

# **INTEREST RATES IN THE REPUBLIC OF CROATIA: PROBLEMS AND HOW TO SOLVE THEM**

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## **INTRODUCTION**

High nominal and real interest rates are one of the main features, but also one of the main problems, of the stabilization process in the Republic of Croatia. Indeed, the growth of interest rates over the past few months calls for the systematic consideration of the problem. However, all its aspects can only be analyzed in conjunction with the overall monetary policy and development of financial markets. This is the subject of the present paper.

The first part deals with statistical facts. The second part discusses the causes of high interest rates, and the third presents the conclusions.

## **1. WHAT DO STATISTICAL DATA SHOW?**

### **1.1. Weighted Average Lending and Deposit Interest Rates in Commercial Banks**

Nominal rates are illustrated in Figures 1 and 2. Monthly rates have been used divided into two periods: from December 1992 to March 1994, and from April 1994 to July 1995. The division into periods has been done for the purpose of better surveyability. In the interpretation of data it should be borne in mind that the trend of the total average interest rate is strongly influenced by the short-term interest rate because a long-term loan market practically does not exist in Croatia.

The figures illustrate a decline of the average nominal rate after inflation was brought down. The decline lasted until August 1994, when the period of mild interest rates growth started.

Figure 1

**NOMINAL MONTHLY INTEREST RATES OF DEPOSIT MONEY BANKS DECEMBER 1992 - MARCH 1994**

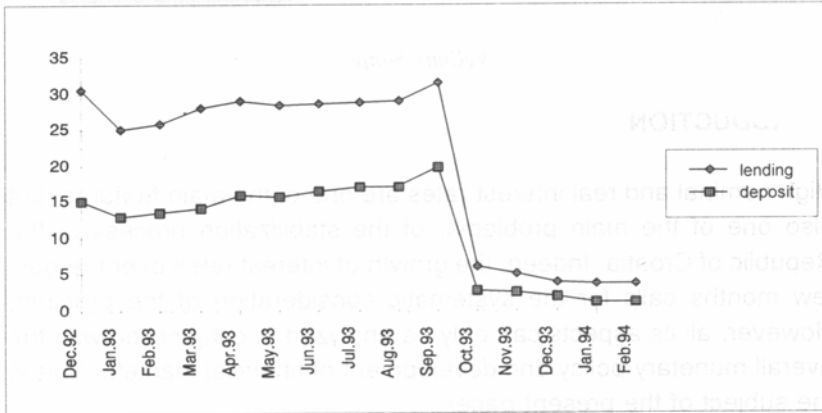
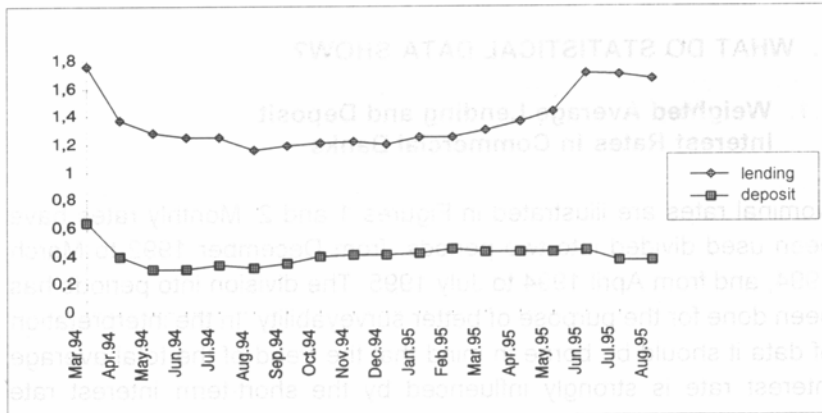


Figure 2

**NOMINAL MONTHLY INTEREST RATES OF DEPOSIT MONEY BANKS APRIL 1994 - JULY 1995<sup>1</sup>**



<sup>1</sup> Data on interest deposit for July and August are not comparable with the previous figures.

Since nominal interest rates declined as high inflation was brought down, the difference between lending and deposit interest rates (referred to as margin) underwent major changes. Until 1993 the margin reached, on the average, 15 percent at the monthly or 435 percent at the yearly level; after the curbing of inflation it stabilized at about 1 percent a month or 12.7 percent a year. However, this year the margin has obviously been increasing and currently - observed in terms of the difference between the average weighted interest on kung loans and deposits - amounts to about 17.5 percent.

