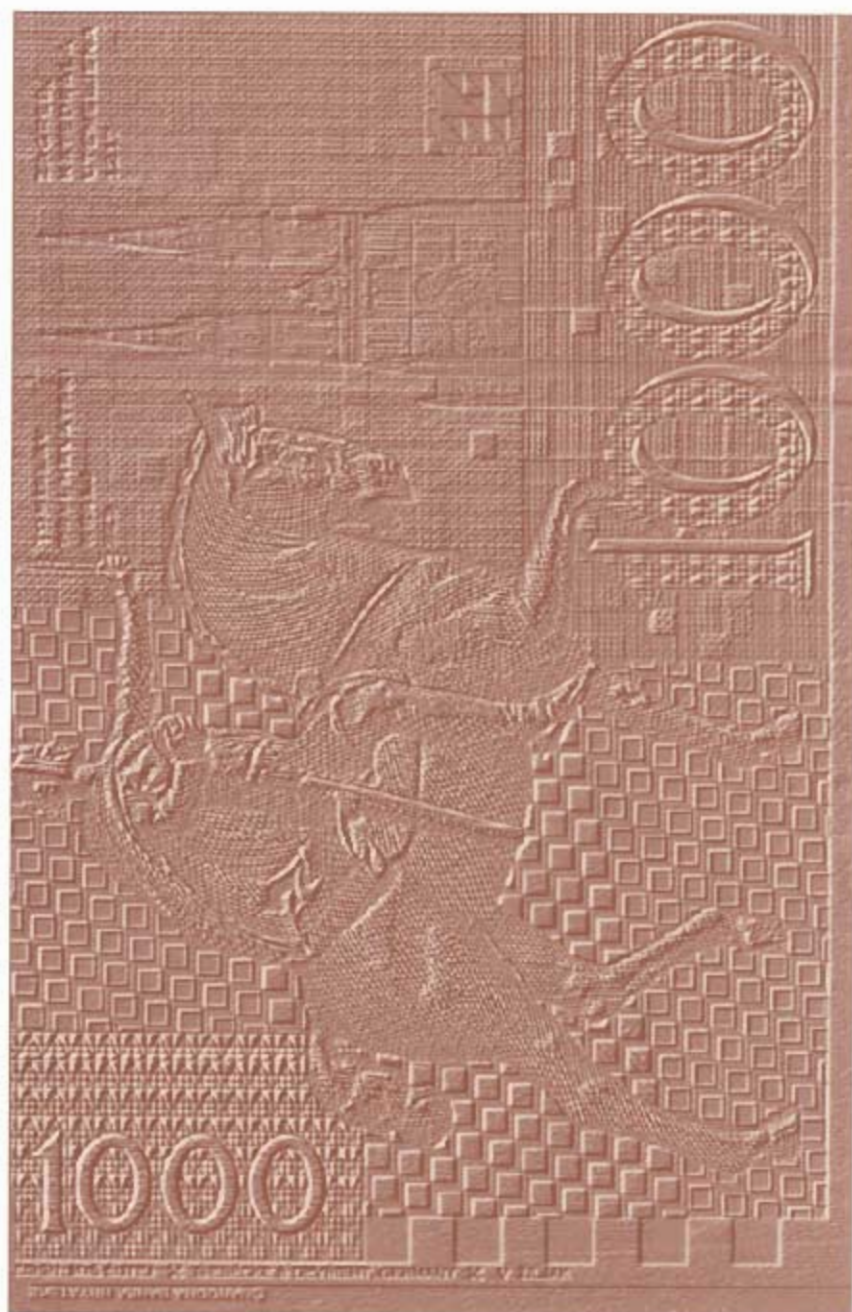


NATIONAL BANK OF CROATIA



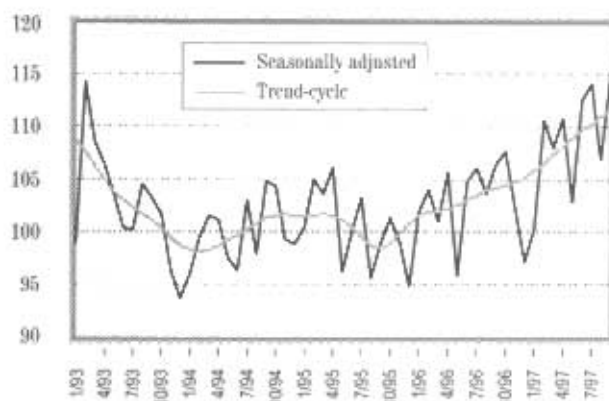
BULLETIN

YEAR II
No. 21 NOVEMBER 1997

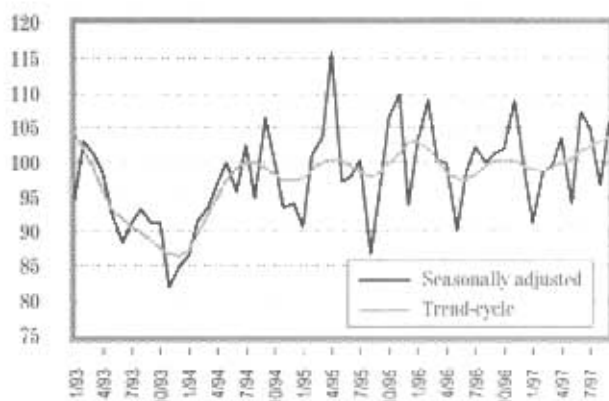
MANUFACTURING INDUSTRY

Industrial production reached an inter-year growth rate of 5.3 percent at the end of October, the highest rate recorded this year. Using simple time-series forecasting techniques based on data from the past five years, this year's growth is projected at 6.8 percent. If we take the base period as average production in 1995, we find that average monthly production this year is up by 6.6 percent. Growth in the last two quarters in relation to the same quarter of the previous year has been above 6 percent. The trend curve continues to show an extremely steep slope and indicates a high rate of growth. The rate of growth of industry as a whole in relation to the previous quarter calculated from the trend series (which is comparable because seasonal and irregular influences have been removed) is 1.7 percent. Within this, growth of processing industry of 2.0 percent is especially important. Looking at end-uses, the only group whose output is below last year is intermediate goods, while the highest growth was achieved by consumer goods. In the last period, mining and extraction grew at an annual rate of 0.3 percent, processing industries by 2.1 percent and the supply of energy by 25.7 percent. Publishing, production of textiles, paper and the wood industry, the production of rubber and plastics, metals, machine-building and transport equipment all contributed to the revitalization of industrial growth. The largest processing industries, food processing and chemicals, showed decreases in production, the first by an insignificant 0.6 percent and the second by a quite significant 11.3 percent. In the same period, the food processing industry increased its exports by 4.3 percent (in dollars), and the chemical industry decreased its exports by 13.2 per-

