THE PROBLEMS OF LIQUIDITY
AND MONETARY POLICY IN 1993/1994

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Introduction

After implementation of antiinflationary measures in October 1993, the question of liquidity in the Croatian economy has been slowly becoming one of the main topics of discussions. The statement that "liquidity of the economy is essentially threatened", that "monetary policy is too restrictive" and that continuation of the started policy will imperil the stabilization program, was very often heard in weeks following the implementation of the program. Enterprises (especially those state-owned) emphasize, that it is just "additional liquidity" they need to increase significantly their production. A very low share of money supply in GDP, non-functioning of the payment system and general economic collapse, have also been mentioned as arguments. A critique of exchange rate policy is still present nowadays, six month after the implementation of the program. All these arguments have one objective in its essence. They suggest the possibility of one simple "medical treatment" of the current unfavorable conditions. According to those beliefs, it is just necessary to "loosen" the monetary anchor, to "print more money", namely to improve liquidity of banks and the whole economy in this way. All that would improve "non-stimulating" exchange rate, payments would return into normal flows, production would increase, and economy would be on the best way of recovery and on the paths of high growth. If only that would be possible! The purpose of this paper is the review of macroeconomic views of the problems of liquidity in Croatia. It represents the comprehension of that question from the aspect of monetary authority. Therefore, the close connection with monetary policy is understandable. The paper has four basic parts:

1. The economic policy objectives and monetary policy

2. The concept of liquidity, the methods of its

measurement and possible sources of lack of liquidity

3. Monetary policy and restrictions in its implementation

4. Further course of action and possible measures to alleviate the problem.

The source of data in text if not differently quoted is the Bulletin of NBH, NBC Main Statistical Indicators and data bases of the National Bank of Croatia. Therefore, those sources are not quoted at every data or graph.

1. The economic policy objectives and monetary policy

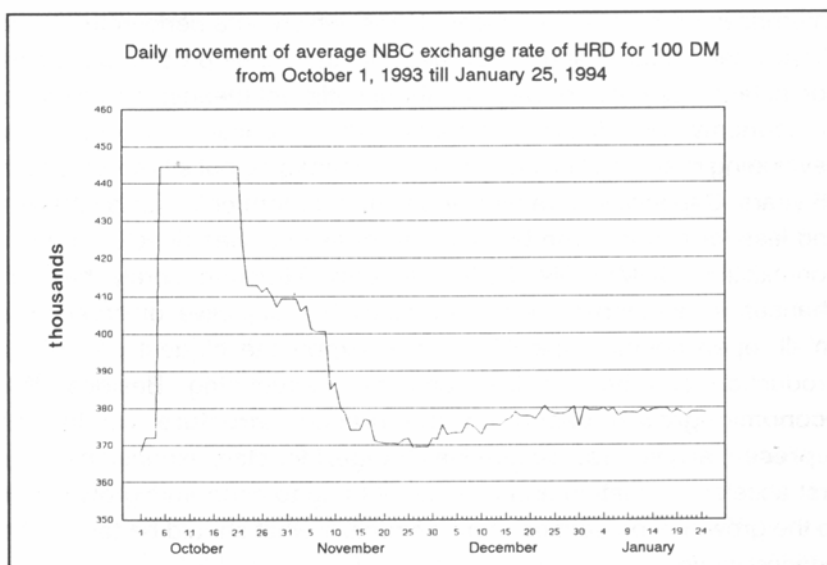### 1.1. THE ECONOMIC POLICY OBJECTIVES

The starting premise of the paper is that in a short run **the basic objective of the economic policy in Croatia is the maintenance of very low inflation.** Under low inflation, we should consider yearly rates of price growth which do not overrun 20 percents.[1] Low inflation should be considered as the indispensable presumption of all economic reforms. According to available economic indicators, the first phase of stabilization program has successfully come to its end. Already for two months continually, inflation has been low. After the increase of 1.4% in November, - 0.5% in December confirm the effectiveness of antiinflationary measures carried out by the Government of the National Bank of Croatia. Anyway, it shouldn't be forgotten that this is a very delicate, initial phase of stabilization program implementation. The credibility of the program has been significantly reinforced by cutting down inflation, but that credibility is surely still inclined to changes. In the case of the least indications of

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[1] *In developed countries by low inflation is considered that one which is under 4% yearly. For the countries in transition, the low two-digit rates of price growth could be considered as acceptable.*

economic (and especially monetary) policy changes, the return of inflationary expectations which are still deep-rooted in the conscience of economic subjects can quickly appear.

Along with inflation, a policy of Croatian dinar rate gets big significance within that frame. With application of the program, a new *way* of formation of exchange rate has been implemented (see Škreb, 1993). As the 16 percents appreciation of dinar rate (in relation to rate of 4444 HRD[2] for DEM at the beginning of October - see figure No. 1) significantly contributed to "blowing out" of the inflationary balloon, a fast rate of depreciation could quickly return inflation again as the problem number one.