However, these figures do not reflect the real cost of capital. In deposit money banks the cost is higher by several percentage points at the yearly level because of various fees paid when loans are granted. Moreover, credit flows between the banks and their clients represent only a part of overall credit flows. The second part refers to credit relations between enterprises, and credit relations between other financial organizations (savings banks, savings&credit associations etc.) and their clients. Although there are no reliable statistical data on this segment of the credit market, partial information suggest its three main features:

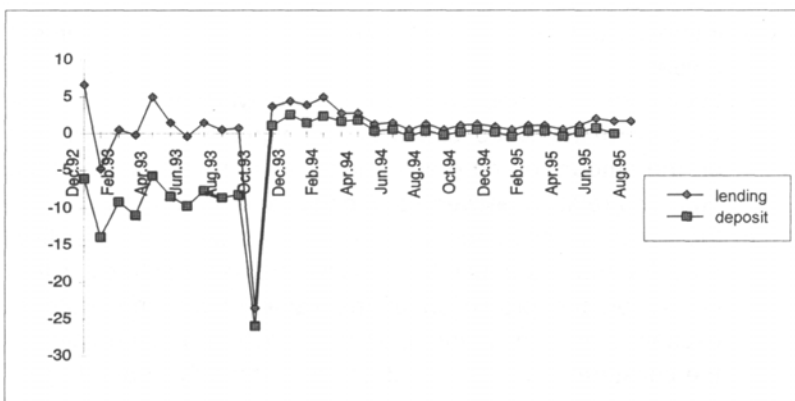
- a) interest rate levels are 1-6 percent a month or 13-100 percent a year;
- b) the market is pronouncedly segmented, which means that the variation of the cost of capital is very high and very dependent on the amount of the granted loan, and on the nature of the business relation between the lender and the borrower;
- c) the financial instruments in the market are very primitive, meaning that, as a rule, they involve ordinary contracts with a clause on the protection of the value of principal (rate of exchange or a price index), while the nature and the value of the collateral are determined entirely arbitrarily depending on the preferences of the parties to the contract.

In terms of its magnitude, this market probably lags behind the banking loan market, and the continuation of this paper is therefore devoted to the analysis of the most important segment of the loan market - the segment involving banks and their clients.

Figure 3 illustrates the trend of real interest rates applied by deposit money banks at the monthly level. Retail prices have been used as a deflator.

The Figure can be split into three periods. The first is the period of high inflation up to September 1993. Although real lending interest rates were occasionally positive in that period because of unforeseeable price fluctuations (having even reached the prohibitively high real level of 6.6 and 5 percent a month in December 1992 and April 1993, respectively), the salient feature of the period is the extremely high real margin which amounted to about 10 a month or 214 percent a year. Obviously, over the period under observation the deposit interest rates of deposit money banks were negative in real terms: the average for the first nine months was -9.2 percent a month, or about -200 percent a year.<sup>2</sup>

Figure 3  
**REAL MONTHLY INTEREST RATES OF DEPOSIT MONEY BANKS**



<sup>2</sup> Calculation based on the absolute value.

The second period covers the first stage of the Stabilization Program from October 1993 to April 1994. The main features of the period, after the October stabilization shock, are as follows:

- a) real monthly lending interest rates at the 3-5 percent level;
- b) real monthly deposit interest rates became positive at the 1-2.5 percent level;
- c) the real interest rate margin dropped to the still high 2-3 percent.

After April 1994 the cost of capital stabilized at average levels slightly higher than 1 percent with a real interest margin of about 1 percent. Such a state of affairs prevailed until May 1995, when interest rates began to grow faster. This will be discussed at greater length in the second part of the Paper.

## **1.2. Breakdown of Interest Rates by Financial Relation**

Table 1 reviews the breakdown of interest rates by type of financial relation for July. Although data for one month only are involved, the breakdown is representative for the entire period. It should be noted that the data shown in the Table have been collected in accordance with a new statistical methodology which makes data on interest paid incomparable with the data presented in Figures. However, this makes the data more reliable, and the comparison of lending and deposit interest rates more meaningful, because their statistical features are the same. The interest rates refer to both loans and deposits granted and/or collected in the current month.

We thought it necessary to highlight the following characteristics of the interest rate breakdown:

1. Interest rates on kung loans with and without the currency clause do not differ substantially.

2. The amount of foreign exchange loans as compared with kung loans is negligibly low, and the average rate of interest is lower by about 4 percent.
3. Very high interest is paid on discounting securities, which suggests the high level of the risk premium.
4. Long-term loans account for only 5 percent of overall kuna loans.
5. The rate of interest on long-term loans is lower than the rate on short-term loans, which may be explained by two factors: (a) the part invested with enterprises probably involves foreign credit lines, which also means an interest rate closer to the international level; (b) the greatest part relates to loans to private persons, and some banks are just beginning to capture, by a lower cost of capital, this segment of the market whose purchasing power is still relatively low.
6. Deposit interest rate on time kuna deposits is still higher than interest rates on time foreign exchange deposits, and interest rates on all time arrangements in kung are higher than interest rates on demand deposits in kung more than is customary in the world, which reflects the still present long-term distrust in the financial system.
7. There are no long-term sources of funds (deposits) in Croatia. Demand and time deposits (up to one year) account for 99.8 percent of kung and 98.3 percent of foreign exchange deposits. This means that the difference of interest rates is still too low to offset the feeling of risk and motivate depositors for long-term kung savings. The risk may also be broadly quantified as follows. Foreign exchange deposits do not comprise a foreign exchange but only systemic risk. The rate of interest on time foreign exchange deposits up to 1 year is still by 2-3 percent higher than in Austria or Germany. The difference reflects systemic risk and transaction costs. This percentage should be increased by the difference between interest rates on time deposits up to one year in kuna (12.33 percent) and foreign

exchange (6.67 percent). The 5.66 percent difference is the measure of currency risk. The sum of the systemic risk and currency risk is 8.66 percent (3% systemic + 5.66 percent foreign exchange). This is the premium Croatian banks are prepared to offer on the average at the yearly level, but it still falls short of promoting longer-term kuna deposits in Croatian banks.