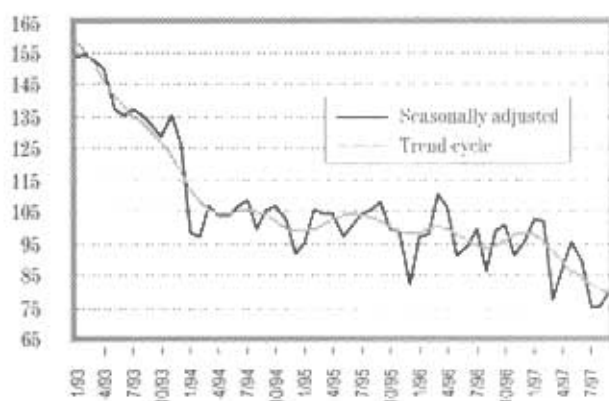
MANUFACTURING PRODUCTION INDEX
Seasonally adjusted and trend-cycle (1995 = 100)



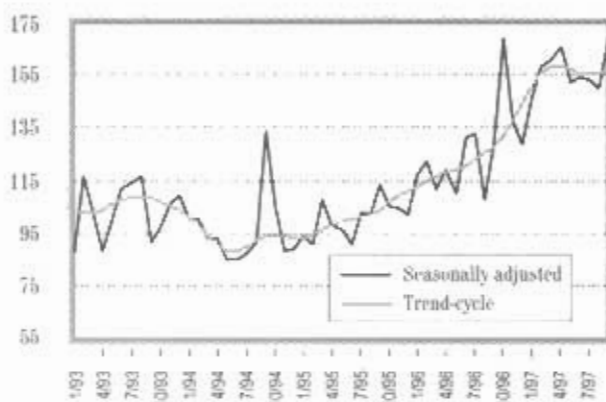
PRODUCTION OF FOOD AND BEVERAGES
Seasonally adjusted and trend-cycle (1995 = 100)



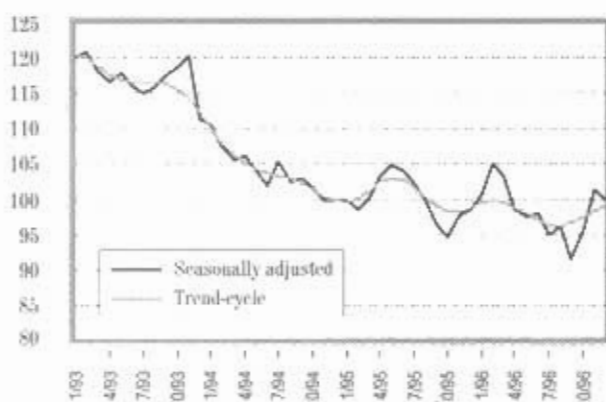
PRODUCTION OF CHEMICALS AND CHEMICAL PRODUCTS
Seasonally adjusted and trend-cycle (1995 = 100)



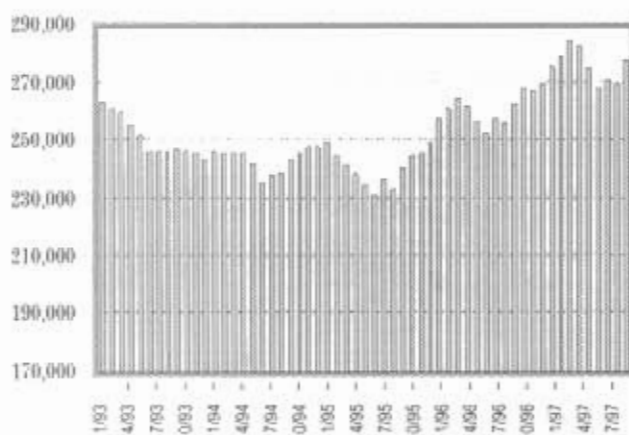
ELECTRICITY, GAS, STEAM AND HOT WATER SUPPLY
Seasonally adjusted and trend-cycle (1995 = 100)



STOCKS OF FINAL GOODS IN MANUFACTURING SECTOR
Seasonally adjusted and trend-cycle (1995 = 100)



NUMBER OF THE UNEMPLOYED



cent. The tobacco, clothing, oil products and light metal mineral industries are "lagging" more and more. In these industries, exports have not fallen in comparison to last year. However, they have been hit by domestic consumers' preferences for cheaper and better-quality imported goods. Exports of consumer goods grew the most, intermediate goods exports remained about the same, and investment goods exports fell significantly. Imports of all three categories of goods increased rapidly, most of all equipment imports (34.1%) and consumer goods imports (23.5%). A larger and larger portion of households' purchasing power is going toward the latter goods.

Data show that labor productivity rose by 10.4 percent in the first eight months, and real wages in the processing industries grew by 9.9 percent, leaving very little room for increased competitiveness of these industries. The fastest growth of pay was in the production of office equipment and computers, and the lowest growth was among the production of clothes and leather working and dying.

The unemployment picture, according to data from the labor market, shows, first, relatively high unemployment, and second, a seasonal increase. In September, 277,337 people were registered as unemployed, which represents the usual seasonal increase. This is due to the registration of people who have finished secondary school and not entered college and had to register as unemployed within three months of leaving school. Another reason, also seasonal, is the freeing-up of those temporarily employed in tourism, construction, etc.

TRADE

Retail trade deflated by retail prices showed a cumulative annual growth of 4.8 percent at the end of the third quarter. Forecasts on the

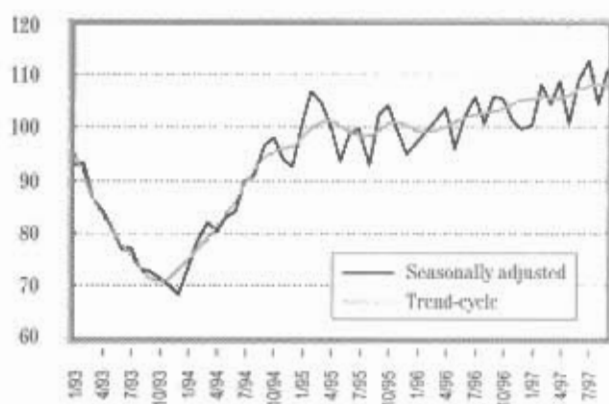
basis of turnover data point to growth of 5.3 percent for the year. While giving this figure, it should be mentioned that these are preliminary data for 1997, and that the sample includes subjects who realize about half of retail turnover. The value of sales in current prices grew by 8.7 percent in comparison to the first nine months of last year. If we take the price of goods in retail trade as the deflator, real growth is somewhat higher, 5.6 percent. The forecast for the coming months shows nominal turnover to be similar to that in September, and by the end of the year it is expected that nominal inter-year growth will be 9.7 percent. This forecast is based on the forecast made by the analysis departments of the firms themselves.

Wholesale trade corrected by retail prices shows an annual growth of 7.4 percent for the first nine months. Using industrial producer prices, wholesale trade grew by 10.1 percent.