Figure 1:   THE EXCHANGE RATE IN HRD

Daily movement of average NBC exchange rate of HRD for 100 DM from October 1, 1993 till January 25, 1994

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[2] *HRD is an acronym for temporary domestic currency Croatian Dinar.*

Consequently, it is indispensable that the National Bank **goes on conducting the policy of intervention at foreign exchange market, which would keep the rate at the current level.** Devaluation would be equal to the destruction of program. It is indispensable to insist on a fact that a market should be balanced by lowering down the prices, and not by administrative rising of the exchange rate.

1.2. THE REALIZATION OF RESTRICTIVE MONETARY POLICY

The continuation of restrictive monetary policy is necessary because of several reasons. First, it is a **constraint of inflationary tendencies** and all negative consequences of inflation (especially the changes of relative prices and wrong signals at allocation of resources). Besides, only **restrictive policy makes indispensable pressure** to **enterprises to restructure.** Namely if, untransformed (what means state-owned) enterprises go on getting "cheap" loans (which nota bene enterprises already can't return), and if they feed with them their present condition (for instance payment of wages without sufficient means), no changes in economy will definitely happen. The Croatian economy was developing in socialist environment (self-managing but still socialist) for 45 years. Capacities were mostly planned for former Yugoslav market and less for exports. The biggest part of exports was directed to now non-existing COMECON. Such economic structure surely has no chances in a competitive environment. The objective of creating a small, open country which is able to export the biggest part of its production can be realized only by restructuring. Besides, **the economic growth based on the present structure would not represent any wanted qualitative change.** Monetary expansion would first accelerate inflation and may partly bring to economic growth, but to the growth of present economic structure what should be termed as unacceptable.

A fact that **the effects of monetary policy to economic growth are asymmetric** shouldn't be forgotten (see Morgan, 1993). That means that monetary policy is much more effective when its restriction is

aimed to curb inflation tendencies in economy (what as the part of heterodox program showed with us). Its effects are markedly less effective when we try to accelerate economic growth (respectively decrease of economic decline) by its expansion. The examples are numerous, but recent literature very often mentions the so called "Geraschenko effect", after the Governor of the Russian central bank. Namely, Russian central monetary authority tried by monetary expansion (tripling of M2 during four months) to solve the problem of outstanding debts of enterprises and economic stagnation. The result is also known: monthly inflation growth of under 10% to over 25% (see: The Economist, December 11, 1993). And production didn't increase. The additional liquidity generated by "printing of money" can't achieve permanent economic growth.

2. The concept and measurement of liquidity
   and the sources of illiquidity

2.1. THE CONCEPT OF LIQUIDITY

At the beginning, it is necessary to answer the question why the liquidity is interesting for central monetary authority? According to the Law of the National Bank of Croatia (article 2): "The National Bank of Croatia is responsible for currency stability and for general liquidity of payment in the country and abroad". Consequently, care is legitimate, but currency stability (respectively inflation) also has to be in the permanent focus of interest.

Liquidity is without doubt a very complex, multidimensional phenomenon. As the concept of liquidity has a very wide usage, it is often imprecisely defined. Here are some possible definitions without intention of giving the definite answers: "On the level of national economy, liquidity denotes proportional exchange of commodity and money flows, respectively undisturbed development of the process of

production, exchange and consumption (Dictionary of banking and finance, 1993). Definition is convenient but inapplicable, namely it is difficult to quantify what is the "proportional exchange of commodity and money flows". That is especially difficult in the conditions of structural lack of coordination and big institutional changes of legal framework which take place in Croatian economy. From the micro aspect, the concept of liquidity has been often used in the sense of: "possibilities of debt repayment on time and in full amount" (Dictionary of banking, 1992). The liquidity of funds usually includes implicitly the time necessary to transform those funds into cash or repayment of some debt. Consequently, liquid funds are those which can quickly, simply and "cheaply" pay obligations. Liquidity of economic subjects is usually measured by different proportions of liquidity what makes the proportion of liquidity funds and different obligations. From the aspect of central monetary authority the liquidity of banking is of primary interest.

Micro-liquidity can be measured relatively easily. What is the possibility of measuring the liquidity in the economy, respectively in the banking system? It seems that there is no global indicator of system liquidity. Therefore, it is necessary to use some proxy variables and infer about global liquidity. The possible indicators of liquidity in the economy are: changes of interest rates, changes of exchange rate and usage of secondary sources of liquidity by banks. In fact, all three indicators are directed to measurement of scarcity of money in the economy.

2.2. MEASUREMENT OF THE GLOBAL LIQUIDITY

a) The changes of interest rates on the market. The argument for observation of the price of money as the indicator of liquidity is understandable. Higher price (and if there is a tendency of its increase), indicates that there is excess demand on the market. Thus, if there is an increase of interest rates on the money market this would indicate tight liquidity and restrictive monetary policy.

In Croatia, there are big constraints in interpretation of interest rates changes as signals of the scarcity of money. First, after the implementation of antiinflationary measures the administrative restriction of interest rates was introduced by the government[3]. As a result, banks subsequently lowered their interest rates to comply with new regulations. Therefore, it is very difficult to conclude what was really happening with interest rates on the market. Besides, the money market (not only the Money market - Zagreb, but also all other buyings and sellings of money in the economy) is not transparent; it is segmented and it is difficult to collect systemic information about it, to say nothing of analyzing it. Therefore, market failures on the money market surely exist (at least informational ones). That primarily refers to asymmetry of information. This is not surprising, when we have in mind that financial markets are underdeveloped.

