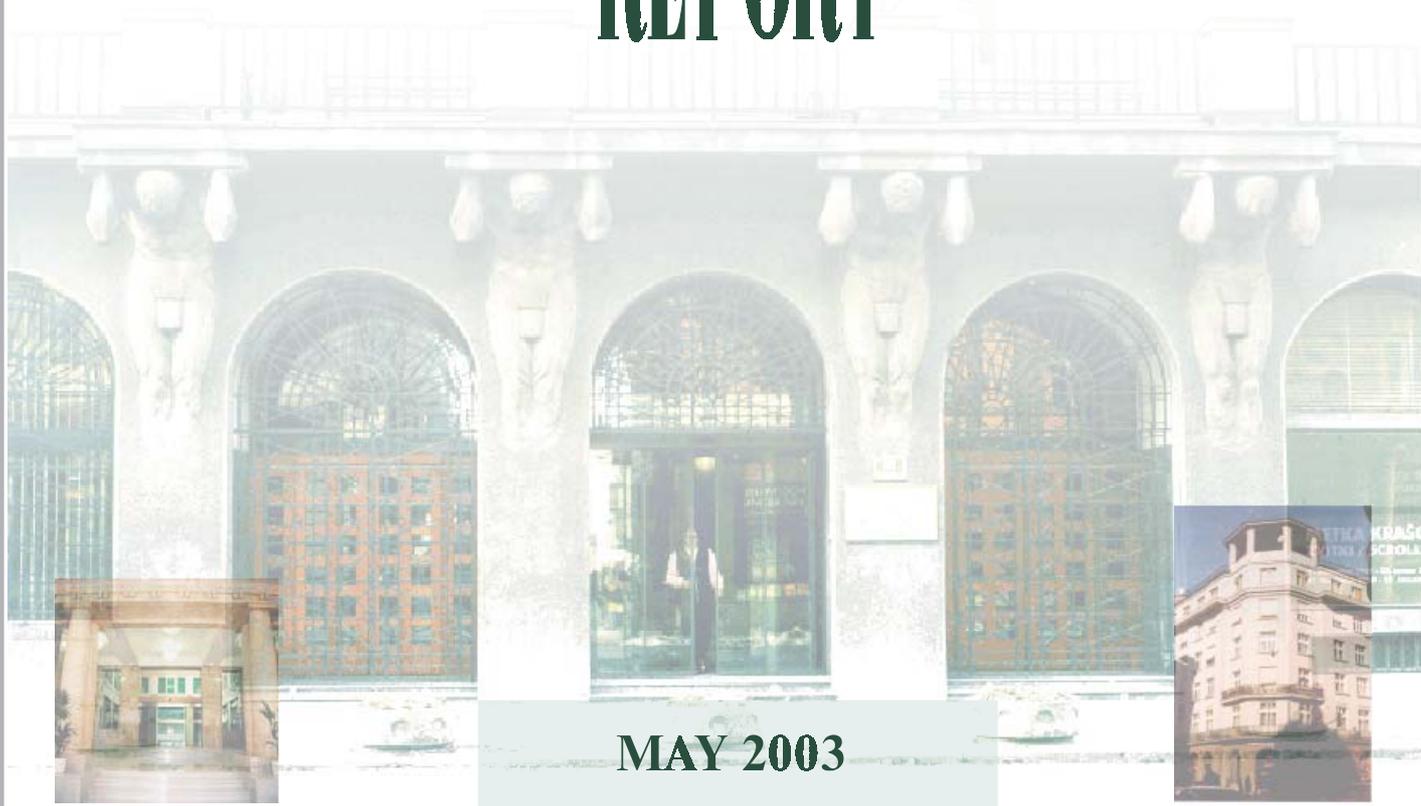


**BANKA**  
**SLOVENIJE**

**BANK OF SLOVENIA**

**MONETARY POLICY**  
**IMPLEMENTATION**  
**REPORT**

**MAY 2003**



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## 1. INTRODUCTION AND SUMMARY

In November 2001 the Governing Board of the Bank of Slovenia approved and announced a clear-cut medium-term policy orientation: to put in place the conditions for joining the Economic and Monetary Union (EMU) at the earliest opportunity. Pursuit of this aim is the most effective way for the Bank of Slovenia to fulfil the task of achieving price stability laid down for it in the Law on the Bank of Slovenia. In line with this medium-term orientation, the Bank of Slovenia committed itself to concentrating on bringing inflation down. The Bank also undertook to prepare a regular inflation report as a way of reporting publicly on the implementation of its short-term monetary stance. This will contribute to greater transparency in the implementation of monetary policy.

\* \* \*

Inflation did not fall as quickly as desired last year. It was clear after a few months that there was very little likelihood of achieving the desired rate of inflation at the end of the year and we drew attention to this in our October report. However, we consider the inflationary pressures of last year to be only temporary in nature and therefore expect the rapid reduction in inflation achieved at the beginning of this year to continue, with the rate coming down to around 5% at the end of the year. The core inflation trends also suggest that we can expect inflation to continue declining. The year-on-year growth in core inflation at the start of this year is between 5% and 5.5%, compared with around 6.5% at the start of last year. There are no signs of inflationary pressures in the economy from the demand side, especially as the Government will have to continue restricting expenditure owing to unfavourable economic conditions.

Monetary policy was oriented towards controlling the supply of money. In 2002 it was influenced by high inflationary expectations resulting from the large price increases at the start of the year and strong inflows of foreign currency. The raising of nominal interest rates prevented a fall in real interest margins, and by maintaining a high level of sterilisation and applying a suitable interest rate policy the Bank of Slovenia neutralised the money supply shocks caused by strong inflows of foreign currency from nonresidents as a result of privatisation and takeover activity. In both cases it had to adjust exchange rate dynamics in line with the changed level of nominal interest rates, and in so doing succeeded in preventing a credit expansion that could have caused demand-side inflationary pressures through a hard-to-control increase in domestic consumption.

Economic growth in 2003 will be below its long-run equilibrium rate for a third consecutive year. The main reason for the slow growth of GDP has been the continuing weakness in the international economy and the relatively slow recovery in domestic demand. With a global economic recovery Slovenia's economic growth will climb back towards its long-run rate of 4%, which it is projected to reach by 2004. Our projections indicate that domestic consumption will again be the main engine of economic growth in the coming period, while foreign trade will have a favourable impact on economic activity primarily through positive terms of trade. But in spite of a gradual recovery of domestic final consumption we are not anticipating demand-side inflationary pressures.

Based on these forecasts, assumptions concerning the effect of economic policy and the inflation trends already observed this year, we believe there are improved prospects for further reducing inflation in the next year and a half as the Government has allied itself with the goal of bringing down inflation and set this as one of its priority tasks. This has led to improved coordination in economic policy-making this year:

- Monetary policy and exchange rate policy are complemented by the administered price policy, which will enable a 5% inflation rate to be reached by year's end. A comprehensive plan of price controls has been approved and will come into force when the price freeze is lifted in May this year.
- The Government applied a tax policy which neutralised inflationary pressures from the international environment arising from big fluctuations in oil prices on world markets.
- Reductions in public spending and a more restrictive incomes policy represent further steps towards achieving a coordination of economic policies enabling inflation to be reduced on a lasting and sustainable basis.

Not only will this combination of economic policies provide the scope for further reductions in interest rates and a slowing of exchange rate growth, it is also a prerequisite for successful participation in ERM2 and for adopting the euro as soon as possible.

\* \* \*

This report contains four further sections, and appendices are also included at the end. Section two presents a detailed analysis of trends in inflation, its composition and movements in the main drivers of inflation last year and in the early part of this year. This is followed by an account of action taken by the Bank of Slovenia in this period in terms of the

use of policy instruments to counter inflation and absorb strong capital inflows. Projected movements in the main macroeconomic aggregates to 2004 are the subject of the fourth section. On the basis of the findings contained in the foregoing sections, the final section gives indications for the future conduct of monetary policy necessary for the task of price stability to be achieved.

This is part of a regular series of reports that the Bank of Slovenia publishes on inflation together with forecasts of macroeconomic trends and explanations of short-term monetary policy orientations. The next report will be prepared in autumn 2003.

## 2. INFLATION TRENDS

Inflation has fallen from 7.2% at the end of last year to 5.3% in April this year, primarily reflecting an end to the shock effects of a one-off nature from the early part of last year. We are also expecting the falling inflation trend to continue in the second half of this year, although at a somewhat slower rate.

The key changes in terms of inflation determinants compared to last year are smaller pressure coming from administered prices and less of a direct impact on inflation from taxes. The substantial improvement in economic policy coordination is also making a major contribution to bringing inflation down this year. Important progress was made when the Slovenian Government allied itself to the goal of reducing inflation and set this as one of its priority tasks:

- it approved a comprehensive plan of price controls which will come into force after the temporary price freeze is lifted in May this year. This plan has been drawn with a view to achieving an inflation rate of 5% by the end of the year;
- by means of a tax policy based on changes to excise duties on refined petroleum products it neutralised the inflation effects of major fluctuations in oil prices on world markets resulting from the US-led attack on Iraq;
- it is preparing the conditions for restrictive fiscal and incomes policy measures to be introduced which will limit the scope for rises in excise duty, thus creating the room to reduce interest rates further and slow the growth of the exchange rate.

Inflationary pressures on the demand side did not materialise despite the excess supply of foreign finance. Extensive sterilisation by the Bank of Slovenia made a significant contribution to maintaining these inflationary pressures at a moderate level. The sterilisation measures and interest rate policy neutralised the major shocks to the money supply coming from strong foreign currency inflows accompanying the privatisation of Nova Ljubljanska banka and the takeover of Lek, which were thus not reflected in an increased credit expansion. The risks related to a credit expansion, which could give rise to uncontrollable final domestic consumption, and demand-side inflationary pressures are declining.

The first indications of a cooling in inflationary pressures are already apparent in producer prices, which grew by 2.5% in the year to March. Producer prices are reflecting the tougher

operating conditions abroad and because of the broad exposure to external operating conditions represent an approximation for prices in the tradable sector. The most pronounced and fastest impact of the exchange rate is on these prices, while its impact on price movements in the nontradable sector is less certain. But the tradable sectors are not only subject to greater exchange rate influence; they are also exposed to far greater competition and are thus better able to control costs. Less effective cost control in the nontradable sectors is a major reason why inflation is not coming down as fast as desired.

The next part provides an analysis of the composition of inflation and of the main factors affecting inflation this year.

## **2.1. Analysis of inflation and its composition**

Overall inflation for the year to April was 5.3%. Consumer goods rose in price by 2.7% between December last year and March this year. At the end of last year inflation was around 7.2% at an annual level but, in line with expectations, it has fallen by 1.9 percentage points to 5.3% in April this year. Core inflation<sup>1</sup> fell from a year-on-year rate of 5.5% in December 2002 to 5.2% in March 2003.

A temporary interruption in the inflation fall is expected in May and June solely as a result of the statistical effect of low inflation in those months last year. After that inflation will continue coming down until the end of the year.