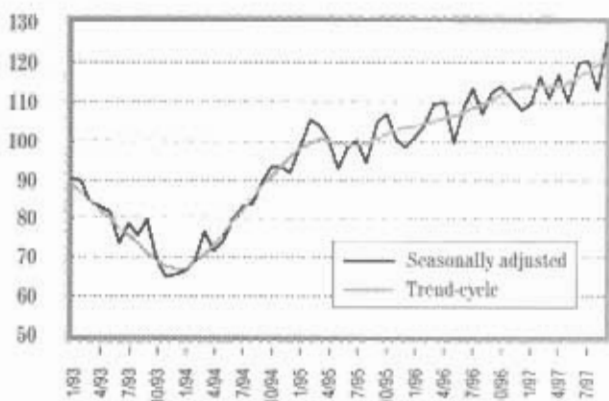
CONSTRUCTION, TRADE AND TOURISM

In construction, data for the first eight months speaks of greater activity than in the same period last year. Effective hours worked increased by 15.0 percent, the value of completed works by 35.0 percent, the value of contracted work in the country by 56.0 percent, and the number of workers at construction sites by 17.8 percent. Exports of construction materials is followed through the value of completed works and projecting services abroad and by the number of employees at construction sites overseas. The value of work and services grew by 23 percent nominally in 1996, as did the number of employees. According to the data for the first half of this year, activity overseas decreased. According to the first measure, it decreased by 25 percent, and according to the sec-

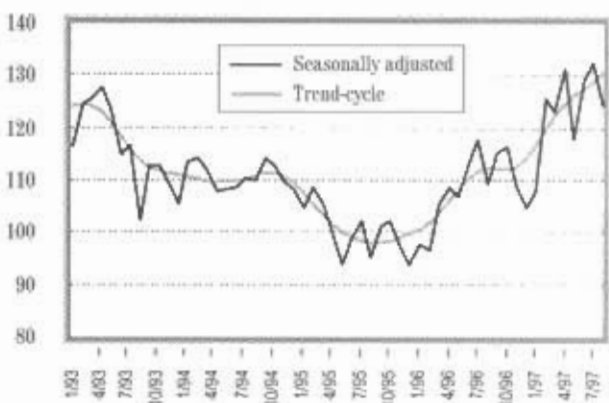
INDEX OF REAL TURNOVER IN RETAIL TRADE
Seasonally adjusted and trend-cycle (1995 = 100)



INDEX OF REAL TURNOVER IN WHOLESALE TRADE
Seasonally adjusted and trend-cycle (1995 = 100)

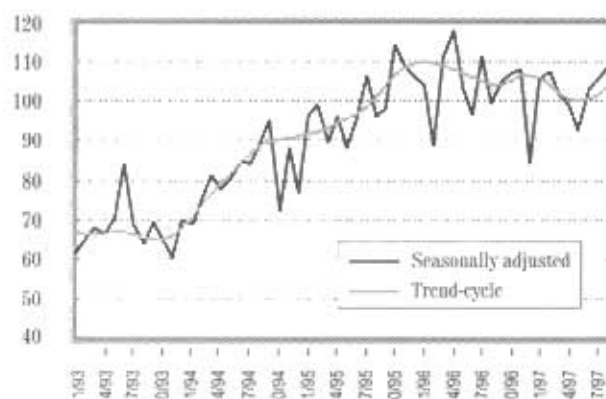


EFFECTIVE WORKING HOURS IN CONSTRUCTION INDUSTRY
Seasonally adjusted and trend-cycle (1995 = 100)



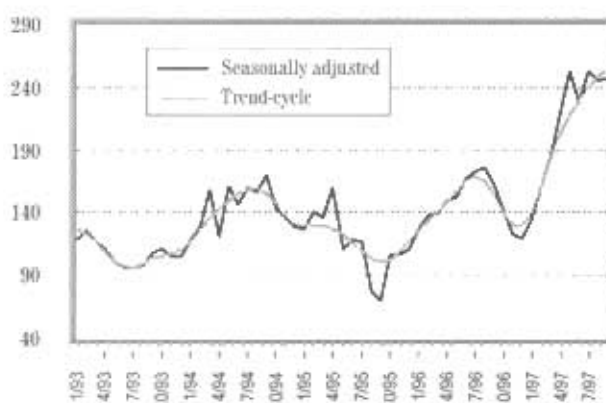
TRANSPORTATION - TRANSPORTED GOODS

Seasonally adjusted and trend-cycle (1995 = 100)

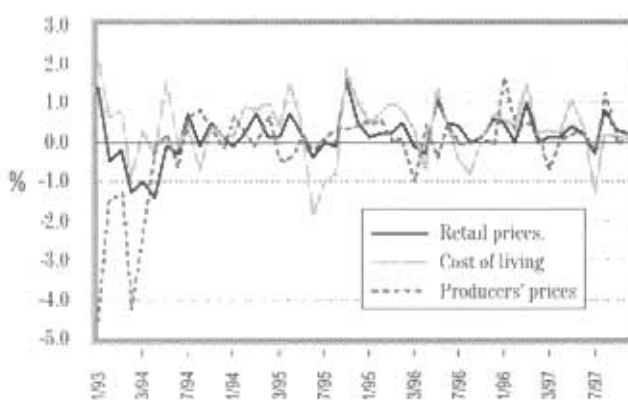


TOURISM - OVERNIGHT STAYS

Seasonally adjusted and trend-cycle (1995 = 100)



MONTHLY RATES OF CHANGE (%) OF RETAIL PRICES, PRODUCERS' PRICES AND COST OF LIVING



ond measure, by 8 percent. It is possible that a part of construction services have returned home, pulled by reconstruction or investment activity in residential construction, transportation infrastructure or productive capacity.

In the first eight months of the year, transportation improved on its results from last year in the transportation of passengers and approximately equaled its results in transporting goods. Passengers transported increased by 2.2 percent, while goods transported, after a significant increase in August, reached last year's level.

The end of September ended the three-month tourist "high season", leaving behind it 23 million night-stays. In all of 1996, only 21 million night-stays were recorded. In comparison with the same quarter of last year, night-stays were up by 44 percent. Overall, night-stays this year were 42.6 percent higher than in the first three quarters of last year. The number of night stays recorded in the first seven months was one factor increasing income from tourist services by 9.5 percent in comparison to 1996 and for a positive balance on the tourist services account.

PRICES

Prices rose slightly in October. Retail prices rose 0.2 percent from September levels, and the inter-yearly index stabilized at 3.3 percent.

Services prices rose by 0.2 percent, which was slightly higher than the growth of good prices (0.1%). The inter-yearly inflation rate for services remains at the high rate of 5.2 percent. It is significant to note that the fastest growing prices during the month of October were among non-food industrial products, which grew 0.3 percent, while, among inter-yearly growth rates, the fastest growth occurred among

agricultural products, whose prices grew 10.2 percent.

The cost of living grew by 0.1 percent in October. Clothes and shoes showed the greatest price increases. This is probably the result of increased demand, as well as higher prices for the fall and winter collections. Despite its increase this month, the cost of living grew at a moderate 3.7 percent on an inter-yearly basis. Among components of the cost of living, the greatest price increases were seen among hygienic products and health products with a substantial 6.5 percent increase, followed by education, culture and entertainment with a 6.2 percent increase, housing with a 5.3 percent increase and clothing and shoes with a 5.3 percent increase.

Producers prices grew at the same rate as the cost of living, 0.1 percent, in October. Only the production of drinks, with a 5.8 percent increase, and the production of light meals, with a 6.4 percent decrease, differed greatly from the overall trend of producers prices.