Anecdotal information collected by unscientific chastener method (private phone calls) suggest the change of monthly rates in January 1994 in the range of 7% (usually according to pattern: discount rate + 5 percents of interest + 1 percent of fee) to incredible 20% of monthly interest rates to short-term loans. At yearly average those are interest rates of 100% and even to 800%. In the conditions of zero inflation in December, those are also **the real interest rates.** But it could be carefully suspected that positive interest rates were at the monthly level in the range of 6% to 10%. We shouldn't forget that the biggest part of the economy is still state-owned (or state controlled) and that the "soft budget constraints" exist. Interest rates of 30% monthly are not too high to "drowning persons", because they neither intend nor can return them.

After the abolition of administrative restrictions on interest rates (interest taxation) in December 1993, no increase in interest rates was observed. It suggests that the problems of imbalances on the money market (if existent) are not huge. It is true that interest rates in real terms (and especially calculated at the yearly level) are very high. But attention should be paid to the fact that **high real interest rates were**

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[3] *A progressive tax on "excess" interest rates was introduced.*

noticed in almost all countries after fast disinflation. For instance in Israel, after implementation of stabilization program, the real interest rate figured out for some time even about 170% (see Bruno, 1993). Consequently, that is a regularity by which money market has been balanced after monetary restriction, that is after the restriction of supply of money and high increase of money demand (what will be discussed later).

Of course, the questions of how high and for how long should interest rates be so high in real expression, are still open. The best remedy is surely transparent clearing money market. Very high real interest rates are not without negative consequences in the economy. First, negative influence of high interest rates to investments is known. It should be mentioned here that the influence of interest rates to investment in Croatia is very controversial at this moment. Namely, the investments in Croatia have been decreasing (falling share in social product) constantly since 1979. Social product has been halved. In spite of real negative interest rates, investments were decreasing (see Bajsar, 1993). Why then should we believe that low interest rates (created by monetary expansion) can revive investment activity?

On the other hand, the attention should be paid to high cost input of interest rates. But, if the price is a measure of scarcity of money , good economizing with such expensive good as money is, may be expected.

What is the behavior of the National bank in the conditions of disinflation? By its interest rate policy, central monetary authority intended to follow goals of economic policy. It could be even said that by decreasing of the monthly discount rate in October to 21 % (from 28.5% in September) it even anticipated antiinflationary measures. The present basic interest rate (usually called discount rate which is not precise because nothing is being discounted) in December 1993 of 1.1 % on a monthly basis (which means 14% yearly) is very moderate. At this interest rate, the central monetary authority gives the loans to banks (within the refinancing facility) and to the central government. The liquidity window for banks is just somewhat more expensive (the
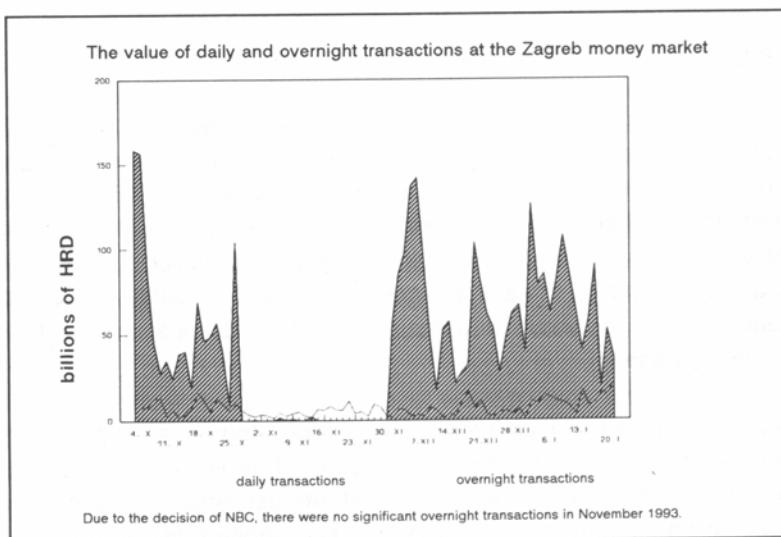
interest rate is 1.45% monthly or 19% yearly). For permitted usage of reserve requirement up to 10% of its amount banks pay to central bank the monthly interest of 3.6%. All those rates are positive in real terms but in comparison with mentioned market rates they are low.

It is true that the penalty interest rates of monetary authorities are very high. Such a policy is completely legitimate. Those rates **must stay high in real terms because that** is **the only possibility of improving financial discipline in the economy.** The response to low interest rates would be a significant increase in the so called "secondary sources of liquidity" (meaning excessive use of all liquidity window at banks' disposal) which is a tantamount to additional increase of monetary base.