Table 1  
**YEARLY NOMINAL INTEREST RATES BY TYPE  
 OF FINANCIAL RELATION FOR JULY**

Type of financial relation	Weighted interest rate	Amount in kuna
<b>Loans</b>		
Kuna loans without currency clause	21.84%	2,147,317,258
Short-term loans	22.57%	2,021,168,794
- on demand to juridical persons	22.87%	677,235,979
- other loans to juridical persons	21.98%	1,247,970,212
- short-term loans to private persons	21.40%	71,990,261
- discount of securities	48.49%	23,972,342
Long-term loans	10.10%	126,148,464
- to juridical persons	15.63%	11,754,025
- to private persons	9.53%	114,394,439
Kuna loans with currency clause	21.70%	423,966,949
Foreign exchange loans	17.28%	100,671,856
<b>Deposits</b>		
Kuna deposits without currency clause	4.39%	6,490,381,092
giro and current accounts	3.81%	5,452,230,749
demand savings deposits	3.97%	484,072,636
time deposits	10.55%	554,077,707
- up to 3 months	9.89%	395,544,388
- 3-12 months	12.33%	145,990,178
- 1-5 years	10.19%	9,925,969
- more than 5 years	12.17%	2,617,172
Kuna deposits with currency clause	8.13%	68,832,852
Foreign exchange deposits	4.13%	5,614,005,921
demand	3.33%	4,040,520,319
time	6.19%	1,573,485,602
- up to 3 months	6.00%	1,270,908,477
- 3-12 months	6.67%	203,899,114
- 1-5 years	7.75%	93,997,326
- more than 5 years	7.40%	4,690,685

### 1.3. Breakdown of Interest Rate by Bank Type

The mentioned premium of 8.66 percent at the yearly level is the maximum that domestic banks can offer. Since this is not enough to attract higher kuna savings, the financial system is in a vicious circle. A higher premium would be required to attract capital, but deposit money banks are not capable of offering higher deposit rates because they could not bear the cost if that implied the reduction of the difference between lending and deposit interest.

This observation introduces us to the problem of the cost and client structure of domestic deposit money banks. Namely, the widespread opinion is that poorer banks have higher costs and higher margins, and higher lending interest rates. It is generally being assumed that poorer banks operate with poorer clients affected by business crises, prepared to pay any interest just in order to extend their existence for a short term, and disregarding the payment of the principal in the future. Our studies have shown that such a belief is wrong.

A representative sample of 10 deposit money banks has been analyzed. The sample includes seven sound banks of different size and regional provenance. The remaining three banks in the sample have been classified as 'bad' (Privredna Banka, Rijecka Banka, Splitska Banka). Figure 4 illustrates the unweighted average deposit interest rate and the unweighted standard deviation of deposit interest rates for all the banks in the sample.

The standard deviation of deposit rates is low and, over time, more stable than the standard deviation of lending rates. This means a rather uniform business policy with respect to deposit rates. The deposit market is homogeneous and does not involve high transaction costs, so that depositors can easily transfer their deposits from one bank to another. Thus, the banks are forced to watch their deposit rates so that they do not depart from the interest offered by their competitors.



However, the loan market is segmented with high transaction costs, causing high interest rate deviations.

Figure 4

**AVERAGE DEPOSIT INTEREST RATE AND STANDARD DEVIATION OF DEPOSIT INTEREST RATES FOR 10 BANKS IN THE SAMPLE\***

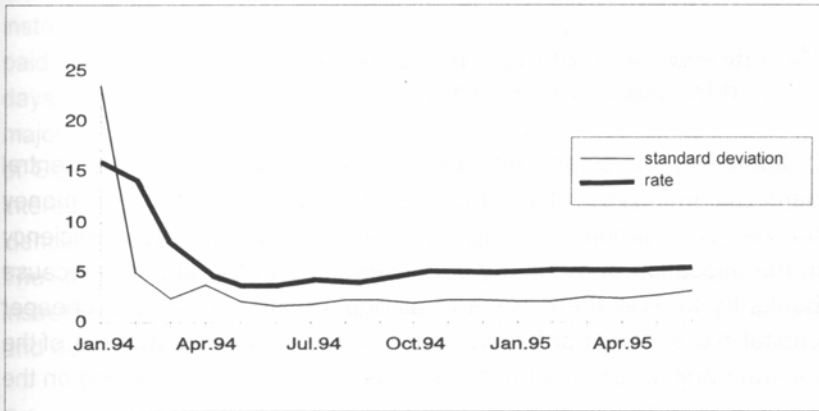
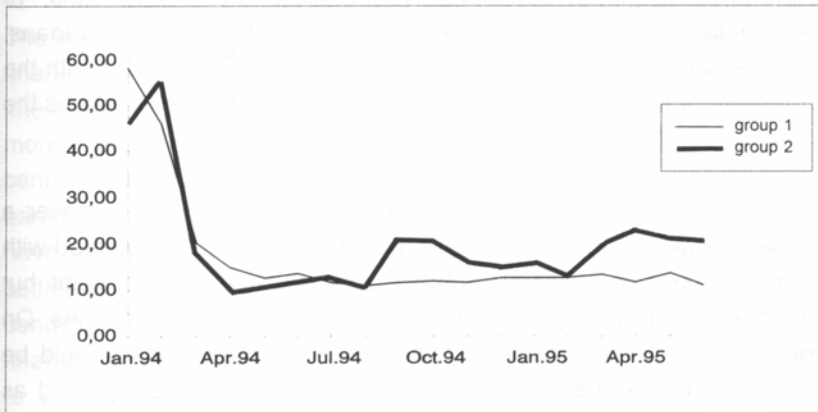