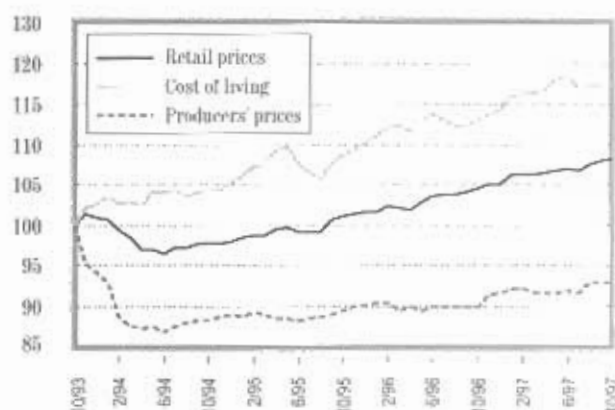
According to end-use of products, the prices of consumption goods grew 0.8 percent in October, while the prices of equipment and inputs fell by 0.3 percent and 0.5 percent respectively.

According to industrial branches, the greatest price increase was in the production of light metals, some 29.3 percent, and the greatest fall was in steel production, 11.6 percent.

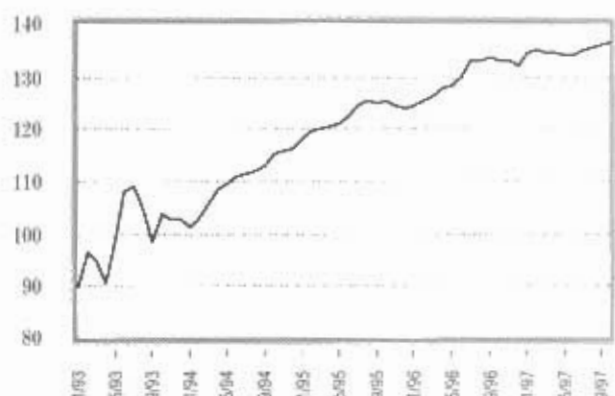
WAGES AND THE GOVERNMENT BUDGET

The average real net wage paid in September was 3.5 percent higher than the average for last year, while the average for the whole year was greater than the comparable figure for last year by 12.2 percent. The greatest increase was recorded in the field of financial intermediation, and the lowest in energy supply. Gross pay grew

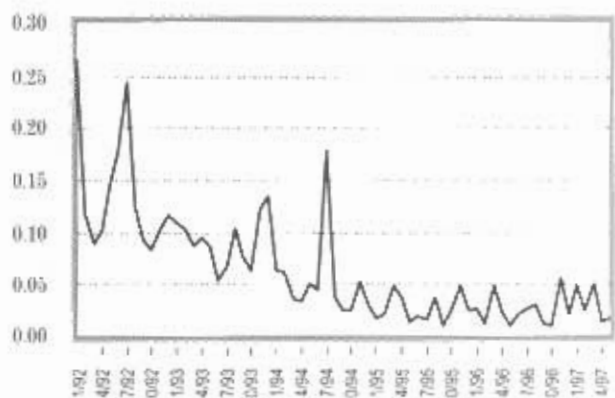
INDICES OF RETAIL PRICES, COST OF LIVING AND PRODUCERS' PRICES
1993:10=100



RELATIVE PRICE INDEX FOR NON-TRADABLE GOODS
(prices of services relative to goods' prices), 1992=100



INTER-INDUSTRY RELATIVE PRICE VARIABILITY IN MANUFACTURING
(standard deviation)



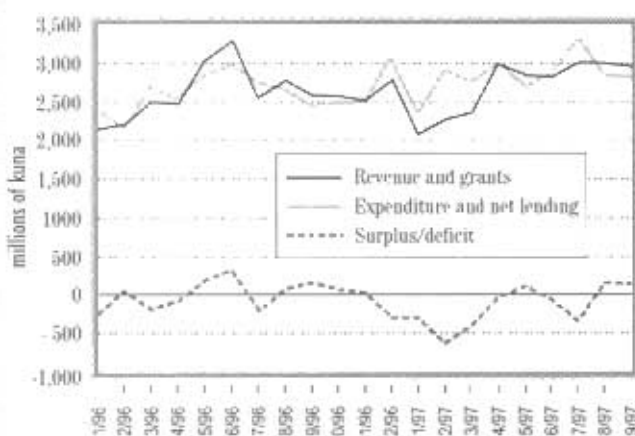
REAL AVERAGE NET WAGE
Constant prices, January 1993



REAL AVERAGE GROSS WAGE
Constant prices, January 1993



OUTTURN OF CENTRAL GOVERNMENT BUDGET



less, so that the average gross pay was greater than that in the same period last year by 12.2 percent nominally. The growth of 4.0 percent in the cost of living leaves space for significant real growth.

The central government achieved a surplus in September, while a deficit of 1.18 percent of planned gross domestic product has been recorded in the first nine months as a whole. This is already larger than the 0.8 percent and 0.1 percent deficits recorded in the last two years. The planned deficit of 2.5 percent of GDP for this year represented an increase, but it will be covered exclusively by foreign sources of financing. In the last three years, revenue has increased its share in GDP from 27.1 percent in 1994 to 30.3 percent in 1996, while it is projected to amount to 29.1 percent this year. In the last three quarters, revenues have risen 3.2 percent in nominal terms. The share of expenditures in GDP grew from 26.5 percent in 1994 to 30.3 percent in 1995 and stayed at that level in 1996. Instead of a desired decrease this year, expenditures are expected to increase. In comparison with the first nine months of last year, expenditures grew by 9.2 percent nominally. Although a significant decrease in capital expenditures was planned for this year, so far they have grown by 4.3 percent.

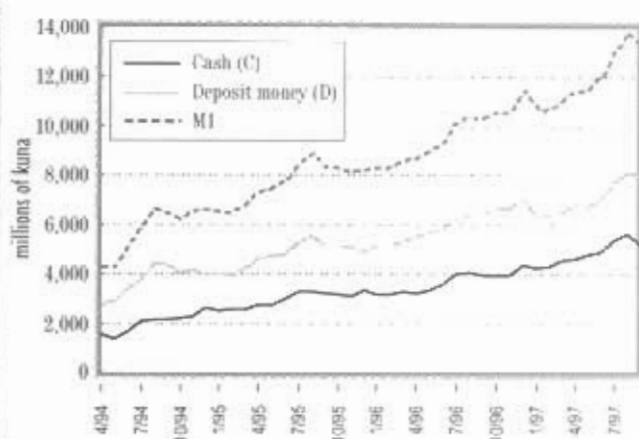
MONETARY DEVELOPMENTS

The month of September always brings with it slower monetary growth, after the dynamic summer months. Regarding September of this year, we can make the overall statement that monetary growth was more than modest. We would especially emphasize the striking decrease in currency in circulation, the very moderate growth of bank placements and the continued increase in government deposits in the banking system.