Let us conclude that high interest rates at this moment are a signal on the degree of monetary policy restriction. This is essential for the success of the program and high real interest rates should not be considered as something unusual nor exaggerated. In the long run, such real interest rates would surely have negative effect on the economy. It shouldn't be forgotten that we are in early phases of disinflation, and there are still big disturbances in the market which would need some time to calm down.

b) Liquidity of the banking system. Liquidity of banks has been usually measured by the level of gyro accounts of banks and their vault cash. Those amounts have been varying on a daily basis, which is normal. In their daily liquidity management, if they run out of money, banks should look at the money market. Our "official" inter-bank money .market is rather undeveloped and its main activity has been really reduced to coordination of automatism of overnight loans (see figure No. 2). Daily activity is quantitatively unimportant. But when the shortage of inter-bank funds (with or without intervention of money market) appears, there is also the lender of the last resort - The National Bank of Croatia.

Figure 2:   THE MONEY MARKET

The value of daily and overnight transactions at the Zagreb money market

daily transactions   overnight transactions

Due to the decision of NBC, there were no significant overnight transactions in November 1993.

Let us not forget that commercial banks at the end of January 1994 and further on, could use up to 120 billions dinars of refinancing facility within the so called general quota. Regarding the changes of interest rates at the market and the level of the discount   rate (which in December was positive in real terms but was under the market level) refinancing quota was an additional (cheap) source of liquidity for the banking system.

The use of secondary liquidity sources may be the measure of money demand surplus. The usage of regular loan for liquidity and of reserve requirement up to 10%   should be considered as regular liquidity window. It should be repeated that it is a question of relatively cheap additional liquidity. Using the regular loan for liquidity, is subject to sanctions and restrictions concerning the time of usage (till ten working days in a month), as   well   as   the necessity of existence of corresponding "collateral " in the form of NBC bills. In such a way, the

total amount of those loans has been (fortunately) quantitatively limited.

Unfortunately, the use of reserve requirement is out of control of central monetary authority. The idea of "the permission of use of reserve requirement funds up to 10% has only ex post price discrimination. Otherwise it is a self-service for banks. Comparison with self-service is appropriate, because here the price is paid at exit, and rather significant thefts are also possible.

Expensive funds of the central bank are the so called irregular sources of additional liquidity and these are: the use of reserve requirement over permitted 10% (what has been in latest decisions restricted to totally 50% of total reserve requirement), the use of the so called special loan from primary issue, and the so called negative balance on the gyro accounts.

A special loan (the so called special loan on the basis of guarantee on savings deposits and current accounts of households) is a special story indeed. Namely, although based on former guarantee for savings deposits and current accounts of households (which nota bene explicitly doesn't exist any more, and there is still no deposit insurance scheme) it has been still present in the system. From one side, it serves to banks to withdraw cash from the Payment System Office when they don't have coverage for cash withdrawals on their accounts. For that part, the central bank (its liquidity commission) gives daily permissions to banks, so they can use that loan. But a part of that loan can bee used autonomously. In other words, if households deposits decrease (on the basis of cash payments through post offices or other banks, or on the basis of spent cheque appear) and a bank has a shortage of its own funds, a bank de facto automatically uses that loan in the Payment System Office without regard whether and for which amount it has the permission from the National Bank of Croatia.

Negative balances on gyro accounts is an additional idiosyncrasy of our payment system, on which our central monetary authority has very little influence. It is indented that the use of negative balance should be

prevented by high price of this "liquidity window" but those penalties have almost no influence on the banks that are using this "facility". It has to be pointed out that within our payment system banks can't completely control the outflows from their accounts. Therefore liquidity management is very difficult.

The use of those sources is increase in monetary base per se, which means additional creation of money in the system. Thus, the use of secondary sources is a possible measure of excess demand for monetary base, namely the measurement of illiquidity. It is true that banks , after the implementation of the program, were using more secondary sources on average than earlier. Thus in September 1993, banks used on average 48 billions HRD, in October that amount increased to 207 billions HRD, in November 199 billions and in December to 154 billions HRD. In the first twenty five days of January the use was also very high, namely about 220 billions HRD on average. Therefore, "the October shock " forced banks to use secondary sources of liquidity to a high extent, but that amount decreased in November and December.

The use of secondary sources is very unequally disposed through banks. There is a very clear **polarization of banks in Croatia.** Thus from complete amount of the use of reserve requirement funds (after overnight interventions of money market) about 90% is used by three banks only. The use of special loan from primary issue for payment of savings deposits and current accounts of citizens on an average is used in the amount of about forty billions, but that loan is almost exclusively used by two banks. The same is true with the use of assets available through gyro accounts. According to central monetary authority, debts of banks can be an additional indicator of liquidity of banks. In December 1993 and January 1994 those debts have a tendency of increase. But debts are also concentrated in some banks.

Concisely speaking, data on liquidity of the banking system would be incomparably better if "ill banks" were rehabilitated. Namely, to keep the liquidity of the whole system by monetary policy in such a way that

"ill" banks can de facto use a series of sources without control, means only one thing - a very fast return of inflation. Consequently, under the condition of rehabilitation of banks, data on liquidity of the banking system would be much nicer.

c) Exchange rate. After the introduction of antiinflationary program, and implementation of the Foreign exchange law there was a strong appreciation of the exchange rate of Croatian Dinar. But figure No. 1 clearly suggests that recently after initial strong appreciation, a slight depreciation has been noticed. If we observe foreign exchange market as the whole of foreign exchange supply and demand (where that market should be observed as complementary to money market in domestic currency) it is possible to explain appreciation as the excess supply of foreign exchange. Alternatively, appreciation may mean excess demand of domestic currency. The conclusion could be: the more the rate appreciates , the higher the restriction of monetary policy.