Figure 5

**SIMPLE AVERAGE MARGIN FOR THE TWO GROUPS IN THE SAMPLE**



Contrary to expectations and widespread beliefs, the difference between two subsamples involved higher lending interest rates and higher margins in good banks. The result is illustrated in Figure 5. Group 1 includes bad, and Group 2 good banks.

The explanation of this phenomenon is given in the second chapter.

#### **1.4 Interest Rates of the National Bank of Croatia (NBC) and Interbank Money Market**

In financially developed economies the interest rates of the central bank mainly represent the top interest rate threshold in the money market. Their prohibitive magnitude provides for maximum efficiency in the allocation of monetary surpluses through the market, because banks try to avail themselves of all opportunities to acquire cheaper capital in the market before knocking on the expensive 'window' of the central bank. In Croatia the situation is the opposite. 'Knocking on the window' is relatively cheap.

While the recent interest rate in the money market amounts to 23 to 24 percent a year, the most important interest rates of the central bank are as follows: 18 percent on lombard (collateral) loans, 19 percent on intervention loans, and 17 percent on daily liquidity loans. The discount rate of 8.5 percent is used only in transactions with the government budget, which - in terms of opportunity cost- sustains the subsidizing of the budget by the central bank.

To be sure, intervention loans granted to banks failing to cover a negative balance in the overnight money market are associated with penalties which increase the actual 'cost' of the intervention credit, but this cost is not excessive for desperate banks used to sanctions. On the other hand, the relatively low cost of lombard loans should be understood in terms of the fact that NBC bills have to be used as collateral when applying for such loans, and cost of the lombard credit

is therefore an indirect incentive to subscribe NBC bills below the market interest rate. However, such an incentive only contributes to the nontransparency of the system and slows down the development of the free auction market of NBC securities.

Nevertheless, in September the NBC has begun to change its policy with respect to interest rates on NBC bills, thus bringing this instrument closer to market yardsticks, and this is encouraging. Having paid, for a long time, 18 percent on 35 days and 19.3 percent on 91 days, as of August 30 the interest on 35 days (which accounts for the majority of subscribed notes) was increased to 21.5 percent, and as of September 4 to 22 percent. Although this is still short of market interest rate, the very low risk should also be taken into account. Hence the enhanced subscription of 'voluntary' notes in recent days. The fact is encouraging because this is the best sterilization instrument which places sterilization into the financial market context and does not affect the growth of interest rates.

Other deposit NBC rates refer to two forms of the statutory reserve. A low interest rate of 5.5 percent a year is paid on 'traditional' statutory reserve assets, while 16.5 percent is paid on the financial relapse called 'obligatory NBC bills.'

The interest rate policy of the NBC influences the interest rates in the financial markets in two ways. On the lending interest rates side, interest is settled at lower rates as compared with the market and money is made available to the users of the financial services of the central bank at a relatively low cost, and this may reduce commercial banks' interest rates to a lower level as compared to what they would have been otherwise. On the deposit interest rates side, interest is settled at considerably lower rates as compared with the market; in conditions of extensive money sterilization, this increases the cost of financial intermediation and interest rates become higher as compared

to what they would have been otherwise. The net effect will be discussed in the next chapter.

## **2. WHY ARE INTEREST RATES HIGH?**

There is a 'common sense' explanation: because there is not enough money. Money supply should be increased, and that will bring interest rates down and accelerate growth.

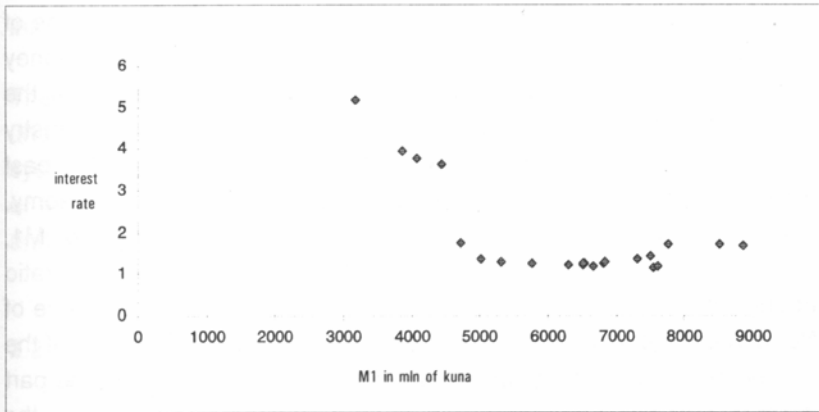
At this point it would be worthwhile to recall Fernand Braudel's words: the essence of the progress of civilization lies in avoiding the pitfalls of 'common sense. The obvious is not always true - the obvious may mean superficial. In this chapter we have tried to penetrate under the surface of the phenomena described in the first chapter and demonstrate that a 'common sense' explanation is too superficial to be translated into an efficient economic policy.