The next part of this section presents the trends in core inflation and in its composition. This is followed by an analysis of the composition of inflation as used by the Statistical Office of the Republic of Slovenia and at the end an analysis of inflation in terms of the degree to which price-setting is governed by competition.

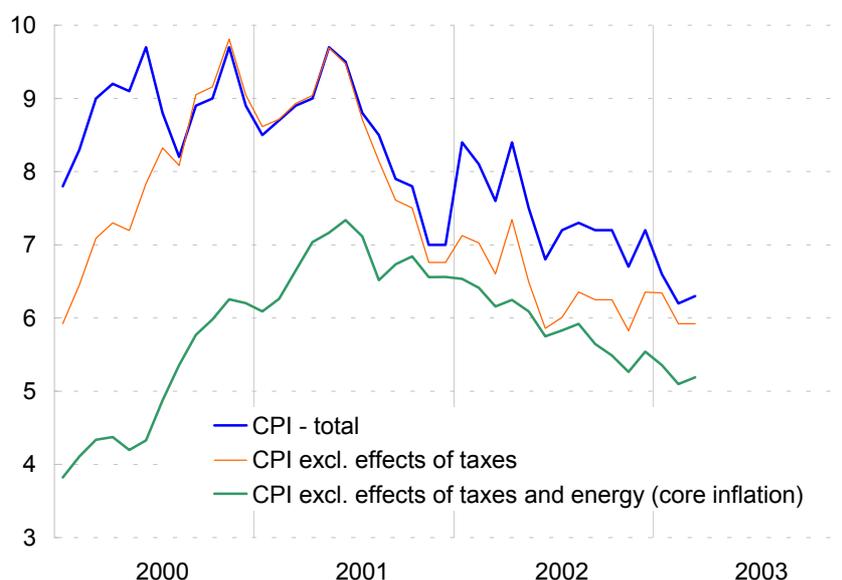
**Core inflation** lags behind inflation measured in terms of the consumer price index. Core inflation is the part of the inflation, which the central bank is generally able to influence by means of monetary and exchange rate policy. It excludes those parts of overall inflation over which the central bank has no influence – taxes and energy sources. Core inflation can be split into prices in the tradable and nontradable sectors. The prices of manufactured goods (in the consumer price index) are used as an approximation to prices in the tradable sector,

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<sup>1</sup> Core inflation is defined as headline (overall) inflation less the effects of changes in the rates of VAT and tobacco excise duty and the prices of fuel and energy sources.

while prices of services are taken as a proxy for the nontradable sector. Food prices comprise a third category of prices in core inflation and are dealt with separately. Central banks often also exclude food prices from core inflation because they are highly volatile. Of these groups, prices are growing fastest in services, which make up about 28% of the index of core inflation. Year-on-year growth in these prices was 7.5% in March. Over the same period, prices of manufactured goods (47% of the index) grew by 6.2% and prices of food (25% of the index) by 5.0%.

Figure 2.1: Overall and core inflation (percentage annual growth rate)



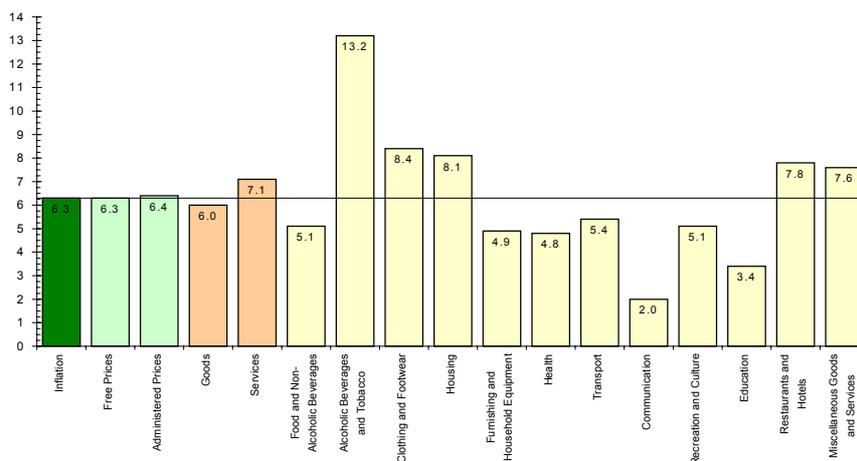
Among the **major groups of consumer goods** in the consumer price index, price growth in alcoholic beverages and tobacco and in clothing and footwear has been particularly pronounced. The growth in prices of alcoholic beverages and tobacco in March on an annual basis was more than twice the rate for the consumer price index as a whole. The main causes of this strong growth were:

- a rise in excise duty on cigarettes in January and July 2002 and in January 2003 resulting from the alignment of Slovenian legislation with European Union laws;
- a rise in VAT rates on wine. Wine was reclassified from the 8.5% VAT category to the 20% category.

The next largest price rises were in housing, hotels and restaurants and miscellaneous goods and services. In housing the biggest price increases were in municipal and other services for households, fuel oil and rent, while in hotels and restaurants the biggest price

increases were in hotel accommodation and spending for accommodation services in student homes. Price growth in communication, education, health, and furnishing and household equipment was most markedly below the overall average. Figure 2.2 shows year-on-year price growth of the major divisions of consumer goods as classified by the Statistical Office of the Republic of Slovenia, and indices of free and administered prices.

Figure 2.2: Composition of consumer price growth (percentage year-on-year growth rates for March 2003)



Price growth of services significantly outpaced that of goods in 2002. Price growth in 2002 was 9.4% for services and 6.4% for goods, a difference of 3.0 percentage points. In March 2003 the gap in price growth between goods and services narrowed to 1.1 percentage points. A major contribution to this narrowing of the gap has come from the freezing of administered prices, and partly also from service activities beginning to respond to the slowdown in economic growth and the reduced final consumption of households.

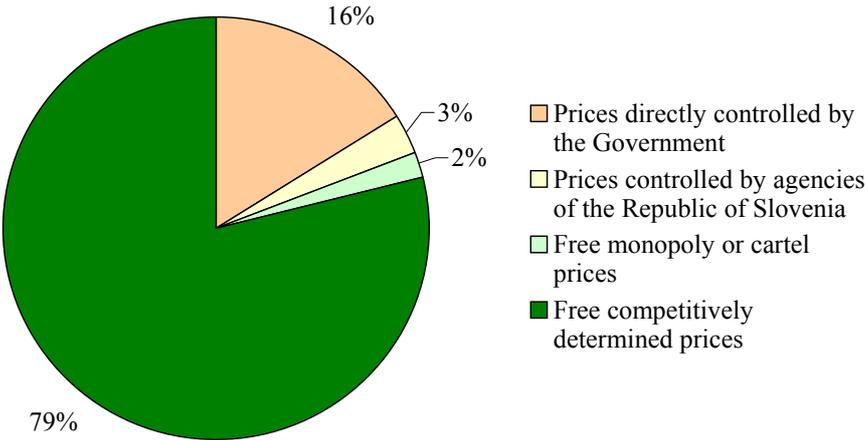
An understanding of the **mode of price-setting** is essential for a central bank in determining monetary policy. Therefore in October 2002 we refined the established division of prices into free and administered with a more detailed classification into four groups:

- prices directly controlled by the Slovenian Government<sup>2</sup>
- prices controlled by agencies of the Republic of Slovenia
- free monopoly or cartel prices
- free competitively determined prices

<sup>2</sup> Prices set by the Slovenian Government or prices of public administration services.

The rationale for this additional division of prices is twofold: the transfer of responsibility for price control from the Government to independent state agencies, and the observation that prices of some goods and services that are in principle freely determined are suspected of in fact being set in a coordinated and collusive manner.

Figure 2.3: Breakdown of the consumer price index in terms of mode of price setting



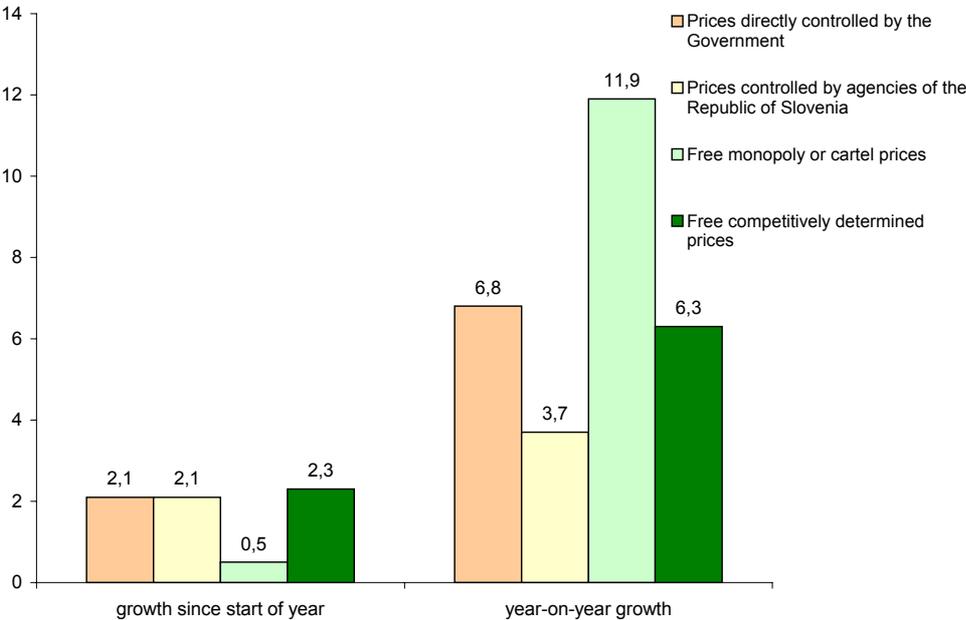
This year the structure of the indices that divide products in terms of the mode of price-setting has changed slightly. The causes of these changes are:

- (1) In 2003 the Slovenian Government is no longer directly controlling postal and telephony services. From 1 January 2003 responsibility for these services has been handed to an independent regulator, the Telecommunications, Broadcasting and Post Agency of the Republic of Slovenia (ATRP).
- (2) The Government passed a decree concerning refined petroleum products in January 2003 which included D2 diesel and extra light heating oil among administered prices until 31 May 2003, in addition to unleaded 95 octane and 98 octane petrol.
- (3) The Statistical Office of the Republic of Slovenia made some adjustments to the structure of the consumer price index.

These moves increased the proportion of products whose prices are directly controlled by the Slovenian Government from 14% to 16%. The share of products whose prices are controlled by state agencies increased from 1% to 3%, while the share of products whose prices are set in a monopolistic or collusive fashion fell from 5% to 2%. The share of products whose prices are formed freely and competitively fell from 80% to 79%.

At an annual level the fastest growth was recorded in the free prices of goods and services with a predominantly monopolistic or oligopolistic market structure. This group includes compulsory automobile insurance, voluntary health insurance and cable television subscriptions. These prices grew by 11.9% year-on-year. The next fastest growth was in prices controlled by the Slovenian Government. Of all the price groups, the slowest year-on-year growth was in prices controlled by state agencies. However, this year these prices have risen fastest of all. This group includes postal and telephony services controlled by the ATRP. In January the Slovenian Post Office, with the agreement of the ATRP, raised the prices of certain postal services, and in February Telekom Slovenije increased the subscription charge for analogue telephone connections.