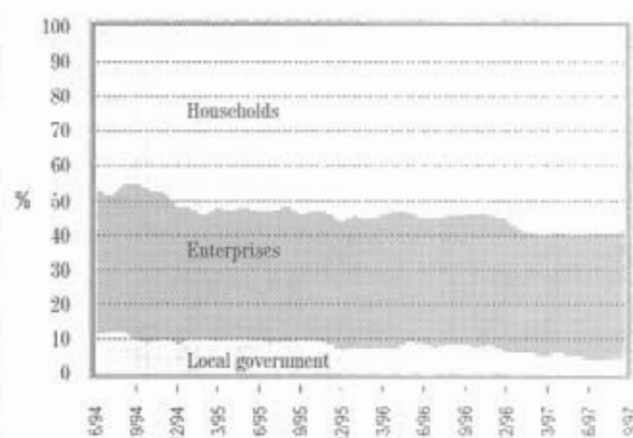
The decrease in currency in circulation in September of 0.4 billion kuna (7.4 percent) was the largest one-month decrease in currency in circulation in the last three years. This fall in currency in circulation was expressed in a decrease in the currency to deposit ratio, and in a mild decrease in the share of currency in the money supply. Deposit money fell an addition 0.1 billion kuna (1.3%), so that the money supply as a whole decreased by 0.5 billion kuna (3.8%). From a sectoral point of view, the whole decrease in the money supply came from the household sector, while other sectors held the same stock of money at the end of September as they had at the end of August. September expenditures because of the beginning of the school year, for fuel and food preparation for winter emptied the pockets of the population. This is seen at the aggregate level as a decrease in households' share of the money supply. However, when seasonal effects are excluded, the series shows a slight increase in September over August.

Quasi-money did not suffer the same seasonal shock as the money supply in September, although it did grow more moderately than in previous months. Kuna deposits continue to be the most dynamic category within M4, while foreign exchange deposits showed signs of "exhaustion". In the first nine months, foreign exchange deposits grew by 40 percent, and kuna deposits by 60 percent, relative to their amounts at the end of December 1996. However, when examining the positive trend that kuna deposits are growing faster than foreign exchange deposits, the overall size of these aggregates must not be forgotten. Foreign exchange deposits amounted to almost 5 billion dollars at the end of September. This is approximately equal to the foreign exchange reserves of commercial banks and the central bank together. At the same time, kuna deposits amount to less than 1 bil-

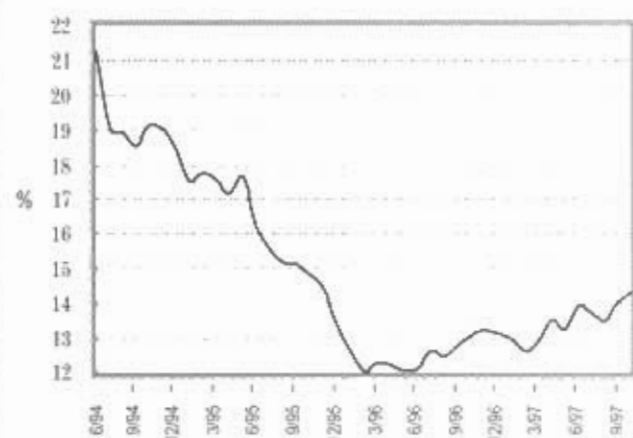
MONEY SUPPLY



MONEY SUPPLY - STRUCTURE BY SECTORS

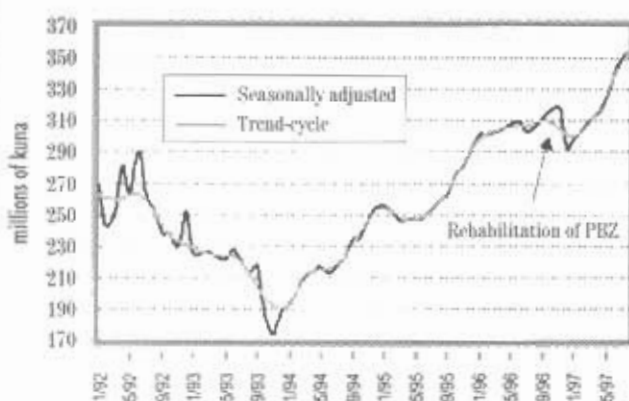


RATIO OF KUNA DEPOSITS TO QUASI-MONEY

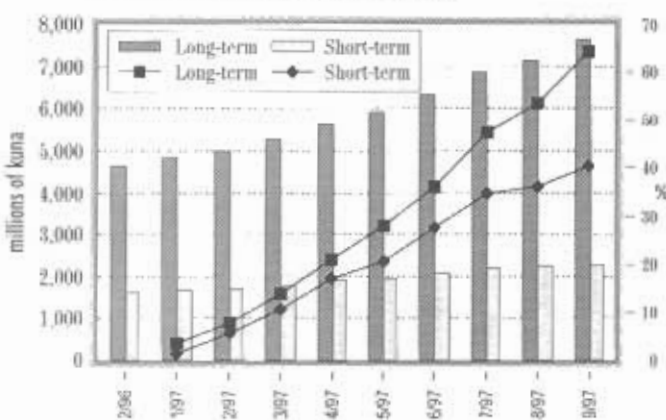


DMB's DOMESTIC CREDITS

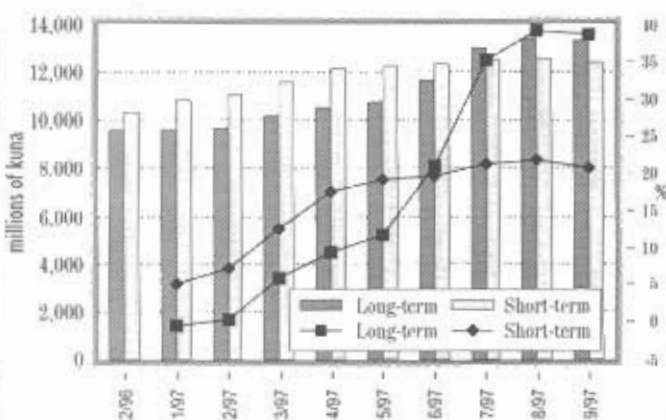
Constant prices, January 1992 = 100



STOCK (columns) AND CUMULATIVE GROWTH RATES (lines - relative to December 1996) OF LOANS TO HOUSEHOLDS SECTOR



STOCK (columns) AND CUMULATIVE GROWTH RATES (lines - relative to December 1996) OF LOANS TO PRIVATE ENTERPRISES



lion dollars (80% of both kinds of savings are household savings).

The growth of placements was also very moderate. The growth of 0.5 billion kuna (1.1%) was the smallest single-month growth in the last year, so that the growth of placements recorded in the first three quarters was actually a little more moderate than had been projected. However, the total growth since the beginning of the year amounts to 30 percent (a bit less than 10 million kuna), and the fourth quarter, which usually sees the highest growth rates of placements, is still in front of us.

We have spoken many times about changes in the time structure of savings in favor of longer-term savings. A similar trend can be seen among assets. Long-term credits to households grew at a faster rate and in absolute amount are greater than short-term credits to households. The change towards longer term among the sector "other enterprises" (that is, private enterprises) is even more noticeable.