For a start, Figure 6 illustrates the link between money supply, M1, and interest rates. It shows monthly data for the period from November 1993 to August 1995. The reconstructed M1 series, which takes into account the establishment of the Treasury in October 1994, has been used.

The data clearly show that there was a negative link (the growth of money supply reduced interest rates) until money supply crossed the 5 billion kung threshold (which coincided more or less with the introduction of the kuna). After that the growth of money supply no longer influenced the reduction of interest. On the contrary, the very high growth of money supply, M1, in 1995 - 32.5 percent from late December 1994 to late August 1995 - has been associated with a considerable growth of interest rates. The following pages provide the answer to the question why the growth of money supply no longer has a bearing on the decline of interest rates.

Figure 6

**MONEY SUPPLY, M1 (MLN OF KUNA), AND THE AVERAGE MONTHLY NOMINAL LENDING INTEREST RATE ON KUNA LOANS**



## 2.1. Trust, Money Supply Structure and Velocity

The average lending interest rate of deposit money banks is about 22 percent, and the average deposit interest rate about 4.5 percent. Short-term deposits predominate, and the average kuna margin now amounts to the very high 17.5 percent. It has also been established that the level and structure of deposit interest is still insufficiently stimulative to attract higher savings. Although very high, deposit interest rate should be still higher. Accordingly, the lack of long-term, trust in the stability of the financial system and in currency still dictates the level of deposit interest, i.e., the basis for the determination of lending rates. Such a state of affairs will persist for some time to come, and it is not at all unusual for a young country which has experienced war and three decades of high inflation.

Trust is closely associated with the degree of technical development of financial services and with the structure of money supply. The mentioned phenomena are of crucial importance when the links between the quantity and price of money are considered. That is,

taking into account the fact that money supply comprises cash and deposit money, the share of cash should always be borne in mind because cash is outside money which does not enter the process of multiplication (a higher propensity to hold cash reduces the money multiplier). In Croatia the propensity to hold cash because of the uncertainty and underdevelopment of the financial service industry (the use of automatic tellers has become widespread only in the past three years), and because of the high share of the shadow economy, is still very high. The average share of cash in money supply, M1, during the first six months of 1995 was 38 percent, matching the ratio attained by the United Kingdom and the United States on the eve of World War One. Accordingly, a substantial part of any increase of the money supply is drained outside the banking system, and a large part of money is still immobilized in private pockets. This is why the exogenous increase of money supply required for unit growth of loan supply is much higher in Croatia than the required increase in a more developed country, which also implies a much higher risk in providing loan supply incentives in this manner. Therefore, in this stage of development of the Croatian financial industry, the sources of funds should be sought in strengthening trust and stimulating competition, which will force banks to financial innovation and to increasing the money velocity. And that can only be achieved in conditions of stability.

The meaning of the recommendation can be represented by Fisher's equation,  $MV = PY$ , or  $M/P = (1/N)Y$ . If monetary policy relies on increasing money supply,  $M$ , there is the risk that nominal growth will be passed to price increase,  $P$ , and not to real income,  $Y$ , and that the financial industry will remain at a rudimentary stage of development. If a consistent stabilization policy is implemented, the system is forced to adjust naturally - the economy itself finds 'money' to the naturally required extent. Different financial innovations increase the velocity ratio,  $V$ . Since the nineteen-fifties, developed countries have doubled

the money velocity.<sup>3</sup> The crucial role in the process has been played by the development of short-term financial markets, particularly markets involving different forms of bills and similar financial instruments.

The foregoing warrants the following conclusion: the main cause underlying high interest rates lies in the lack of trust in the financial system and in currency, underdevelopment and noncompetitiveness of the financial industry, particularly of financial institutions, markets and instruments.

## **2.2. Difference Between Lending and Deposit Interest Rates and Economic Growth**

The magnitude of deposit interest rates, correlated with the state of trust and the degree of development of financial markets, only determines the basis for lending interest rates. The actual lending interest rate also includes the margin, which depends on cost and competitiveness in the financial inter mediation sector, and which is exceptionally high in Croatia precisely because of the high cost and lack of competition. The extremely high difference between interest on foreign exchange loans and deposits - 13 percent in July - also bears witness to the fact that this particular factor is involved.