Figure 2.4: Consumer price growth by mode of price-setting (March 2003)



**2.2. Inflation factors in 2002 and at the start of 2003**

In deciding monetary policy measures it is important to recognise the causes of inflation. These causes may be:

- Factors stemming from the international environment and passed on to domestic prices directly or indirectly, which as such are exogenously given from the point of view of the central bank and other areas of economic policy.

- Demand factors acting mainly via increased domestic absorption and overheating of the economy in conditions of rapid economic growth. In such cases inflation grows because supply cannot keep up with increased demand for goods and services. Excess demand may also be caused by loose monetary and/or incomes policy and is also reflected in public spending.
- Supply factors constituting additional costs that are taken into account in pricing decisions and are passed on to prices in part or in whole.

A single factor can be viewed in several ways. Whether a particular factor operates via the demand side or the supply side at a given point in time depends on the state of the economy and economic activity as a whole.<sup>3</sup>

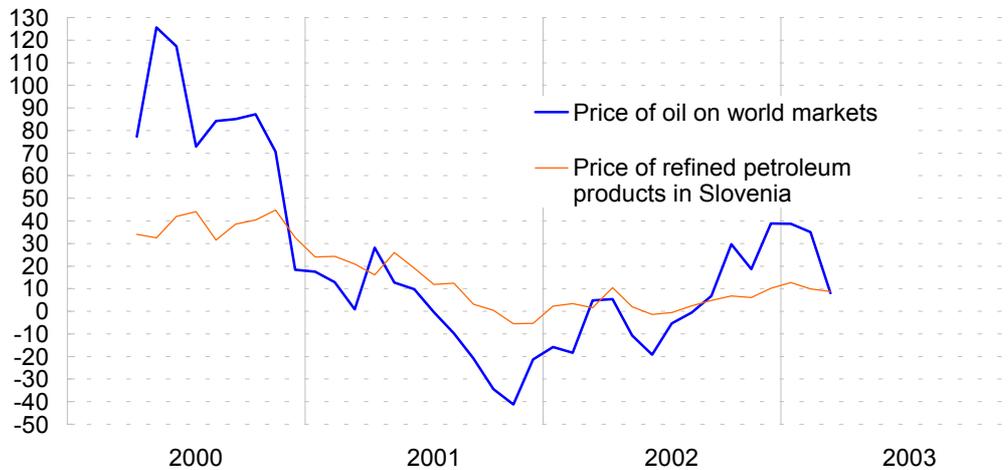
Inflationary pressures from the international environment this year have been neutralised by the Slovenian Government using excise duties to compensate for jumps in oil prices on world markets and prevent strong negative inflationary effects. This has reduced uncertainty and helped to produce more stable operating conditions. In short, international factors have not pushed up inflation. World oil prices and the US dollar exchange rate are exerting a particularly large influence on consumer price trends.

After growing strongly in 2002, the price of oil on world markets remains high and volatile. The reason for increased oil prices in the first half of 2002 was the Middle East crisis, while in the last quarter of 2002 and the first part of 2003 the price of oil was influenced mostly by low oil stocks in the industrialised countries, a general strike in Venezuela and expectations of an attack on Iraq. Once the attack was underway oil prices began to fall. The trend in world oil prices in coming weeks is unpredictable as oil trading will depend on how quickly the Iraq situation is resolved.

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<sup>3</sup> For example, wage inflation can act as a demand factor creating additional consumer purchasing power or be treated as an increase in firms' costs of production. The same applies to interest rates, the exchange rate and certain other factors.

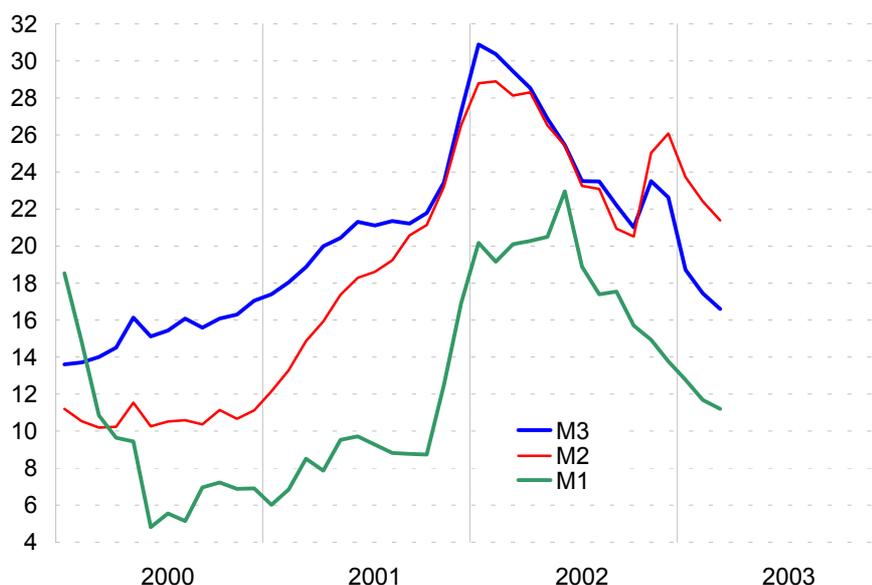
Figure 2.5: World oil prices and prices of refined petroleum products in Slovenia (y-o-y percentage change)



Through two new decrees on refined petroleum products the Slovenian Government reduced the impact of world oil prices on domestic prices for refined petroleum products, and consequently on inflation. The Government passed a decree concerning refined petroleum products in January which, until 31 May 2003, included D2 diesel and extra light heating oil among administered prices as well as unleaded 95 octane and 98 octane petrol. The new model allows the Ministry of Finance effectively to even out large fluctuations in world oil prices through adjustments to excise duty. Reacting to the Iraq crisis, in March this year the Slovenian Government passed a new decree relating to price-setting for refined petroleum products which was interventionist in character and remained in force until 30 April. This extended the accounting period from two to four weeks, with the five highest and five lowest daily fuel prices on international markets being excluded from the four-week accounting period.

Via import prices the low dollar/euro exchange rate also had a favourable impact on inflation trends, moderating the impact of higher oil prices on world markets on the price of refined petroleum products in Slovenia. The dollar fell against the euro in 2002 and is continuing to lose value against the euro in the early part of this year. May, June and July in particular saw significant falls in the value of the dollar. This was followed by a period of stability in the dollar/euro exchange rate until October, when the dollar again began to slide against the euro. The dollar picked up temporarily after the attack on Iraq before the falling trend continued.

Figure 2.6: Monetary aggregates (y-o-y percentage change)

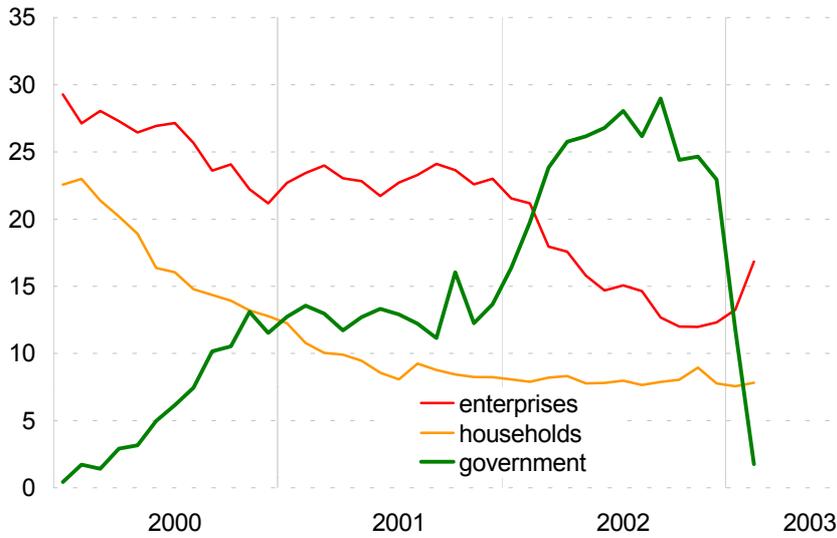


Inflationary pressures on the demand side did not materialise despite the excess supply of foreign finance and the relatively low interest rates. Final consumption remains modest, the growth in monetary aggregates is slowing and the excess supply of finance from abroad has not developed into a credit expansion. The risks of inflationary pressures developing from the demand side are abating. Labour market conditions are becoming tougher and incomes policy more restrictive.

Growth in monetary aggregates has slowed in the first two months of this year. The growth in the supply of broad money (M3) has slowed in the first two months of this year after rising very strongly at the end of last year. The factors contributing to M3 growth in the final quarter of last year were foreign direct investments relating to the privatisation of NLB and the takeover of Lek. Large capital inflows caused strong net inflows of foreign currency onto the foreign exchange market, but through an active policy of sterilising foreign currency inflows the Bank of Slovenia maintained control of the supply of transaction money (M1).

Despite the large inflow of foreign currency from abroad and the accelerated growth in monetary aggregates, a credit expansion did not emerge. Household saving continues to be dominated by long-term motives. Increased financial savings are restraining final consumption and preventing substantial demand-side pressures on prices from emerging. This is confirmed by the modest demand for retail credit. Household borrowing at domestic banks continues to fall and there is no indication of any significant changes in this trend soon.

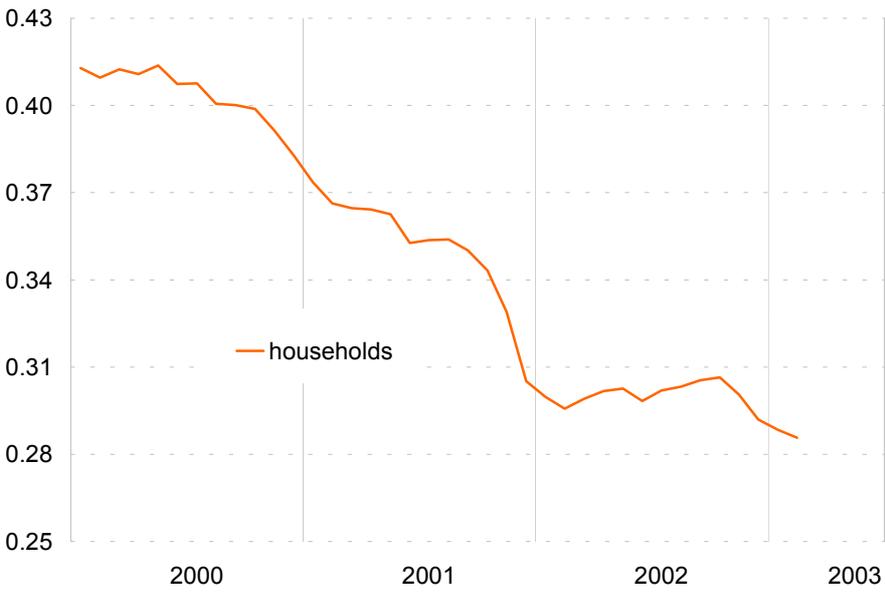
Figure 2.7: Lending by domestic banks (y-o-y percentage change)



Note: In January 2003 Dars was moved from the government category to the enterprises category.