In September, the central government continued to decrease its net obligations to the banking system (by 0.1 billion kuna). By increasing its foreign exchange deposits in the banking system by 0.2 billion kuna, and its kuna deposits by a further 0.1 billion kuna, claims of narrowly-defined government decreased by 0.3 billion kuna. However, at the same time HBOR granted a 0.2 billion kuna credit, which is counted as a claim on the government. At the end of September, the central government owed commercial banks about 1 billion USD less than it did at the end of 1996.

In keeping with the moderate changes in monetary categories and net domestic assets, net foreign assets decrease by 0.3 billion kuna. The growth of foreign exchange deposits in September did not have a direct effect on the growth of NFA, even though this effect should be significant because of the

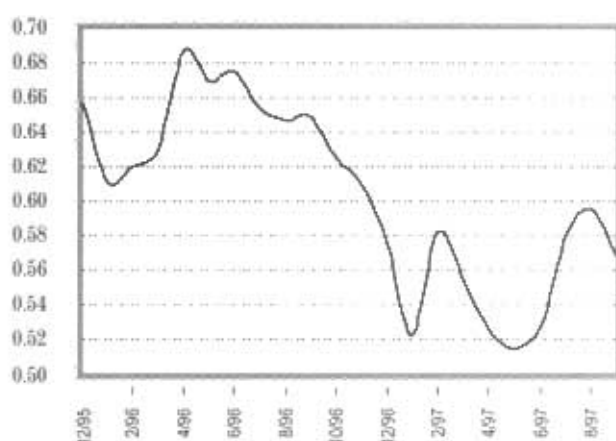
requirement to redeposit a fraction of these deposits abroad. In the first three quarters, the growth of foreign assets of commercial banks amounted to 4.8 billion kuna, which is 55 percent of the growth of foreign exchange deposits (itself 8.6 billion kuna). The absolute amount of foreign assets of commercial banks has oscillated around the figure of 55 percent of foreign exchange deposits this year.

Foreign assets of the central bank were flat in September and October. The decrease of the money supply of 0.1 billion kuna in September (most of all because of the above-mentioned fall in currency in circulation of 0.4 billion kuna) resulted from the central bank actually withdrawing money from circulation. The money multiplier $m1$, the "lever" which the central bank uses to influence monetary aggregates, fell. However, the seasonally-influenced events of September most likely will not have much influence on the continuous, year-long growth trend, especially after the decrease in reserve requirements by 2 percent in July.

The liquidity of the banking system was abetted by secondary liquidity sources in September. Banks used Lombard credits all month. In the middle of the month, the level of Lombard credits suddenly jumped within three days. Since giro accounts then fell, because of new contributions to required reserves, the National Bank organized a repurchase of NBC bills on October 16 of 300.4 million kuna. The banks repurchased these on October 20. The government did not take short-term credit at the National Bank this month, and a long-term credit of 66.4 billion kuna remained.

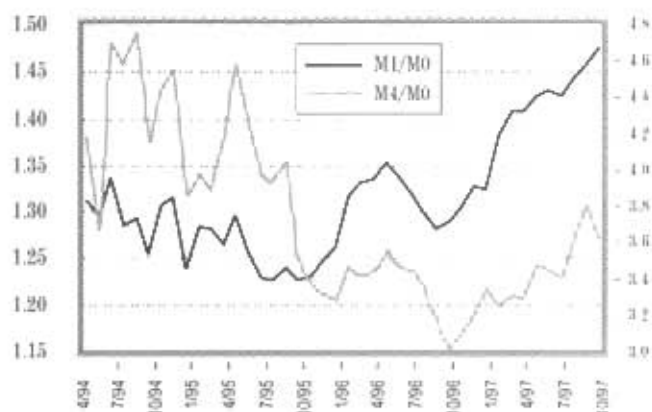
On the liabilities side, the money supply grew mainly because of giro accounts. These, despite everything, were higher at the end of the month. Currency in circulation grew minimally in relation to the end of September, even though the

RATIO OF COMMERCIAL BANKS' FOREIGN ASSETS TO F/C DEPOSITS

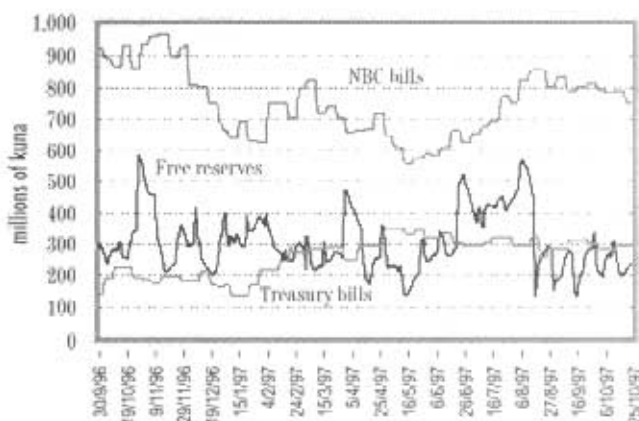


MONEY MULTIPLIERS

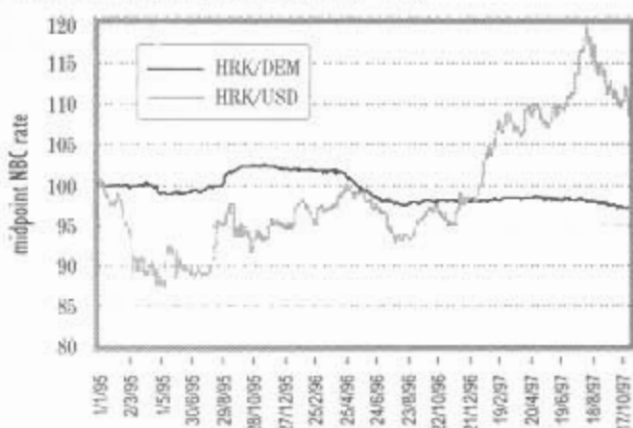
$m1 = M1/M0$ and $m4 = M4/M0$



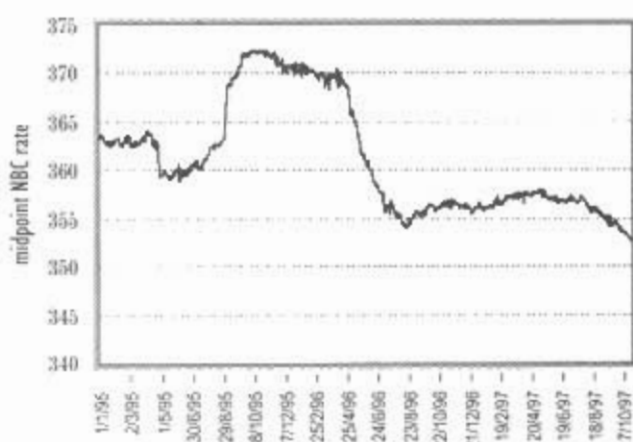
NBC BILLS, TREASURY BILLS OF THE MINISTRY OF FINANCE AND AND DMB'S FREE RESERVES AT THE NBC



INDICES OF DAILY NOMINAL EXCHANGE RATES OF KUNA VS. DEM AND USD, (January 1, 1995 = 100)



DAILY NOMINAL EXCHANGE RATE - KUNA VS. 100 DEM



DAILY NOMINAL EXCHANGE RATE - KUNA VS. ITL



end of the month, the end of the week and the a holiday all fell on the same day. Total NBC bills purchase were 20 million kuna higher than the month before.