But the introduction of the Foreign exchange law brought very big structural changes to foreign exchange market. The floating of the dinar and convertibility of current account of balance of payments, the permission of keeping foreign exchange accounts for enterprises, are only some of important changes in the foreign exchange system which mean huge structural changes on that market.

Let us repeat that the exchange rate is now freely determined on the market, and central monetary authority only intervenes on this market. However, the scope of those interventions is restricted. On the other hand foreign exchange market is very "young" and therefore a certain period of time is necessary for the sake of running-in. As the exchange rate in our economy surely has a very strong signalling effect, the increase of the exchange rate wouldn't be interpreted as autonomous decrease of foreign exchange supply, but as the revival of inflation. That is a legacy of indexation with which we were all living for a long time.

It may be concluded that the implementation of antiinflationary program brought to: the increase in real interest rates, the decrease of liquidity of banks and to appreciation of Croatian dinar. But, on the other hand clear polarization of banks has appeared, so that the liquidity of banking system, with the exception of "ill banks" is much better. All these are normal consequences of very fast disinflation and it is disproportional to speak of "extremely disturbing trends". On the contrary, it could be affirmed that without "decreasing" liquidity, it is possible neither to reduce inflation nor to keep it at low level, especially in initial phases of such a program.

2.3. SOURCES OF THE LACK OF LIQUIDITY

Let us consider what are the possible causes of the "lack of liquidity" of the global banking system. There are many of them, but the main ones seem to be: disinflation, non-servicing of public debt and ineffective enterprises, that is "the soft budget constraints".

a) Disinflation and remonetization of economy. Figure No. 3 clearly points out that there with inflation velocity of money increases dramatically.[4] Figure No. 4 shows how real money balances (currency in circulation and other aggregates) have been decreasing with the increase of inflation. With disinflation the inverse process is going on. Velocity of money has been slowing down. Money demand is rapidly increasing and the economic subjects want again to keep more money, not only because of transactional motives, but as a form of property as well. Therefore, the remonetization of the economy is something that is the expected consequence. But it should be known that the process of remonetization must go on gradually (for instance in Israel it lasted 3 - 4 years) and carefully. Fast monetary expansion would only "blow up" the existing structure of the economy and revive inflation.

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[4] *There are several papers published in "Privredna kretanja i ekonomska politika" about velocity of money.*
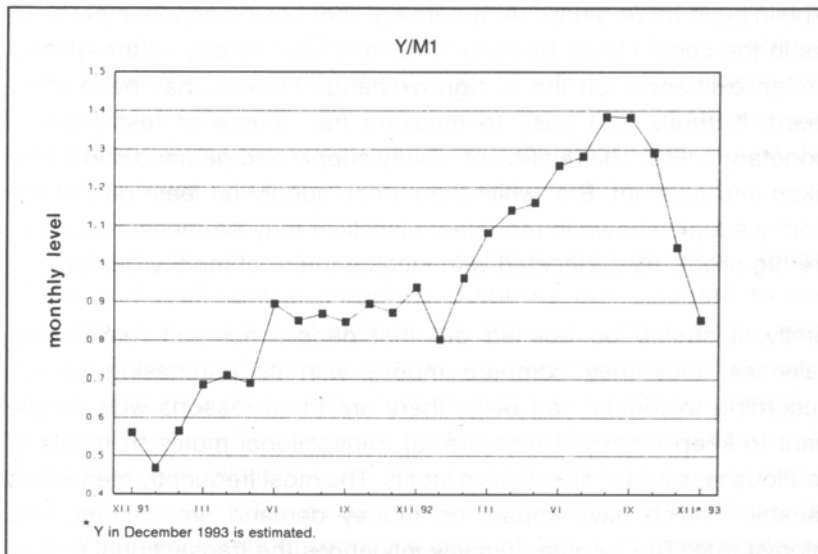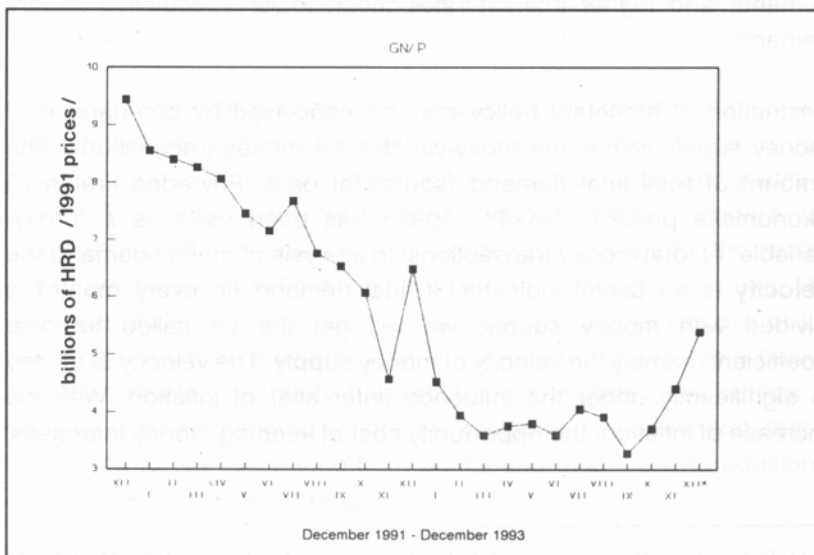
Figure 3: THE VELOCITY OF MONEY

Y/M1

* Y in December 1993 is estimated.