Tougher labour market conditions resulting from the economic downturn also acted to prevent the emergence of demand-side inflationary pressures. Employment growth came to a halt and wage growth was modest. There were no major differences in wage growth between the tradable sector and the nontradable sector. Thus incomes policy is contributing to the reduction in inflation. Average year-on-year growth in average net wages last year was 9.7%, or 2.0% in real terms. Very modest wage growth continued in January.

Figure 2.8: Net borrowing at banks (credits/deposits)



In the context of weak domestic demand the main causes of inflation in recent years have been supply factors, or cost-push factors. However, supply-side inflationary pressures have been abating in the most recent period.

Fiscal policy and administered price policy this year have been strongly tailored to meet the inflation goal. Exchange rate growth continues to lag behind inflation and is helping to bring inflation down. Coordinated and effective cooperation in economic policy-making is the principal advance this year as far as the fight against inflation is concerned. The main inflation challenge is therefore to improve cost control in sectors that are less exposed to competition.

Certain fiscal measures, such as the January increase in customs duty on cigarettes and the change to the VAT rate on wine, have also had inflationary effects. These measures, which were announced last year, meant that fiscal policy in January added around 0.3 percentage points to this year's inflation. Two further increases in excise duty on cigarettes have been announced, to be introduced in July 2003 and January 2004.

Fiscal policy also actively contributed to reducing inflationary pressures by means of price controls on energy sources. In order to meet its inflation targets the Slovenian Government took the decision to lower excise duties on mineral oils in early January 2003 in the face of higher oil prices on world markets. The lowering of excise duty prevented a more substantial rise in refined petroleum product prices in Slovenia in January and February. However, large oil price rises on world markets meant that even by lowering excise duty at the beginning of March the Slovenian Government was unable to prevent the price of D2 diesel and heating oil in Slovenia from rising. This was because the Government can only reduce the excise duty on mineral oils to the minimum level determined by EU directive. This minimum has already been reached for D2 diesel and for heating oil, while there is still scope to reduce further the excise duty on 95-octane and 98-octane petrol. In mid-March 2003 the Slovenian Government adopted a new decree concerning refined petroleum products in order to get around this problem during the Iraq crisis. The decree is interventionist in nature and is in force only until 30 April this year. The prices of refined petroleum products were first set under the terms of the new decree at the start of April, but favourable movements in oil prices and the EUR/USD exchange rate meant that the Government was able to increase the excise duties on mineral oils. By adjusting excise duty on refined petroleum products this year the Government has prevented a rise in inflation of around 0.3 percentage points. This is, of course, only an estimate of the direct impact on consumer price growth – changes in

the prices of refined petroleum products also have a strong indirect impact on movements in other prices.

#### Box 2.1

##### **New developments not envisaged in the Government plan for 2003**

Fiscal and other administrative measures that could push inflation up above our forecasts, and which we did not envisage in the forecasts, include a rise in the rental costs for non-profit housing and various import duties.

- On 20 February 2003 the Constitutional Court unanimously passed a decision standardising the system of non-profit rents irrespective of when the rental agreement was signed. The Constitutional Court took the position that differential rent pricing according to a point system that has different point values before and after the introduction of methodology to calculate non-profit rents is unconstitutional. Thus it determined that a standard point value will apply to all non-profit rental arrangements, including those referring to denationalised apartments. This means a 37% rise in certain non-profit rents. We estimate that this adjustment in rents will contribute around 0.2 percentage points to inflation, although it is not entirely clear when it will happen. Rents on non-profit housing in the City of Ljubljana are expected to go up in July, while elsewhere the price rises will probably be introduced in April or May.
- On 10 April the Slovenian Government increased the customs protection on imports of live pigs and pork from Hungary and Poland for the second time in a month. Both countries have large pig surpluses and are giving substantial subsidies to exports, which is squeezing the price of pigs in Slovenia. However, the Slovenian Government also decided that it would support the lifting of the special import duties in the event of a rise in retail prices for pork and so this additional protection for Slovenian pig farmers is not expected to generate additional inflation, but it will not help to bring it down either.

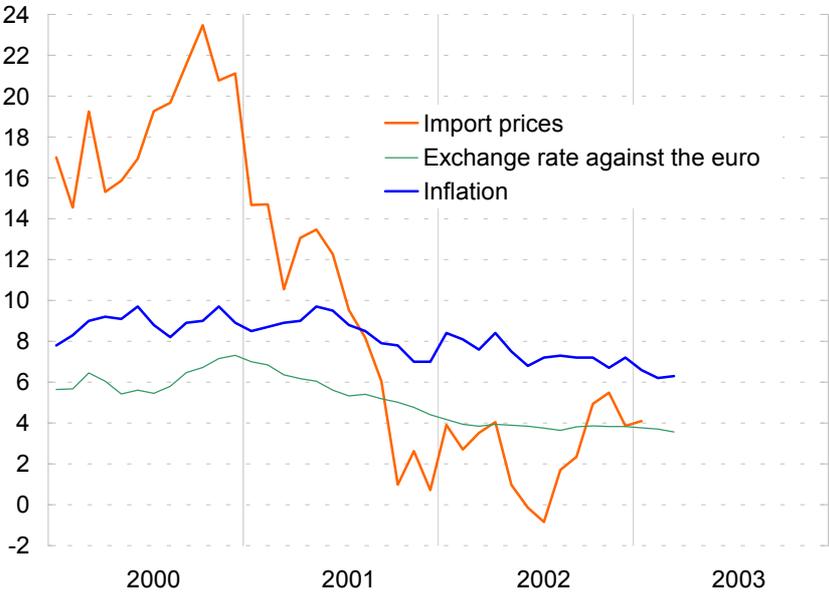
At the beginning of this year the Government is applying an administered price policy that differs significantly from last year's policy. It has adopted a comprehensive plan of price controls which will come into force after the temporary price freeze is lifted in May this year (the Government temporarily restricted the growth of prices under its control until the end of April). The price control plan is designed to enable a 5% inflation rate to be reached by year's end. Rises in administered prices will depend on current economic conditions, but in any case will not exceed the target inflation rate for 2003 of around 5%.

The framework for adjusting administered prices does not include telecommunications and postal services. Responsibility for these prices has been passed on to an independent regulator, the Telecommunications, Broadcasting and Post Agency of the Republic of Slovenia (ATRP). In agreement with the ATRP, in January the Slovenian Post Office raised the prices for domestic deliveries of certain items and the prices of national and international telefax services. The price of postage stamps was increased by more than 22%. From February Telekom Slovenije increased the subscription charge for analogue telephone connections in line with the ATRP's approval of a 9.7% increase in telephone subscription charges in February. From 1 June 2003 the ATRP has also approved the introduction of two differentiated, market-oriented service packages. With the gradual introduction of cost-based prices, reflected in the two-stage introduction of the above-mentioned packages, the ATRP is

taking into account the Government guidelines on restricting inflation. This year's price rises for postal and telephony services have added around 0.07 percentage points to inflation.

Exchange rate movements are continuing to slow inflation gradually by virtue of the fact that the tolar depreciated at a slower rate than prices grew. In March the Bank of Slovenia further slowed the depreciation of the tolar. Exchange rate growth is currently running at a little under 3.0% on an annualised basis, and around 3.5% year-on-year. The main impact of the exchange rate on inflation is through import prices.

Figure 2.10: Inflation, import prices and the exchange rate (y-o-y percentage change)



The first indications of a reduction in inflationary pressure are already apparent in producer prices, which grew by 2.5% in the year to March. But noticeable disparities are appearing within the producer price index: in March the fastest growth in terms of consumption purpose was in consumer goods prices, which rose by 4.3% on an annualised basis. The year-on-year growth in the prices of intermediate goods was 1.5%, while capital goods prices rose by a modest 0.4% on an annualised basis.

Figure 2.11: Consumer price growth and producer price growth (twelve-month percentage change)

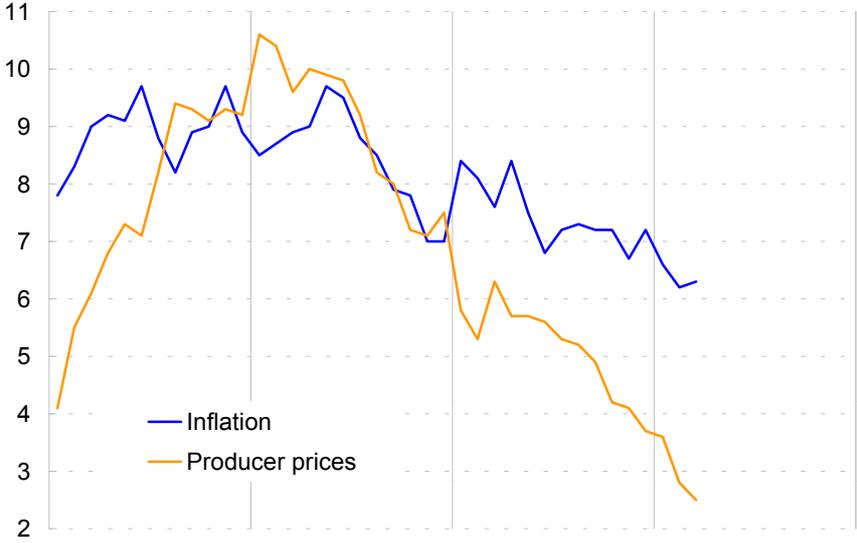


Figure 2.12: Producer price growth in Slovenia and Germany (y-o-y percentage change)

