liquidity problem and general process of non-payment. Enterprises should keep granted credits on special account within direct transfer account from which payments are effected for intended purposes. Other enterprises for commodity and other goods receive money from buyers and keep it on special account. There is no outflow of credits and liquid funds from economic sector into other sectors.

The concept of primary money is not adequate. It is mostly reserve money (mandatory bank reserves), and only partly it is primary money of the central bank (circulating money in cash). Primary money can be only central bank credits and money in cash (with foreign exchange transactions by central bank that is created or cancels domestic currency). In order to achieve more efficient monetary policy and better monitoring and its control, this concept should be changed.

After criticism of actual quantitative monetary regulations and monetary policy, efforts were made to build a different concept and base orientation of this policy, but also selected primary goals. Strategic re-orientation of monetary (and fiscal) policy from concept of stabilisation to concept of development was proposed.

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