The policy of sterilization of money supply surpluses does not have a crucial bearing on the margin. Even in 1994, when money supply more than doubled, when interest rates stabilized and when Croatia still had not signed the stand-by arrangement, the average margin level was 10-12 percent, and this is a level which can also be seen in other countries which are successfully undergoing the period of so-called transition. This is also born out by the fact that Slovenia achieved in 1994 a growth of real GDP of 5 percent with an average real yearly interest on banking loans of 19.2 percent.

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<sup>3</sup> Farmer, Roger E.A. (1993): *The Macroeconomics of Self-Fulfilling Prophecies*. The MIT Press, Cambridge, Mass: p. 214.

Therefore, this is an unfortunately unavoidable and general phenomenon in financial systems encumbered by the past, where banks have to pay almost all commitments from their liabilities, and can collect only a small part of claims from their assets. Sound banks, which achieve very high profits with a high margin, follow such a policy. They are still too small and organizationally too unstable to attract funds and offer loans at a lower cost by reducing the margin (by increasing deposit and reducing lending interest rates): the price elasticity of loan supply is very low. Hungarian experience has demonstrated that proper competition pressure can come only from foreign banks with a strong financial background and banking experience.

Nevertheless, the following point is called for: if sound banks sustain a high margin, this implies that their clients belong to fast-growing segments of the economy. One should also and in particular remember the fact that sound banks have higher lending rates and margins than ailing banks. There are obviously clients operating in economic segments allowing for gross profits capable of withstanding the high cost of capital. Because of this, part of interest rate growth in the last trimester of 1994 should also be attributed to economic recovery, recorded at the time even by growth yardsticks of the poorest statistical quality (industrial output index). Moreover, the fact that bad banks have lower rates and margins should also be attributed to the fact that their poor clients are simply unable to pay higher interest.

Conclusion: the second cause underlying high interest rates which has a direct bearing on the magnitude of the margin lies in the impossibility to recover old investments, which is why a smaller part of recoverable investments must entail higher interest if the banks are to meet their obligations.



### **2.3. Role of the Budget and of the Government Sector in General**

The analysis presented under 2.2 above focused on the links between the banking sector and other sectors without particularly singling out the government sector. However, that sector deserves a separate analysis because of its extremely important role.

The link between government and the banking system is manifested in two basic ways - through links with the central bank and through links with deposit money banks. Links with the central bank involve loans to the government on the assets side and government deposits on the side of liabilities. The link on the liabilities side has become particularly important in recent times because the fluctuation of the government deposit balance with the NBC has a great bearing on total liquidity, i.e., on money supply. However, we have seen that money supply does not have a crucial bearing on the rate of interest, and we have just experienced - in August and September - its decisive bearing on the exchange rate. Therefore, outflow which is substantially higher than inflow to the government account has an effect contrary to what is expected: higher liquidity in the system does not bring interest rates down, but pushes the exchange rate towards depreciation. The NBC then sterilized the money supply surplus by its statutory reserve in order to stabilize the kung, and this pushed interest rates upward. The net effect is undesirable - growth of interest rates and of the margin. This is why at this moment fiscal policy prevails over monetary policy which, because of underdeveloped financial instruments and markets, has a very restricted maneuvering space. In the future the relation may change to the advantage of monetary policy, and to the benefit of fiscal and monetary subjects, if the sterilization instruments markets (the market of 'voluntary' notes, public debt market etc.) becomes stronger so that its volume and fluctuations exceed the average fluctuations in the government account with the NBC. And this is possible only by

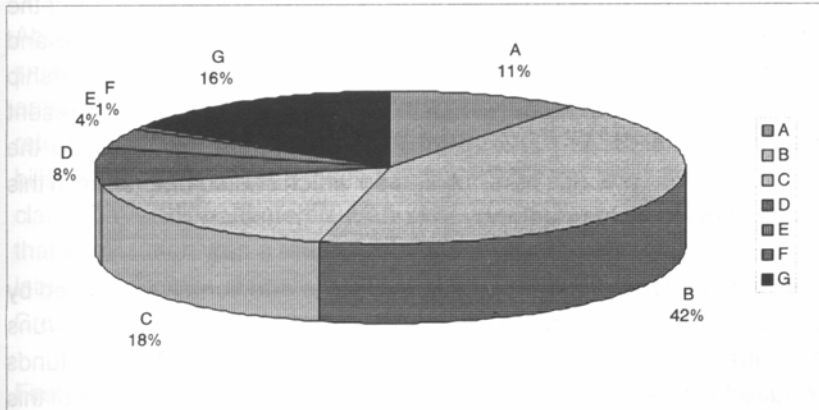
allowing further growth of interest rates on NBC bills and if trade starts in accordance with transparency rules of free auction.

The links between government and deposit money banks are so complex that this analysis can present only some of them, i.e., the links bearing on the magnitude and change of interest rates. Two relations are of the greatest importance. The first refers to 'old' banks a great part of whose assets are non-performing due to credits to state-owned enterprises awaiting rehabilitation, restructuring or bankruptcy, and are not capable of repaying their loans. In such a situation of waiting there is no credible instrument for loan recovery, and the cost is transferred, in the form of higher interest rates, to clients capable of repaying loans.