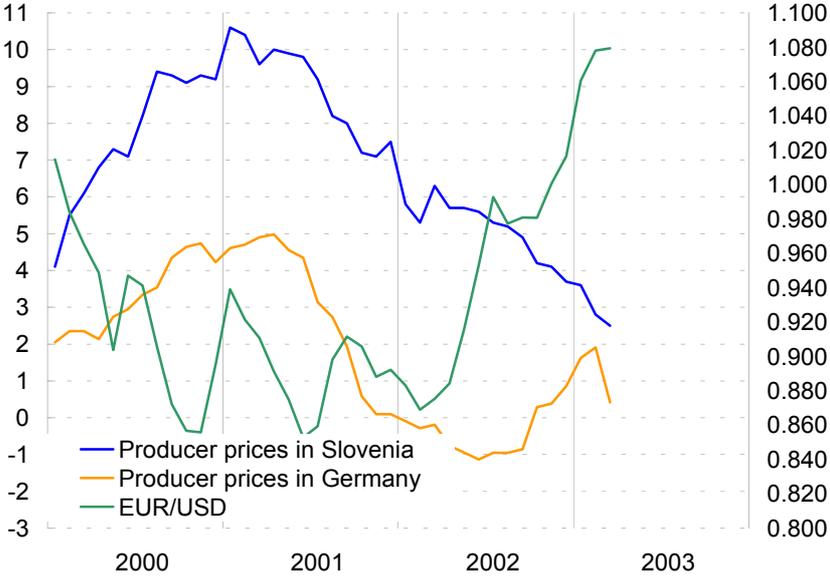
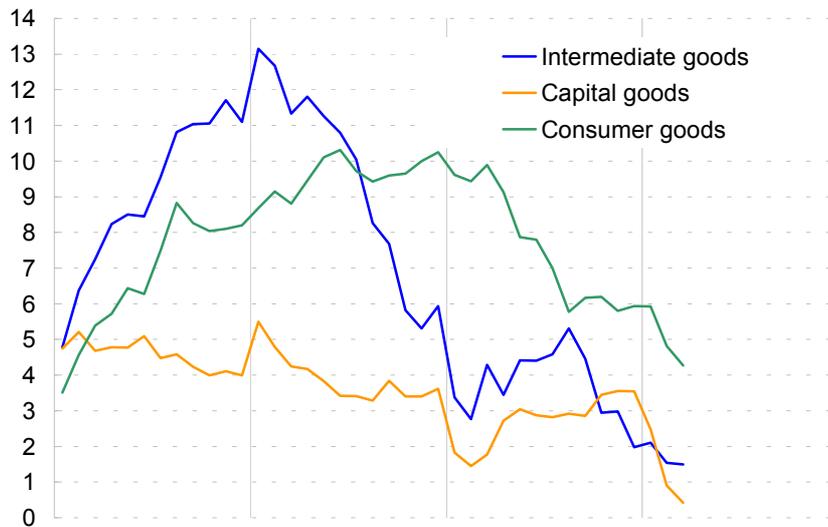


Figure 2.13: Producer price growth by consumption purpose (y-o-y percentage change)



Producer prices are reflecting the tougher operating conditions abroad and because of the broad exposure to external operating conditions represent an approximation for prices in the tradable sector. The biggest and fastest impact of the exchange rate is on these prices, while its impact on price movements in the nontradable sector is less certain. But the tradable sectors are not only subject to greater exchange rate influence; they are also exposed to far greater competition and are thus better able to control costs. Less effective cost control in the nontradable sectors is a major reason why inflation is not coming down as fast as desired.

The main challenge as far as reducing inflation is concerned is not therefore to slow down the growth in the exchange rate, but to improve cost control in sectors that are less exposed to competition.

\* \* \*

Inflation has been falling this year and we are expecting the trend of a gradual reduction to continue in the second half of the year. This year's inflation reduction has been helped by improved coordination in economic policy-making in a counter-inflationary approach.

There is continuing uncertainty over short-term inflationary effects stemming from the international environment, particularly relating to movements in world oil prices. At same time the Slovenian Government is limited in the extent to which it can absorb external shocks by reducing excise duties.

Nevertheless, the inflation outlook is optimistic, particularly considering the improved coordination in economic policy-making as far as lowering inflation is concerned. We can expect smaller pressure on inflation as a result of:

- the Slovenian Government's moderate price control plan, which will come into force in May this year when the temporary price freeze is lifted;
- the neutralisation of increased prices of refined petroleum products through excise duty measures;
- the sustained reduction in interest rates and consequently a slower depreciation of the tolar.

Improved cost control and hence smaller price growth in the sectors that are less exposed to competition is key to a longer-run, sustained reduction in inflation.

### **3. BANK OF SLOVENIA ACTIVITIES IN 2002 AND 2003**

In 2002 and at the beginning of 2003 monetary policy was geared towards controlling the money supply. Sterilisation measures and a corresponding interest rate policy neutralised the money supply shocks from heavy foreign currency inflows accompanying the privatisation of NLB, the takeover of Lek and the euro cash changeover, which consequently were not reflected in the credit expansion. Money supply control was further hindered by the inflationary expectations following the price rise shocks at the beginning of the year. This caused an excessive fall in real interest rates, forcing the Bank of Slovenia to raise nominal interest rates and slow down the anticipated rate of reduction in interest rates and exchange rate growth.

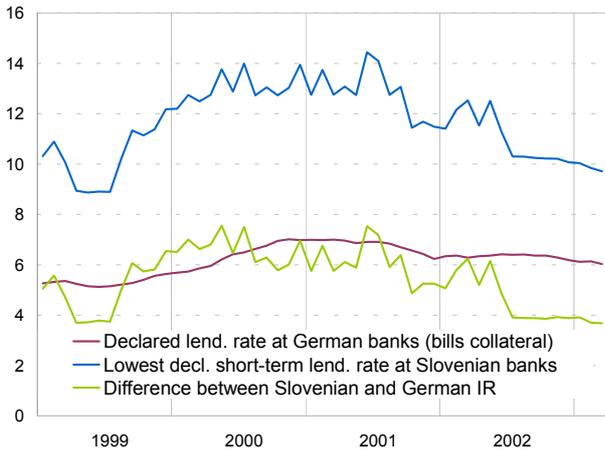
#### **3.1 Implementation of monetary policy**

The Bank of Slovenia pursued its monetary policy within the framework of a managed floating exchange rate, which gave it a certain degree of monetary policy freedom in conditions in which restrictions on inflows of capital from abroad have been relaxed. Indeed, relaxations on capital flows were one of the key determinants of monetary policy conduct in the most recent period. Net capital inflows last year equalled 5.2% of GDP and, together with the surplus in the current account of the balance of payments of 1.8% of GDP, resulted in strong net inflows of foreign currency on the foreign exchange market. With the aim of controlling the quantity of money in circulation the Bank of Slovenia's monetary policy conduct targeted two variables: the interest rate and the exchange rate. The Bank adjusted the interest rate according to the required degree of money supply restrictiveness in view of the estimated demand for money and depending on inflation trends and inflationary expectations. Changes to the intervention rate dynamics followed the principle of uncovered interest parity. In this way the Bank of Slovenia influenced movements in expected changes to the market exchange rate in line with the difference between domestic and foreign interest rates and taking account of the risk premium as far as possible.

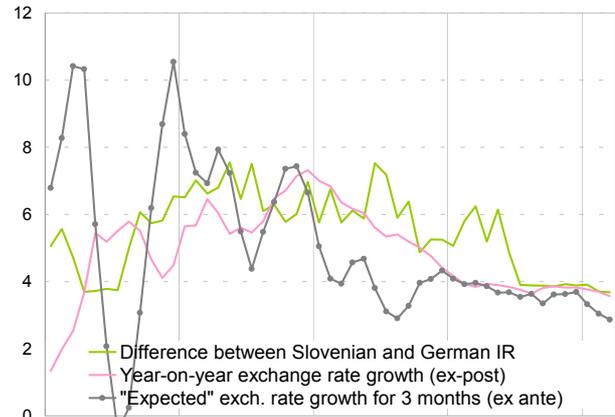
Figures 3.1 and 3.2 show a comparison of the costs of company finance at home and abroad and a comparison of the costs of sources of funding abroad and the yields on investments in domestic securities. Since the restrictions on capital flows were lifted in 1999 the conditions of financing in Slovenia and abroad have been comparable and consequently prevent, or at least limit, speculative inflows of capital.

Figure 3.1: Comparison of companies' costs of finance at home and abroad, and finance in domestic currency and with a foreign currency clause

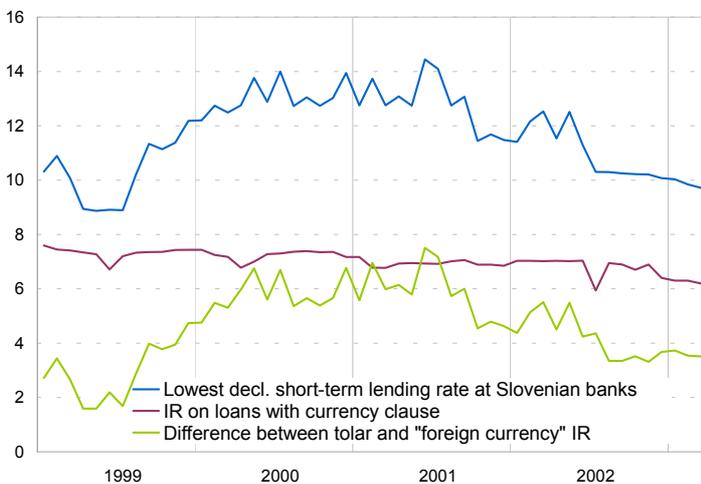
Average lowest declared short-term lending rates for companies at Slovenian and German banks. Declared interest rate at German banks refers to loans with discount of bills in amounts up to EUR 50,000.



Difference between Slovenian and German short-term lending rates, year-on-year exchange rate growth (ex post) and expected change in exchange rate in next 3 months (ex ante).



Lowest declared short-term lending rate and lending rate for bank loans with a foreign currency clause at Slovenian banks.



Difference between short-term interest rates and year-on-year exchange rate growth (ex post) and expected change in exchange rate in next 3 months (ex ante).

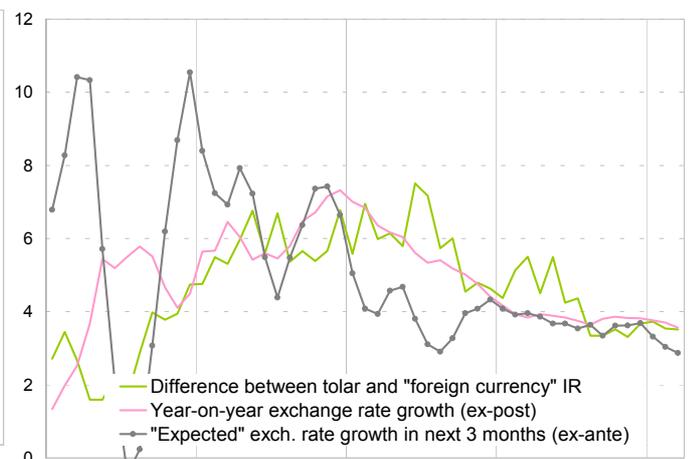
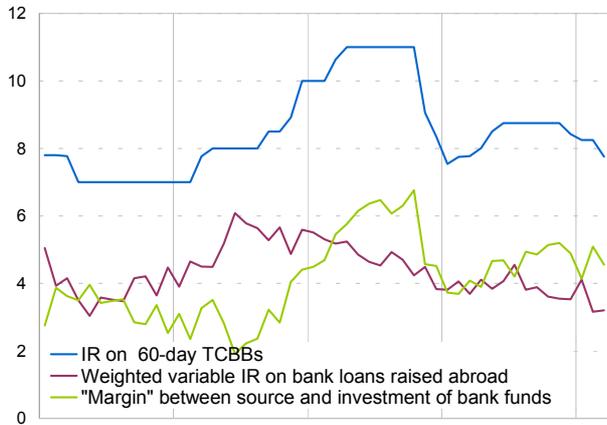
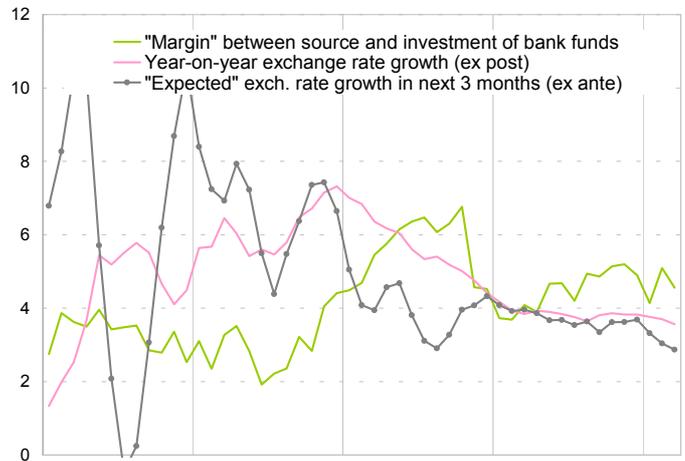