EXCHANGE RATE

In the course of October, the largest nominal appreciation of the year was recorded. The value of the kuna appreciated by 0.6 percent against the German mark. At the beginning of October, it had been necessary to pay 3.5463 HRK per mark, while at the end of October, the value of a mark had fallen to 3.5263 HRK.

The new sample used for calculating the central exchange rate of the NBC only had a slight effect on the appreciation of the kuna. According to data from the Sector for Foreign Exchange Policy Implementation, the change in sample had an influence of about 0.10 to 0.16 percent.

The inclusion of transactions by individuals in the central exchange rate of the NBC has almost completely made the total recorded sale and purchase of foreign exchange equal. That is, before transactions with individuals were included, the sale of foreign exchange by banks had a share of 3/4 of total foreign exchange transactions, while, after the inclusion that share was reduced to 2/3 of foreign exchange transactions.

Starting in October, the methodology for calculating the real effective exchange rate also was changed. The base is changed, with January 1994 now being used in place of January 1992. Also, the weights for the currencies included are changed. The weights will no longer be based on trade of goods according to country of origin or destination, but will now be based on the foreign exchange balance (according to the currency structure of foreign trading transactions). According to the foreign exchange

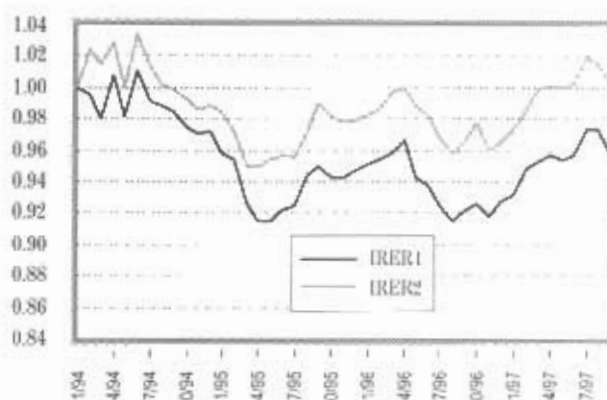
balance, the nine most important currencies account for 94.4 percent of total trade, while up till now, only 74.23 percent of trade had been covered. The value of the IREER has mildly appreciated because of the nominal appreciation of the kuna.

BALANCE OF PAYMENTS

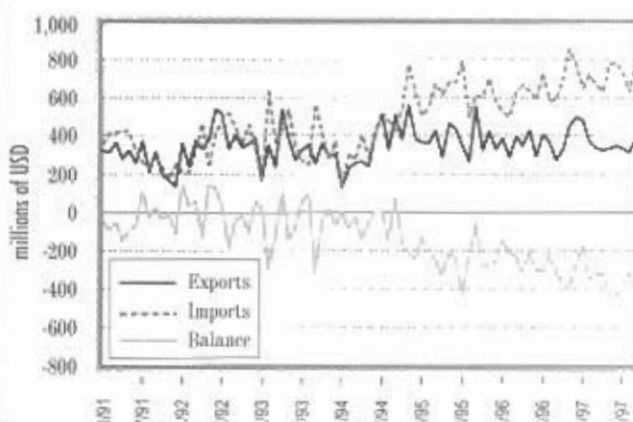
The balance of payments deficit in the first seven months of 1997 was 1,744.9 million dollars, which was 249.2 percent greater than in the same period last year. This increase in the deficit was caused by an increase in the merchandise trade deficit and a decrease in net income from services. Changes in the exchange rate of the dollar also had a large influence, decreasing all elements of the balance of payments. This had the smallest effect on goods, and the largest effect on income from services and transfers, which are mainly recorded in German marks and Italian lira, and on foreign exchange reserves. In the first seven months, the merchandise trade deficit grew from 1,709.7 to 2,428.2 million USD, which is an annual increase of 42.0 percent. Net income from services decreased from 571.7 to 317.6 million USD, which is an annual decrease of 44.4 percent. Although physical indicators show a substantial increase in the number of guests, income from tourism expressed in dollars in the first seven months of this year amounted to 571.4 million USD, which is 4.8 percent less than last year. Net income from current transfers decreased by 11.7 percent, from 480.8 to 429.5 million USD. Within this, international aid to the government decreased by 82.8 percent.

On the capital account excluding foreign exchange reserves, an inflow was recorded of 1,041.2 million USD or 257.9 percent more than in the corresponding period last year. Foreign direct investment

INDEX OF REAL EFFECTIVE EXCHANGE RATE OF CROATIAN KUNA
(IRER1 - with retail prices, IRER2 - with producers' prices), 1994:1=1.00



MERCHANDISE EXPORTS, IMPORTS AND TRADE BALANCE



BALANCE OF PAYMENTS in millions of USD (preliminary data)

| | Jan. - Jun. 97 | Jan. - Jun. 96 | indices Jan. - Jun. 97/Jan. - Jun. 96 |
|--------------------------------|----------------|----------------|--|
| Current account | -1,554.7 | -662.3 | 234.8 |
| Capital and financial accounts | 895.5 | 172.4 | 519.5 |
| NBC international reserves | -12.5 | -123.9 | 10.1 |
| Net errors and omissions | 671.7 | 613.8 | 109.4 |

Source: NBC

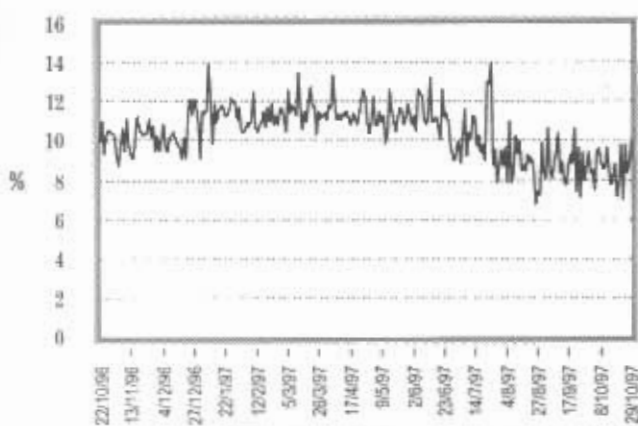
MERCHANDISE EXPORTS AND IMPORTS (in millions of USD)

| | Jan.-Sept. 1997 | Jan.-Sept. 1996 | Sept. 1997 | Sept. 1996 |
|---------|-----------------|-----------------|------------|------------|
| Exports | 3,256.3 | 3,220.7 | 389.4 | 369.0 |
| Imports | 6,390.6 | 5,461.6 | 784.7 | 587.5 |
| Balance | -3,134.3 | -2,240.9 | -395.3 | -312.4 |