The magnitude of this problem is evinced by the paper entitled 'Analysis of the Financial Condition and Business Results of Croatian Banks According to Data for 1994' (National Bank of Croatia, Area for Supervision and Control). While the banks themselves classify only 5.68 percent of their assets as 'bad', NBC supervision has shown, with respect to the data available to it, that at least 27 percent of the assets of deposit money banks should be classified as 'bad'. The correction with respect to data provided by the banks refers to investments into some state-owned enterprises. But even this is a very optimistic estimate because only 0.71 percent of securities, accounting for as many as 43.2 percent of totally classified assets, have been classified as bad. These are mostly securities taken over through the transformation of debt into equity, and a great part of these securities produces no yield because the enterprises pay no dividend, and can be sold in the market far below their nominal value, if at all. Hence the justified doubt that the share of bad non-performing assets in the five largest banks might be, very roughly, between 50-60 and 70-75 percent. According to data available to the NBC (cumulative with corrections by the banks), the very unfavourable breakdown of risky but good assets bears witness to such a possibility. The breakdown is shown in Figure 7.

Figure 7

**BREAKDOWN OF GOOD RISKY ASSETS (73 PERCENT OF TOTAL RISKY ASSETS) BASED ON DATA AVAILABLE TO THE NBC (CUMULATIVE WITH CORRECTIONS BY THE BANKS) AS OF LATE 1994**



- A-claims on deposits
- B-securities
- C-long-term loans
- D-short-term loans
- E-other investments
- F-interest and fees
- G-other risky assets

Source: *Analysis of the Financial Condition and Business Results of Croatian Banks According to Data for 1994*. National Bank of Croatia, Supervision and Control Division, Zagreb, April 1995.

Furthermore, the absence of a credible debt collection system increases the risk of financial operation throughout the system, i.e., in its sound part as well. There is always the danger that a client might keep funds in circulation for his own account if this gives him a higher yield as compared to the total loan cost, penalties included. This gives rise to unpermissible and irregular arbitrage which incorporates a higher degree of risk perception into the average cost of financial

intermediation. It should be stressed that no data are available in this regard, and that this discussion remains at the level of speculation.

At any rate, risk is becoming an increasingly important element of the cost of money and large banks, which still operate with a vague and still predominantly (indirectly, through enterprises) state ownership structure, cannot adequately value risk. Because of this their present business policy does not lead to a solution of the problem. On the other hand, the process of rehabilitation which should help them in this regard obviously lags behind.

Risk in the financial intermediation system is additionally increased by unresolved relations regarding public debt servicing. The budget runs a nontransparent public debt policy, i.e., does not provide the funds required for the servicing of due interest and principal. Because of this the net claims of the banking system on government have increased this year by almost 800 million kuna by the end of August, and an agreement on the payment of the total debt, although promised, has not been concluded yet.<sup>4</sup> The fate of the new instalment, which also includes part of the principal and becomes due at the end of the year, is also uncertain. In this light it may be of interest to note that claims on government on account of public debt are classified as risky but good assets, and this makes the assessment about only 30 percent of poor assets additionally questionable.

#### **2.4. Money Sterilization Policy and Link Between Foreign Exchange and Kuna Loan Markets**

Therefore, only a smaller part of the interest rate magnitude, i.e., the change of magnitude over the past four months, is left unexplained. About 5 percent of growth are involved, which is not by any means a small figure. Most of this growth is caused by the increase of the opportunity and absolute cost of financial mediation due to the higher

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<sup>4</sup> *End of August.*

rate of the statutory reserve and the introduction of obligatory NBC bills. Although it is not difficult to be a hero now, after the battle, and claim that additional sterilization was unnecessary, we firmly believe that sterilization was a reasonable policy (in principle, without entering into the choice of instruments). The latest developments in the Croatian foreign exchange market only reinforce this conviction.

First, it should be stated that it would be impossible to defend the claim according to which the growth of interest rates had a bearing on slowing down growth. The growth momentum of the latter half of 1994 disappeared after the first quarter of 1995, mainly under the influence of political-war reasons: the January termination of the UNPROFOR mandate, the feeling about the imminent outcome of the crisis, operations 'Flash', 'Summer 95' and 'Storm', naturally slowed down economic flows, particularly the further increase of exports. Moreover, macroeconomic policy could no longer promote growth on its own as in 1994. Because of the absence of microeconomic reforms, most of the increased domestic aggregate demand began to shift to imported products, with the resulting deficit in the current account of the balance of payments.

Second, for all that, the receipts from tourist and attendant services achieved in June and July were not negligible. The higher seasonal foreign exchange inflow prompted the NBC to enhance purchase (also motivated to a considerable extent by the correction of the criteria regarding international reserves of the central bank for arrears due to the Paris Club); thus, there was a surplus money supply in financial channels in late July. In August the surplus produced an equilibrium in the foreign exchange market at a new level of the kung rate of exchange depreciated by 1.2 percent. Therefore, the link between money supply and interest rates should be considered in conjunction with the response of the foreign exchange market.