Figure 3.2: Comparison of the costs of foreign sources of finance and the yield on investments in short-term securities

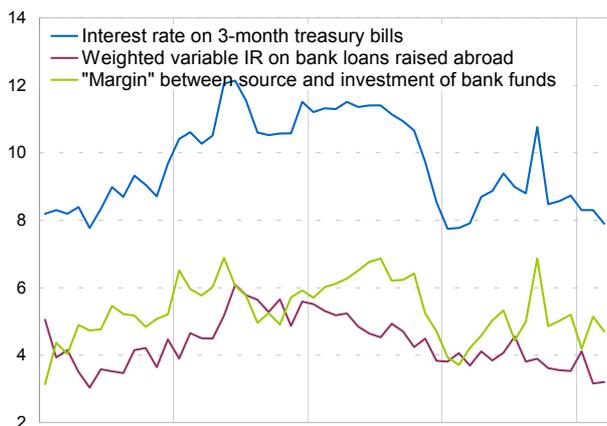
Interest rate on 60-day TCBBs (Tolar denominated Central Bank Bills) and weighted interest rate on bank loans raised abroad.



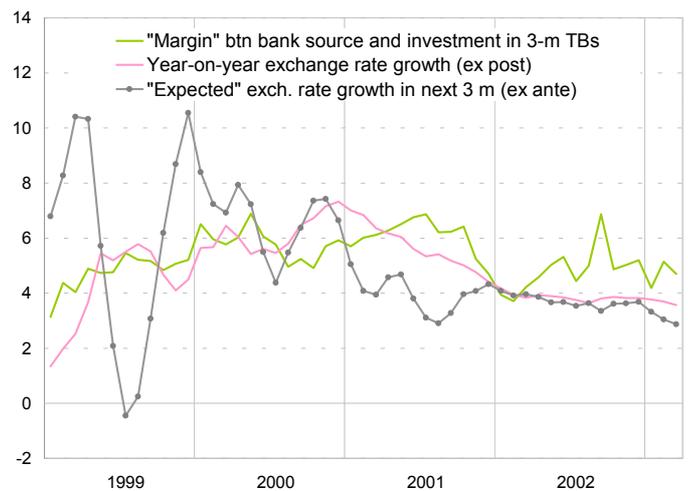
Difference in IR on 60-day TCBBs and IR on bank loans raised abroad ("margin"), year-on-year exchange rate growth (ex post) and expected exchange rate growth in next 3 months (ex ante).



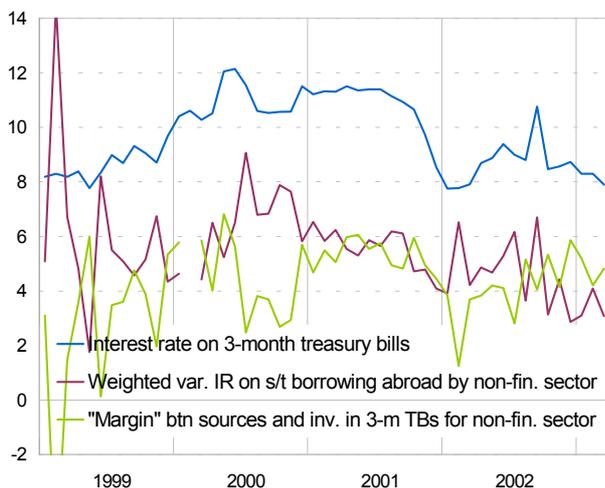
Interest rate on 3-month treasury bills and weighted interest rate on bank loans raised abroad.



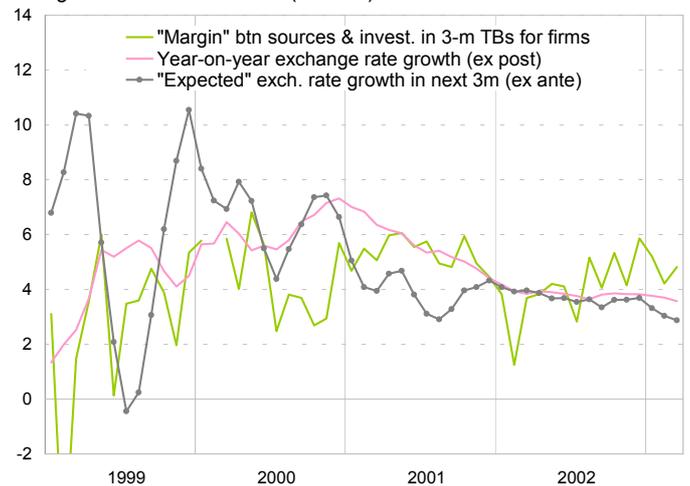
Difference in IR on 3-month treasury bills and IR on bank loans raised abroad ("margin"), year-on-year exchange rate growth (ex post) and expected exchange rate growth in next 3 months (ex ante).



Interest rate on 3-month treasury bills and weighted interest rate on bank loans raised abroad for nonfinancial sector.

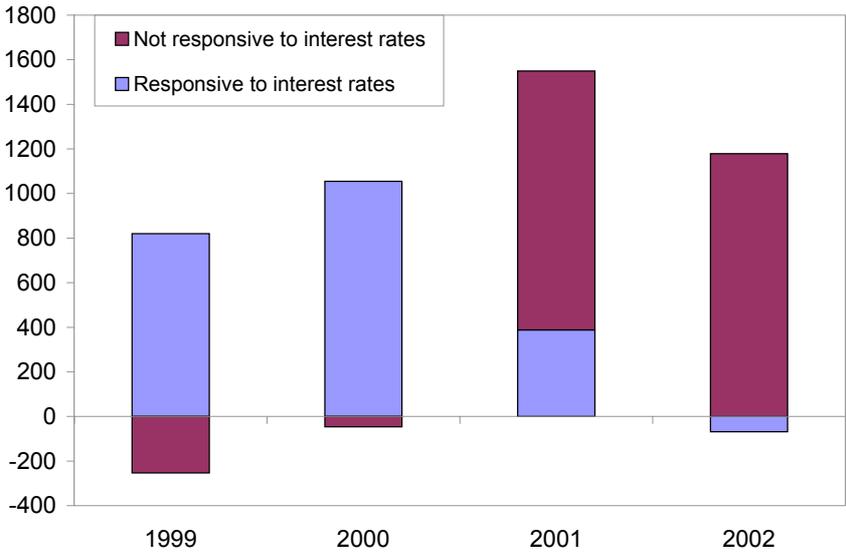


Difference in IR on 3-month treasury bills and IR on loans raised abroad by nonfinancial sector ("margin"), year-on-year exchange rate growth (ex post) and expected exchange rate growth in next 3 months (ex ante).



Financial flows from abroad, particularly from the private sector, were an important determinant in controlling the quantity of money in circulation because they directly affect the surplus structural position in the money market. The success of the Bank of Slovenia’s efforts to influence the volume of financial flows from abroad is strongly dependent on their interest elasticity, in other words their responsiveness to anticipated yields. Foreign direct investments (FDI) are one of the forms of financial flow that are not interest elastic. In 2002 these investments totalled 8.7% of GDP. Along with FDI, payments for imports of goods and services arising from the current account of the balance of payments also fall under interest inelastic financial flows because the elasticity of exports to changes in the exchange rate is relatively low. On the other side are financial flows which display a relatively high interest elasticity. These include portfolio investments, which totalled 0.1% of GDP in 2002, and, in particular, loans raised abroad. Net loans raised by companies and banks abroad accounted for 2.3% of GDP last year.

Figure 3.3: Composition of financial inflows in terms of responsiveness to interest rates (USD m)

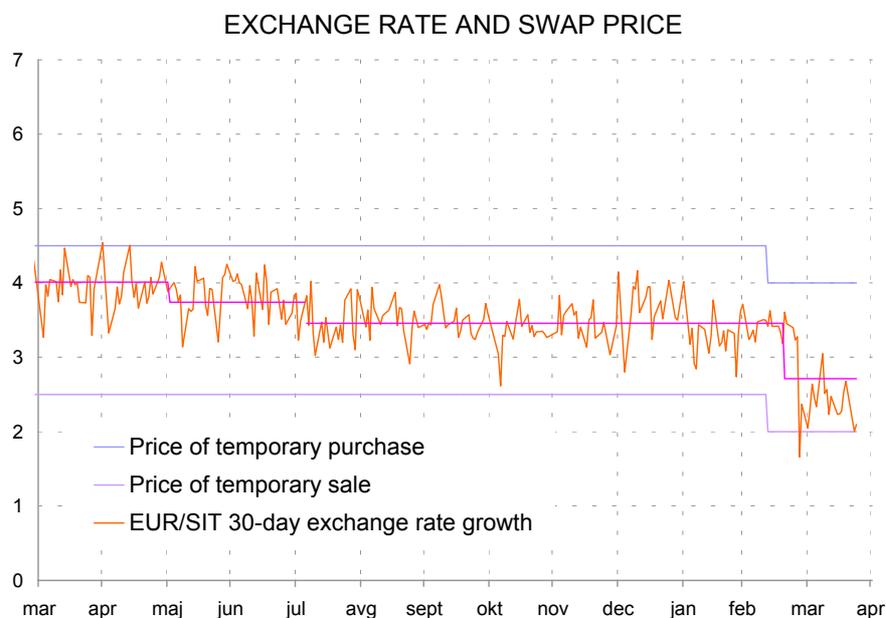


Source: Analysis and Research Department

Because foreign direct investments in 2002 were very strong (3.7 times more than in 2001) and rising throughout the year, the Bank of Slovenia was compelled to continue setting the rate of growth of the intervention exchange rate. The central bank was able to intervene in the foreign exchange market in this way having concluded an agreement concerning intervention in the foreign exchange market with the commercial banks. Between the last quarter of 2001 and the end of April 2002 the rate of growth of the intervention rate was

4.0%. In July 2002 there was a further correction to the rate of growth of the intervention rate to 3.5%, and the most recent change was carried out in March 2003.