Figure 4: THE REAL MONEY BALANCES

GN/ P

December 1991 - December 1993

A thesis about "monetary policy being too restrictive" is worth explaining in more details. A "mourning" that basic economic problem lies in the central bank because it doesn't want to buy all the offered foreign exchange (on the foreign exchange market), has been often heard. It surely isn't easy to measure the degree of restriction of monetary policy. The relation of money supply and demand should be taken into account. But, while the money supply (at least part of the money supply shown in monetary statistics) may be measured, there are big problems connected with measurement of money demand.

Firstly, it should be pointed out that people demand real money balances, thus they compare money with its purchasing power. According to widespread belief there are three reasons why people want to keep money. These are: a) transactional motifs b) motifs of cautiousness and c) speculative motifs. The most frequently mentioned variables which have impact on money demand are: income and interest rate. The income primarily influences the transactional money demand, and the level of interest rate measures de facto opportunity costs of keeping money. Higher income means higher transactional demand, and higher interest rates mean lower speculative money demand.

Restriction of monetary policy may be conceived by comparison of money supply with some proxy-variable for money transactions[5] The amount of total final demand (source of data "Privredna kretanja i ekonomska politika", No. 25, 1993.) has been used as a "proxy-variable" of total money transactions. In analysis of money demand **the velocity** is an useful indicator. If final demand (in every month) is divided with money supply, we will get the so called turnover coefficient, namely the velocity of money supply. The velocity of money is significantly under the influence (inter alia) of inflation. With the increase of inflation, the opportunity cost of keeping money increases.

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[5] *Unfortunately, the existing statistical* sources *don't give prompt data on money transactions in the economy.*

In inflation, keeping currency means a big loss, so that everyone wants to get rid of it as soon as possible. The result is generally known. A big increase in velocity. In the time of the highest inflation, velocity (at monthly level) decreased to about 70% of the final consumption value. Compared to the data for end December 1991 (when monetary independence of Croatia was introduced) the velocity has tripled. The inverse process has been going on in fast disinflation.

From figure No. 3, it can be seen that **velocity has been slowing down and that central monetary authority has adapted to new conditions, that is to fast disinflation.** This can be confirmed by data. Thus in December money supply was increasing at a monthly rate of 22.4%. With zero inflation (to be more precise with monthly deflation of 0.5%) this rate is at the same time the growth rate of real balances. Till November, with inflation of only 1.4% monthly, money supply increased (cumulatively) by 49%. Retail prices increased for 0.9%. Thus, **the growth in real terms of money supply of 48% has been achieved.** If we observe the last three months, the prices cumulatively increased by 40%, and money supply by 93%. Thus, **in three stabilization months money supply increased in real terms by 38% (measured by deflation).**

The frequently emphasized cause of the lack of liquidity for money is the increase of demand for currency caused by disinflation. A very strong increase of currency in circulation has influenced the liquidity of banks. The demand for currency is always satisfied. Therefore, the amount of cash in circulation is an exogenous variable for the central bank, because it hasn't got the possibility to control this demand. The increase of demand for cash means the worsening of liquidity of the banking system as a whole. That is especially true for some banks. Central monetary authority has mostly compensated the outflow of liquidity of banks by interventions on foreign exchange market, that is by buying foreign exchange from banks and thus creating additional amounts of domestic currency.

The currency in circulation in three stabilization months (data from the end of December compared to those from the end of September) increased by 782 billion HRD. Money supply increased by 1885,9 billion HRD, and monetary base by 957,2 billions HRD. Thus, the increase of monetary base is markedly bigger than the increase of currency in circulation. This means that **central bank compensated the decrease of liquidity induced by the increase in currency in circulation.** That enabled banks to perform indispensable changes in the structure of their portfolios.

It seems that increase in the demand for currency in circulation has been generated by some other factors as well. Namely, in the conditions of very high inflation it is a rule that a part of transactions, especially in the grey economy, takes place in foreign currency. In the Croatian case the foreign currency are German marks. There are indications that in the grey economy the inverse process of currency substitution has been taking place and that Croatian dinar is pressing out German marks. Since there are no available data about the unregistered economy (by definition), this statement can't be confirmed.

b) Irregular and incomplete payment of public debt by state and fiscal deficit. Over 50% of total assets of Croatian banks consist of claims on the government based on the public debt. If we know that it is a long-term "investments" of banks, a very little mobility of their assets is evident. If a state doesn't service that part of banks' assets (the state hasn't been paying a full amount of interest , but only its smaller part), and if we have in mind that part of the remaining 50% of assets should be classified as "nonperforming loans", it is obvious how banks can't pay their obligations without having their liquidity very often imperilled. Nonservicing of public debt has surely very big impact for liquidity of banks.