Conclusion: the third cause of high interest rates occurs because of the existence of a trade-off between the maintenance of the exchange rate and of prices on the one hand, and the reduction of interest rates on the other. Over a short term, stability should be sacrificed to the advantage of interest rate reduction, while the disruption of stability in the long run makes the resolution of the first two main causes of high interest rates less possible. It would therefore be wiser to sacrifice high interest rates in the short run in order to deal with the long-term, structural causes of high interest rates.

### **3. CONCLUSION: HOW TO BRING DOWN INTEREST RATES IN THE REPUBLIC OF CROATIA?**

Like any treatment, economic policy can be successful only if based on a correct diagnosis. If the diagnosis is wrong, the disease gets worse. Let us examine first the course of the disease brought about by a wrong diagnosis.

**Wrong diagnosis:** the resources of the national economy are not utilized because of high real interest rates, i.e., because of the lack of loan (money) supply.

**Treatment:** increase the money supply.

**Course of disease:** the economy enters into a stage of excess aggregate demand associated with the depreciation of the exchange rate. In theoretical terms, at first excess demand can even produce some growth of the real output, but part of the surplus shifts to price growth. A higher depreciation of the exchange rate first increases the cost of strategically important import inputs (oil!) and formally or informally indexed prices, and the price domino effect begins to spread in the economy. Nominal deposit rates cannot be increased to the extent required to offset the initial price growth, and the rationale for keeping money in accounts decreases. Real deposit money declines,

and every motive for spreading financial innovation disappears. Net loss is achieved with cash, the share of which in the money supply is high and increasing additionally because of the inability of banks to increase real deposit rates and hold deposits. However, everybody wants to protect the value of his or her wealth. Since trust has again been flouted, kuna cash does not 'run away' to goods and real estate but, first and foremost, to foreign exchange (because of the low standard of living and of the collective memory of the instability period), creating new pressure on the exchange rate and a new price increase cycle, etc. The final outcome: the destruction of the most valuable form of economic capital - the reputation and trust capital; stagnation and recession appear again. In such conditions it is not possible to increase real output by promoting domestic aggregate demand, because the part of increased demand which does not shift to imported products is mainly shifted to demand for instruments protecting the value of real wealth such as the Deutschmark. Although real interest rates would decline in this scenario, this decline would not be associated with stable growth.

The essence of the error is to be found in the unidimensional, superficial diagnosis - in the 'common sense' error. Unidimensional simplicity also results in a superficial drug.

**Correct diagnosis:** there are several causes of the disease. Let us list them in the order of their importance:

1. Long-term distrust in the system and in currency, and deposit interest rates which are still insufficiently high, in real terms, in order to overcome the perception of risk.
2. Underdevelopment of the financial industry manifested through
  - a) the high share of cash in money supply;
  - b) the underdevelopment of short-term financial markets and instruments.

3. The past, reflected in non-performing bank assets producing no yield, so that banks can operate only with high differences between lending and deposit interest rates.
4. Low intensity competition in the banking sector and absence of foreign banks.
5. Sterilization of money supply surpluses which could cause shocks in the foreign exchange market.

## Treatment

1. Link the growth of money supply to the exchange rate; permit increases only if there is appreciation pressure and, in that case, combine the growth of money supply and appreciation in order to reduce the problems of ex post sterilization.
2. In that case, issue money linearly, by reducing the statutory reserve, and not selectively through intervention in the foreign exchange market; this will promote the development of the interbank foreign exchange and kuna markets, the exchange rate will assume equilibrium price features, the problems caused by selective issue and linear ex post sterilization will be reduced, and all the NBC has to do is to renounce international reserve maximizing as its target function.
3. Moreover, in implementing such a policy the NBC has to increase its lending and deposit rates; rates on loans should be increased above the rates in the money market, and interest rates on NBC bills should be determined in accordance with transparent auction rules. The price in the overnight money market should be liberalized completely, and the repayment of overnight loans from secondary liquidity sources should be forbidden.
4. The target function consistent with interest rate abatement is the zero course of NBC profit, even if that meant a perceptible growth of interest paid on statutory reserve assets and other reserve money; this contributes to the 'rehabilitation' of the



banking system in a transparent way and with the maximum appreciation of market criteria, as well as with the reduction of pressure with respect to arbitrary administrative criteria. In this model the short-term loser is the government budget which is deprived of the not insignificant seigniorage, but even the budget stands to gain in the long run because the model reduces the funds to be provided for rehabilitation, and it also reduces the administrative pressure on the Agency which will not, for a foreseeable period, have the administrative facilities for a successful implementation of the complex operation of rehabilitation; most important of all, the reduction of interest rates makes the development of the public debt market possible.

5. Items 1-4 are related to the behaviour of the monetary authorities. However, the central bank cannot contribute to the final stabilization of interest rates on its own. A balanced budget policy and a faster implementation of microeconomic reforms are required.

In this way interest rates would be brought down in conditions of stable exchange rate and prices, these being the most important preconditions for the long-term solution of the problem. The problem is dealt with by reliance on the strengthening of trust in the system and currency, by financial market development, by reinforcement of competitive, natural pressures on bank restructuring, by promoting financial innovation, and by the opening of the Croatian financial system and economy as a whole.