Figure 3.4: Growth of the exchange rate and the price of temporary sale and purchase of foreign currency



Source: Central Banking Operations

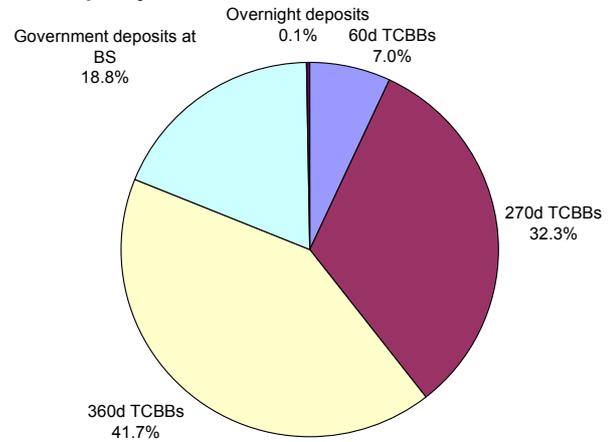
The first half of 2002 was characterised by inflation shocks and increased inflationary expectations, which required the Bank of Slovenia to continue pursuing a restrictive monetary policy. This was reflected in successive rises in interest rates on the majority of monetary policy instruments. From January to mid-May 2002 the Bank of Slovenia raised the interest rate on 60-day tolar-denominated central bank bills in four successive increases from 7.50% to 8.75%. During the same period the interest rate on 270-day tolar-denominated central bank bills at auctions was increased from 9.0% to 10.0%. This ensured a relatively effective policy of sterilisation of foreign currency inflows. Throughout the year, with the exception of January and July 2002, the Bank of Slovenia was a net purchaser of foreign currency on the market, buying foreign currency with a total value of SIT 281 billion. A large part of the foreign currency purchase transactions comprised 7-day temporary purchase of foreign currency from banks. The interest rate on temporary bank refinancing remained

unchanged in 2002 at 4.5%. The rate of sterilisation of foreign currency inflows<sup>4</sup> in the first half of the year fluctuated between 64% and 73%.

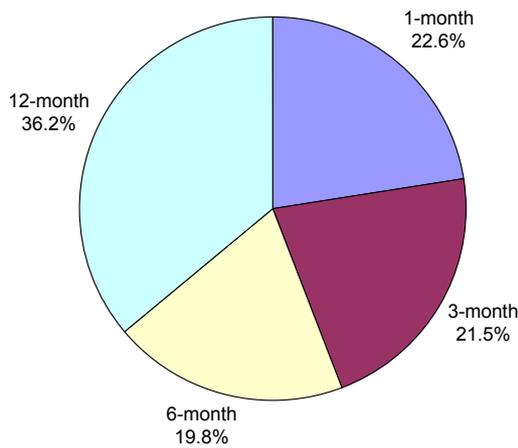
**Percentage sterilisation rate**



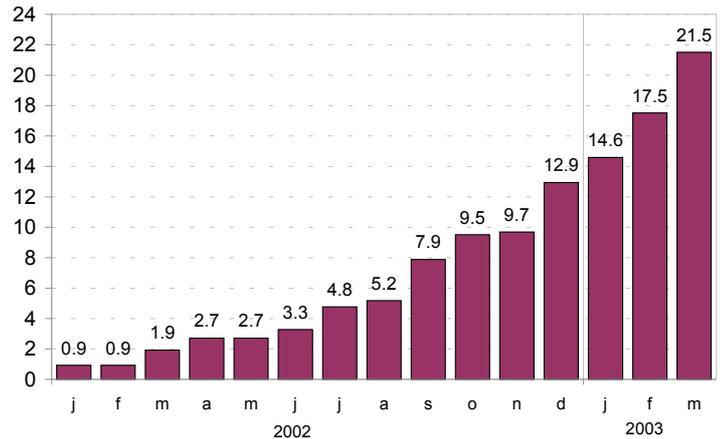
**Liquidity withdrawal instruments as of 31/03/2003**



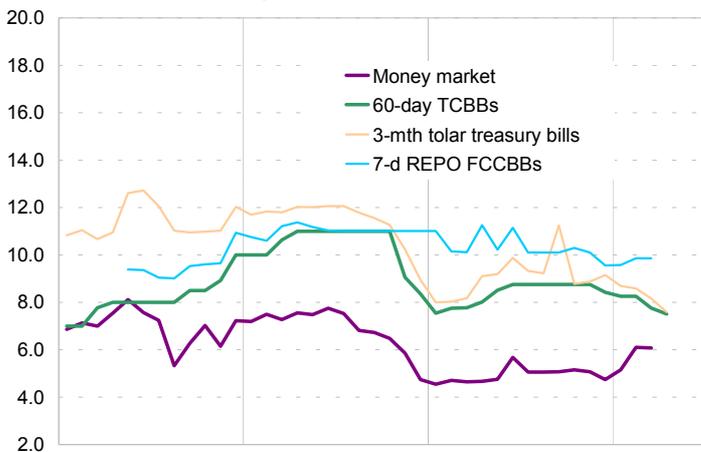
**Composition of Treasury bills as of 31/03/2003**



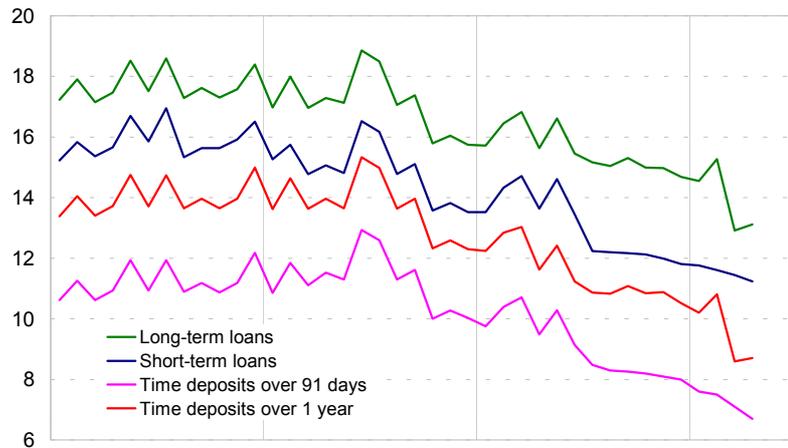
**Investments by nonresidents in Treasury bills (SIT bn)**



**Money market and BS interest rates**



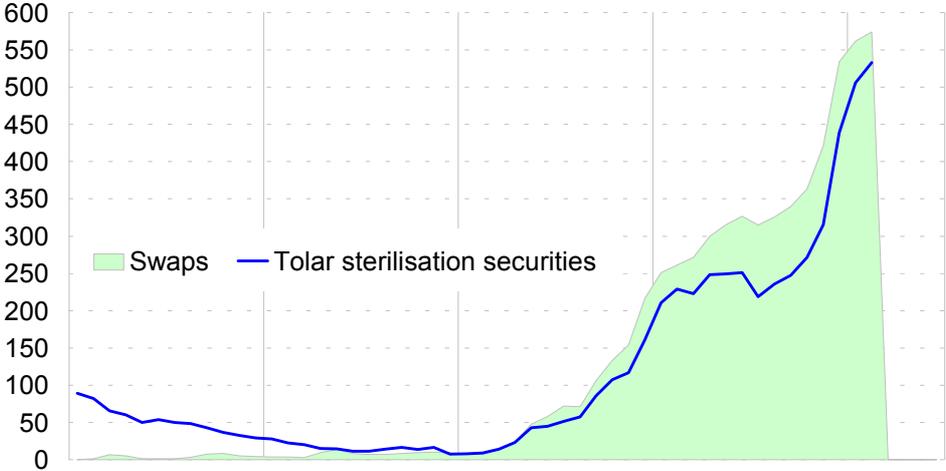
**Commercial bank interest rates**



<sup>4</sup> The rate of sterilisation of foreign currency inflows is defined as the ratio between the balance of subscribed central bank bills and the balance of foreign currency temporarily bought from banks.

The second half of 2002 was marked by growing capital inflows. Added to the increased FDI (67% of the total flow of direct investment in the year) were the loans of companies and banks raised abroad (93% of the total flow of loans from abroad), which required the Bank of Slovenia to add 270-day temporary purchase of foreign currency and 360-day tolar-denominated central bank bills to its monetary policy instruments. The extent to which the banks were able to respond to the 270-day temporary purchase of foreign currency was limited by the proportion of foreign currency temporarily sold for seven days with the possibility of outright sale upon maturity of the instrument. By offering relatively high-yield investments in one-year central bank bills the Bank of Slovenia succeeded, in the face of very strong financial inflows, in maintaining a high rate of sterilisation and hence, via a stable multiplier, a moderate growth in transaction money in circulation. The stock of subscribed tolar-denominated central bank bills grew by 193% last year. At the end of 2002 the rate of sterilisation was 68%, and in the first two months of this year it has risen above 75%. In the early part of this year foreign currency inflows from FDI have been subdued (totalling just USD 14 million in January 2003).

Figure 3.5: Intervention and sterilisation by the Bank of Slovenia (SIT billions)



Source: Analysis and Research Department

Through its active sterilisation policy the Bank of Slovenia limited the risk of large capital inflows being transformed into an increased credit expansion. By means of sterilising foreign currency inflows the Bank of Slovenia was able to control the supply of base money and transaction money in circulation. Base money grew last year by a modest 7.4%, while M1 growth was 13.8%. The nature of the large direct financial inflows resulting from takeovers of major Slovenian companies by nonresidents, and the related transformation of the equity

stakes of Slovenian owners into bank deposits, caused strong M2 and M3 growth (26.1% and 22.6% respectively). It was the sterilisation policy, which prevented this “autonomous” growth in monetary aggregates to transform into an increased credit expansion. In this way the Bank of Slovenia helped to maintain a low level of final consumption.

### Box 3.1

#### **Operational basis of the Bank of Slovenia’s exchange rate policy actions**

Large capital inflows and the resulting excess liquidity in the Slovenian banking system have created a need for a range of monetary policy instruments for intervention in the foreign exchange market. The Bank of Slovenia uses an active exchange rate policy to forestall potential monetary shocks and increased inflationary pressures.

There are three main elements to the Bank of Slovenia’s exchange rate policy operations, which are crucial in understanding the actions it takes:

- an agreement between the Bank of Slovenia and banks, constituting the "Bank Club",
- temporary purchases of foreign currency by the Bank of Slovenia,
- sterilisation operations through the issuance of Bank of Slovenia tolar-denominated central bank bills.

The first element is the "Bank Club", comprising banks that have signed up to an agreement with the Bank of Slovenia on foreign exchange market interventions<sup>1</sup>. At times of interventions by the Bank of Slovenia on foreign exchange markets, the banks in the Club must stand ready to deal at a rate lying within a certain range of the intervention rate. In exchange for undertaking this obligation, the banks enjoy unlimited and exclusive access to tolar liquidity, which they can obtain through foreign currency repurchase agreements.