In consideration of the role of the state (that is first and foremost the central budget) to liquidity, it must be mentioned how budgetary funds are included in the banking system. According to established criteria

those deposits have been included in commercial banks. Thus, the variation of budgetary funds has been directly manifested as variation of liquidity of banks . Bigger outflows (for instance payment of wages from the budget) result in the lack of liquidity of (some) banks. There is a usual practice in the world that budgetary deposits are held in the central bank. Pulling out the deposits from the banking system is neither simple nor unambiguous action, but it surely deserves careful consideration in regard to its influence to liquidity.

c) Nonefficient enterprises. In the conditions of high inflation, many enterprises could live easily. The high price growth covered all losses, growth of costs and nonefficient management. In the conditions of stable prices the situation has dramatically changed. If loss-making enterprises don't restructure, they will surely accumulate losses, meaning that their debt either towards banks or towards other enterprises will increase. If the number of those enterprises is relatively big, it is possible to calm down their "demand" for money only by extremely expensive monetary policy. Such enterprises often raise interest rates on the market ("every credit is welcomed regardless of its price"), what has consequences on the entire economic system.

It may be said concisely that some sources of lack of liquidity are the regular occurrence of the situation in which we are situated (disinflation and slowing down the velocity of circulation). But the others (enterprises which still operate with losses and budgetary deficit) demand systemic and steady work in order to alleviate them.

3. Monetary policy and its constraints

We can say that disinflation has pointed out that there are four basic "constraints" of efficient monetary policy. These are: "ill banks" and the existing payment system, central budget, and "shallow financial markets" and poverty of monetary policy instruments.

a) "ill banks" are the main obstacle of further conducting restrictions in monetary policy. Due to existing payment system (as it has been already described), monetary authority has been losing control over monetary base changes. **The urgent implementation of announced financial rehabilitation of banks** is **indispensable presumption of the stabilization program.** The overthrow of high inflation is only the necessary condition (prerequisite) for restructuring of the economy and the basis for revival of production and renewal of the country. The fast growth of the economy is not possible without a healthy banking system in Croatia. One cannot speak about the healthy banking system with maintenance of the existing structure of banks customers (meaning the structure of the economy).

In the conditions of present payment system it should be admitted that the possibilities of the National Bank of Croatia to prevent such movements are very limited. Financially non-improved banking system and the inclusion of "ill banks" into additional sources of liquidity appear as the serious barrier for efficient monetary policy. Thus, those problems should be emphasized as primordial and their solution an indispensable prerequisite of the realization of monetary policy projection (and consequently broader objectives of economic policy) during the whole 1994. Banks debts towards monetary authority are an issue per se. This debt brings into danger the possibility of efficient control of monetary aggregates.

b) For successful implementation of stabilization, **fiscal restriction** is necessary. There is not enough reliable data that we could indisputably confirm that public sector deficit hasn't been financed through primary issue. It is true that direct credit financing of central budget has been carefully registered. But there are also outstanding manners and that is that banks through the payment system can sometimes create "the money on their own" and that has been caused by non-servicing of public debt and by the arrears of central budget towards enterprises. Without clearly quantified sources of financing the budgetary deficit and all expenditures clearly defined , the quasi-fiscal function of central

monetary authority (not wanted and verbally condemned) will go on. That is especially dangerous if central bank and central budget relations remain insufficiently transparent. The best decision made on the basis of wrong premises may have dangerous effects for the economy. Consequently, fiscal sphere may become a deterrent to effective monetary policy. Transparency of relations with state, that is with budget, should be pointed out as strategically significant goal of monetary authority. The existing system of interacting debt and demand "clearance" disturbs the so called "gross principle" in budgetary formation. That should be further considered as inadequate, because it doesn't show quasi-fiscal functions which central monetary authority has been still performing for the central budget.

c) "Shallow financial markets" and poverty of monetary policy instruments. In Croatia the banks are still the main intermediator between the sectors with financial surplus and those with financial deficit. The number of products which banks offer to their clients is very poor. The activity of banks has been mostly restricted to basic credit and deposit activity. Households can only choose between time deposits in local currency and buying foreign currency, with timid appearance of shares in portfolio of households. Underdevelopment of the Money and short-term securities market, and the Zagreb stock exchange (as well as the other securities market) along with the non-existence of adequate legal framework,   are big obstacles to development of financial intermediation. Weak intermediation also means less liquidity, respectively less elasticity to shocks because the possibilities of alternative financing are limited.