Source: Bureau of Statistics

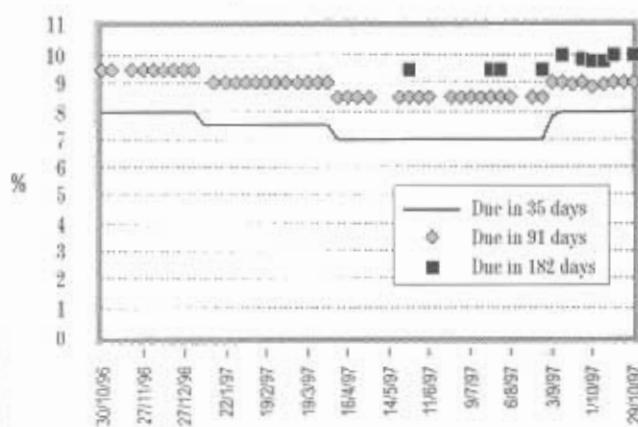
ANNUAL INTEREST RATE ON THE ZAGREB MONEY MARKET

Daily data



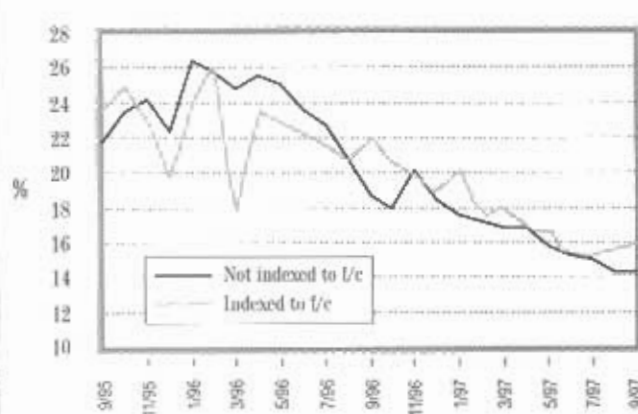
INTEREST RATES ON NBC BILLS IN 1996 AND 1997

Annual level, on auction days



DMBs' INTEREST RATES ON CREDITS IN KUNA

Annual level



reached 201.9 million USD or 14.7 percent more than last year. Net foreign credits grew from 99.5 to 680.2 million USD, of which government indebtedness grew from 12.8 to 534.2 million USD.

In September, Croatian exports grew substantially in dollar terms, which helped improve the export picture for the first nine months. Exports amounted to 3,256.3 million USD, which was 1.2 percent greater than in the same period last year. Imports grew to 6,390.6 million USD, an increase of 17.0 percent.

MONEY MARKET AND INTEREST RATES

Oscillations in the average daily interest rate are the best expression of the liquidity problems experienced in October. Daily averages ranged from 7.0 to 9.9 percent, and the average for the month was nearer the lower bound. From the graph, it can be seen that greater oscillations were seen in the second half of the month. Because of these substantial oscillations, it is difficult to discern a trend on the basis of which one could say something more detailed about the direction of movement of interest rates. Liquidity problems were continuous; Lombard loans were taken out from the beginning to the end of the month. In the middle of the month, the use of Lombards intensified (mainly due to the need to meet reserve requirements). The National Bank, as in September, used a repo auction to decrease the threat that banks would lose their right to Lombard credits, and thus increased the assortment of instruments of monetary policy. Significantly, banks with liquidity surpluses are showing a desire to invest them for a longer period on the money market (several weeks). The interest rate difference between, for example, funds invested for 16-30 days and callable funds is greater than 6 percentage points.

Short-term securities have shown relatively stable yields. Vol-

untary NBC bills yielded 8.0 percent for 35 days, 9.0 percent for 91 days and 9.8 percent for 182 days. These continue to be useful to commercial banks, since they serve as good reserves against liquidity problems, and also give a secure income. Income on Ministry of Finance Treasury bills, also useful to commercial banks, have produced interest rates of 9.90 percent for 91 days and 10.25 percent for 182 days.

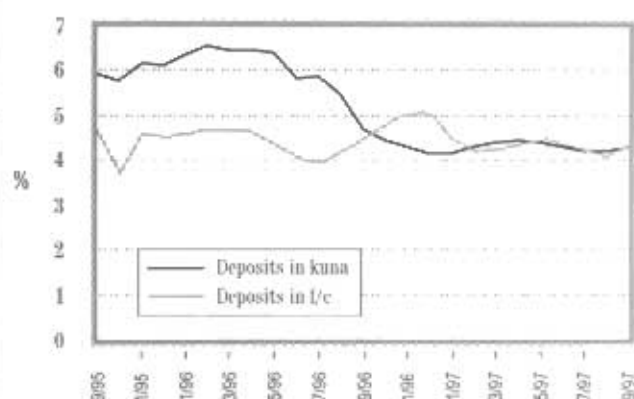
Lending rates of commercial banks in September showed a slight rising trend, in contrast to the falling trend present since the end of last year. The average interest rates on kuna credits with the currency clause rose insignificantly, reaching 14.29 percent (short-term credits 14.30 percent, long-term credits 14.24 percent). The average interest rates on kuna credits with the currency clause also slightly rose to 15.82 percent (short-term credits 18.44%, long-term 13.02%). It is important to mention that the slight increase in lending rates was for the most part caused by increases in interest rates on long-term loans. The average interest rate on foreign exchange credits increased by 2 percentage points relative to August and is now at 15.25 percent.

The very stable trend of deposit rates of commercial banks continues. For quite some time now, there has been no significant difference between interest rates on kuna and foreign exchange deposits. Thus, it is no wonder that the average interest rate on total kuna and foreign exchange deposits is identical and amounts to 4.3 percent.

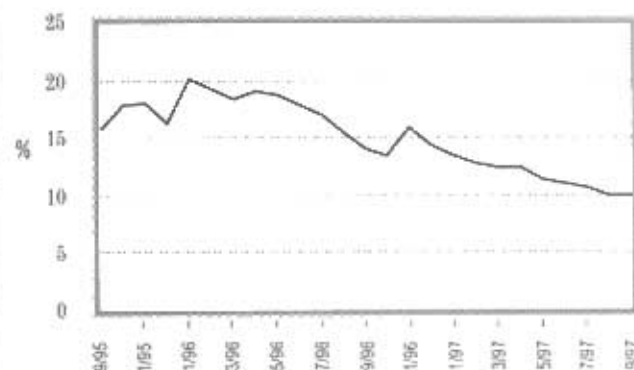
The stagnation or slight growth in lending and deposit rates of commercial banks results in stagnation of the "spread", which, as in August, was 10 percentage points. The possibility should not be excluded that our banks, with their low level of efficiency, have reached the lowest level of "spread" possible. It is therefore possible that we are at the end of the period of rapidly declining interest rates.

DMBs' INTEREST RATES ON DEPOSITS

Annual level



DIFFERENCE BETWEEN INTEREST RATES ON CREDITS IN KUNA AND INTEREST RATES ON DEPOSITS IN KUNA



Note: spread is calculated as a difference between interest rates on non-indexed credits in kuna and interest rates on non-indexed deposits in kuna.

ARREARS REPORTED TO PAYMENTS INSTITUTE