4. Strategy for further development and possible measures

According to available data and   previous discussion it may be concluded that the liquidity of the economic system has somewhat worsened with the implementation of the antiinflationary measures. Secondary sources of liquidity (lender-of-last-resort facilities) have been

used to a greater extent than earlier. In the meantime, significant qualitative changes have happened in the financial sphere. Inflation has decreased to very low or negative single-digit numbers (monthly rates). The behavior of all subjects has essentially changed in new circumstances. Central monetary authority intended (and still intends) to conduct a policy of "light" restriction with careful eavesdropping of economic trends. But in disinflation, there are some other essential changes (primarily the slowing down of velocity of money, respectively demand for real money balances has been increasing). With the exception of October 1993, when monetary restriction was very strong (what is regularly the part of such antiinflationary programs - cold turkey strategy - , so it can be considered lege artis) the end of the year can be qualified as small restriction.

Therefore causes of the "lack of" liquidity should be primarily looked for in unsolved structural problems of our economy. Very high inflation has successfully fogged them. In present conditions they have become visible. At the end, a list of proposals consisting of measures is given.

1. III banks should be strictly controlled and their automatic use of secondary sources of liquidity should be restricted. Those banks should not transfer to their regular activity unless they have been financially rehabilitated. In the short history of monetary independence of Croatia recapitalization of the banking system has been done already twice (big bonds and "frozen foreign exchange savings accounts"). Nowadays, those recapitalization schemes represent a big part of internal public debt. Consequently, the following recapitalization (of some, not all banks) should be the last one, otherwise the problem of moral hazard would remain to be persistent in banks' management behavior.

2. Banking supervision (of all banks in Croatia) should be much stricter. That especially refers to ex ante activity and prevention of future possible damages. It is impossible to avoid contaminated assets, but they could be minimized by adequate prudential control of banks (more than 50% of banks are still state controlled). Furthermore, one

should insist on financial discipline of all banks. In that context, we should reconsider the present payment system very carefully, especially the use of reserve requirement and negative balances on gyro accounts.

All financial experts are aware of the fact that bankruptcy of banks is extremely expensive and therefore it is very rarely applied. At bigger banks it is practically impracticable ("Too big to fail") . But as the philosophy of the market is in its essence the philosophy of failure (that is permanent fear of possible bankruptcy), it is necessary to act in such a way that the management of banks wouldn't exploit that comprehension. The price of financial rehabilitation of banks, in ultima linea, has been always paid by taxpayers through direct taxes or through inflationary tax. Therefore, it is further necessary to develop mechanisms which will prevent the appearance of moral hazard in the behavior of administration of banks. It seems that after the above mentioned rehabilitation such behavior is quite present.

3. To work on the elimination of the still existing political influence on decision-making process in banks (that is the allocation of credit).That is connected with the process of privatization in the economy and in the banking system which should be accelerated as soon as possible.

4. The state should service regularly its public debt. Besides, the state must decrease its outstanding debt, both towards banks and enterprises. By its size and outstanding debts in payments, central budget influences the liquidity of the whole economy. The present way of inclusion of budgetary funds into the banking system has a strong impact to big oscillations in liquidity. That should be changed in the foreseeable future. By regular payment of its obligations the state strengthens the confidence in its financial discipline. And that is essential if the Ministry of finance wants to finance a part of its deficit by short-term securities. At the same time that would more actively develop financial markets in Croatia.

5. The state has to initiate and carry out the process of restructuring of the biggest loss-making enterprises. Enterprises without chance to survive in market conditions (and it is usually known which enterprises are in question) should be restructured. Such as they are , they represent "the hole without bottom" in which liquidity outflows (accumulation of debts) without hope for recovery.

6. Very active relation towards further expansion and deepening of financial markets in Croatia is necessary. It is necessary to create additional securities and to accelerate their circulation. That would influence the increase of liquidity of the whole economic system. If there is a strategic aim to develop indirect control of monetary aggregates, it is indispensable to develop operations on the open market. As the choice of securities very poor at this moment, the National Bank of Croatia must actively develop its NBC bills market. Besides, the more active role of the monetary authority on interbank money market is needed. Past changes in monetary policy are surely a step in the right direction, but the existing instruments still don't enable the conducting of monetary policy in a way as it has been going on in developed market economies. The changes are not possible overnight, but the systemic and persistent work on that is necessary.

7. To watch carefully the movement of cash and liquidity of banks and consequently to conduct flexible (but restrictive) monetary policy and to adjust its objectives accordingly to changes in the economy. Such an approach is necessary, because the process of disinflation is very fast and markets are "nervous", changes are quick, and bigger shifts in behavior of subjects are possible as well. Completely new institutional framework also demand time in order to accommodate to "the rules of game". Consequently, flexible and reasonable observation of situation with permanent caution on the recurrence of inflation is needed.

8. To influence actively the improvement of existing instruments of banks borrowing from central bank (refinancing, discount and liquidity windows). Liquidity variations are normal appearance in banks. In our conditions, refinancing window should be closed. Central monetary authority must not stimulate banks to use liquidity window too often. Therefore, interest rate on those loans should be higher than interbank money market rates. Finally, this window must be open only in necessity, and the conditions of its use must be very rigorous.

9. To strengthen financial discipline of enterprises. That can be made by adequate control (punishment of non payers), effective legal system (acceleration of bankruptcy process), restructuring of enterprises and creating of such legal framework which will markedly decrease incentives for non payment and other frauds.

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