The second element is the temporary monetisation of foreign currency inflows. The Bank of Slovenia conducts its exchange rate policy through temporary (rather than outright) purchases of foreign currency, carried out by means of 7-day currency swaps, and since November 2002 also 270-day currency swaps. The temporary nature of the swap instrument means that exchange rate policy and its effects are much different from what they would be if outright foreign currency purchases were used. The difference can be summarised in three points:

- Tolar liquidity acquired by currency swaps is short-term (7 days and 270 days), allowing banks to manage liquidity effectively. Even though a large fraction of temporary purchases of foreign currency is regularly renewed, the expansion in credit arising from the tolar liquidity thereby acquired is nevertheless limited. The need to maintain a prudent degree of maturity transformation restrains banks in approving long-term loans on the basis of holdings of short-term securities.
- The use of foreign currency swaps enables the Bank of Slovenia to intervene cost-effectively, as the interest rate on the swap instrument is set so that the totality of operations is financially neutral for the Bank of Slovenia and the banks and does not involve any additional costs. As a rule the Bank of Slovenia determines the price of temporary foreign currency purchases according to the principle of uncovered interest parity; the price is therefore set at a level that depends on the interest rate of refinancing at the ECB, the rate of depreciation of the tolar and the interest rate on Bank of Slovenia tolar-denominated sterilisation bills.
- The short-term nature and flexible pricing of this instrument deter potential arbitrage and restrain the emergence of speculative capital flows. Even though the banks enjoy unlimited access to these funds, they are exposed to a certain amount of uncertainty insofar as the Bank of Slovenia has the power to directly alter the cost of acquiring tolar liquidity.

The third element of the Bank of Slovenia's exchange rate policy is the sterilisation of excess tolar liquidity arising from the temporary monetisation of foreign currency. The key features of this instrument noted above allow the Bank of Slovenia to successfully absorb excess liquidity in the banking system by issuing tolar-denominated central bank bills with a maturity of up to one year (60-, 270- and 360-day TCBBs), since these maturities do not cause major misalignments in maturity transformation.

<sup>1</sup> The agreement was signed in 2000 and an annex to it was signed in 2001.

The first months of this year have seen a continuation of a period of moderate annual growth rates of monetary aggregates (see Figure 2.6). In February 2003 the year-on-year monetary aggregate growth rates were 6.4% for base money, 11.7% for M1, 22.4% for M2 and 17.4% for M3.

Constructive cooperation between the Bank of Slovenia and the Slovenian Government in coordinating counter-inflationary policies has put in place the conditions for a sustained reduction in annual inflation rates. This is certainly having a positive influence on reducing inflationary expectations, in spite of the unpredictable economic impact from the international environment. Based on its monitoring of monetary policy indicators and the reduction in year-on-year producer prices to below 3%, the Bank of Slovenia took the decision in March to reduce the interest rates on the majority of its instruments and temporarily stop intervening in the foreign exchange market.

### **3.2. Monetary policy achievements in 2002 and 2003**

Despite the unfavourable conditions for monetary policy conduct and the relatively modest lowering of inflation last year and at the start of this year, two important achievements should be pointed out:

- The prevention of an expansion of credit that would spark off hard-to-control domestic final consumption and demand-side inflationary pressures.
- An improved level of economic policy-making cooperation enabling the Bank of Slovenia to be more effective in its counter-inflationary efforts.

Both of these elements are also important as far as Slovenia's future participation in ERM2 is concerned.

## Box 3.2.

### Chronology of monetary actions by the Bank of Slovenia during 2002 and 2003

#### 1 January 2002

- The Bank of Slovenia begins using a linear calculation of interest on its monetary policy instruments. It bases the calculations on the actual term of the transaction and a 360-day year, which brings the calculation of interest into line with European Central Bank practice.
- The Bank of Slovenia cuts the discount rate from 11% to 9%, the lombard rate from 12% to 11% and the interest rate on 60-day tolar-denominated central bank bills (TCBBs) from 8% to 7.5%. The rate cuts are prompted mainly by considerations of uncovered interest parity, since lower interest rates reflect lower yields on short-term government securities, as well as changes in the way interest is computed and a lowering of inflation.
- The Bank of Slovenia takes a further step to liberalise capital flows with the rest of the world by abolishing all limits on cross-border transfers of domestic and foreign currency and all limits on securities transactions. The Bank of Slovenia is ahead of the timetable for the liberalisation of capital flows passed in June 2000 and removes all restrictions within its power except on the opening of resident accounts abroad.
- The Bank of Slovenia alters the method for measuring mandatory reserves. Repo transactions between banks and customers conducted on the basis of short-term government securities are removed from the base on which the mandatory reserves are calculated in order to stimulate the money market. The Bank of Slovenia simplifies the monitoring of mandatory reserves for instalment savings.

#### 31 January 2002

- The Bank of Slovenia raises interest rates on 60-day TCBBs from 7.5% to 7.75% in line with the interest rate on bank refinancing at the Bank of Slovenia.

#### 29 March 2002

- The Bank of Slovenia raises the interest rate on 270-day TCBBs from 9% to 10% and on 60-day TCBBs from 7.75% to 8%. At the same time it increases the supply of 270-day TCBBs. These measures are aimed at curbing liquidity in response to growing inflationary pressures, even though the rise in inflation is due to seasonal increases in certain food prices, price increases in the nontradable sector and rises in excise duty and VAT rates at the start of the year.

#### 1 April 2002

- The Bank of Slovenia raises the discount rate of interest from 9% to 10%.

#### 26 April 2002

- The Bank of Slovenia lowers the rate of depreciation of the tolar intervention rate from 4% to 3.75% per annum.

#### 30 April 2002

- The Bank of Slovenia raises interest rates on 60-day TCBBs from 8% to 8.25%, thereby affecting the movement of interest rates on money market instruments of comparable maturity and attempting to curb the decline in bank deposit interest rates connected with the transition to nominal rates.

#### 16 May 2002

- The Bank of Slovenia raises the interest rate on 60-day TCBBs from 8.25% to 8.75%.

#### 28 May 2002

- The Bank of Slovenia increases the number of auctions of 270-day TCBBs (from two to four a month) with the intention of making it easier for banks to manage liquidity in the context of more volatile flows on the foreign exchange market, thereby boosting subscriptions to TCBBs.

#### 1 July 2002

- The Bank of Slovenia alters the methodology for calculating the liquidity ladder and liquidity ratio.
- The transfer of payments from the Payments Agency to the banks is completed, and the Ministry of Finance starts using the unified Treasury account at the Bank of Slovenia, influencing the size and composition of the monetary aggregates.
- Indexation of interest rates on transactions with a term of less than one year is abolished.

#### 23 July 2002

- The Bank of Slovenia lowers the rate of depreciation of the intervention rate of the tolar from 3.75% to 3.5% per annum.

#### 22 August 2002

- A new methodology for calculating mandatory reserves comes into effect. The instrument is partly conformed with the ECB mandatory reserve instrument. The base for calculating mandatory reserves is widened in terms of maturities and currency, National Housing Saving Scheme funds are exempt from mandatory reserves and the possibility for supplementation by 60-day TCBBs is therefore also abolished. The change is effected in such a way as to avoid increasing the burden on the banking system.

#### 1 October 2002

- The Bank of Slovenia adjusts the lombard rate so that lombard loans perform the function of overnight and emergency liquidity loans. The Bank of Slovenia increases the scope for raising lombard loan capital against securities pledged as collateral (from 4.5% to 90%) and abolishes overnight and emergency liquidity loans. This represents a step forward in streamlining the Bank of Slovenia's instruments.
- The Bank of Slovenia introduces one-day loans as a payments instrument for bridging banks' liquidity requirements in the course of the day.

#### 4 November 2002

- The Bank of Slovenia introduces 270-day temporary purchase of foreign currency with compulsory repurchase and the option of outright sale of the currency when the instrument matures. The price is fixed at the same level as for temporary purchase of foreign currency for seven days, which is 4.5%.
- Responding to the need for extensive sterilisation of foreign currency inflows arising from the sale of Lek d.d., the Bank of Slovenia offers 360-day TCBBs at an interest rate of 12%.

#### 9 December 2002

- The interest rate on bank refinancing at the Bank of Slovenia is lowered from 7.75% to 7.25% and on placements with the Bank of Slovenia from 5.75% to 5.25% in line with the lowering of ECB interest rates.

#### 12 December 2002

- The Bank of Slovenia lowers the lombard rate from 11.0% to 10.5%, the auction interest rate on 7-day and 2-month repo foreign currency central bank bills from 9.5% to 9.0% and the interest rate on 60-day TCBBs from 8.75% to 8.25%. At the same time it also lowers the interest rate on 270-day TCBBs from 10.0% to 9.5% and as a consequence the interest rate on 360-day TCBBs is lowered to 11.5%.

#### 13 January 2003

- The Bank of Slovenia passes a decision to stop selling 360-day TCBBs.

#### 29 January 2003

- The offer of temporary purchase of central bank bills in foreign currency with compulsory repurchase after two months is temporarily withdrawn.

#### 12 March 2003

- The Bank of Slovenia lowers the rate of growth of the intervention rate from 3.5% to 3.0%. The interest rate on refinancing at the Bank of Slovenia is lowered from 7.25% to 6.75% and the interest rate on placements with the Bank of Slovenia from 5.25% to 5.00%. The price of temporary purchase of foreign exchange from banks is also reduced from 4.5% to 4.0% and the price of temporary sale of foreign exchange from 2.5% to 2.0%. The Bank of Slovenia also lowers the interest rate on 60-day TCBBs from 8.25% to 7.50%, on 270-day TCBBs from 9.5% to 8.75%, on 7-day repo foreign currency central bank bills to 8.25% and the lombard rate to 9.75%.

#### 25 March 2003

- The Bank of Slovenia ends its intervention in foreign currency market through the setting of the rate of growth of the intervention exchange rate.

## 4. ECONOMIC FORECASTS TO THE END OF 2004

### Made on the basis of data available as of 5 March 2003

Economic growth in Slovenia in 2003 will be below its long-run equilibrium rate for a third consecutive year. It will be somewhat higher in 2004, on the strength of a recovery in the global economy and a gradual strengthening of domestic demand. And as domestic demand gradually picks up, on present assumptions about administered price policy, forecast trends in the international environment and the monetary and exchange rate policy stance, a further gradual easing of inflationary pressure is predicted.

The forecasts of endogenous macroeconomic factors contained in this section, including inflation, rest on assumptions about the movement of international economic variables and about certain domestic factors that are linked to economic policy decisions. Factors that can be influenced by domestic macroeconomic policy are determined separately from the forecasting exercise and are liable to vary from past or expected economic trends. The forecasts should therefore be treated as a scenario that may change depending on the outcome of these exogenous influences from the international environment or as a result of changes in domestic economic policy.<sup>5</sup> Domestic factors that are influenced by economic policy and exogenously included in the forecasting exercise include the exchange rate of the domestic currency, government spending and investment, public sector wages, administered price inflation and other variables of a fiscal nature. The forecasts are therefore drawn up on the assumption of monetary policy unchanged from that set out in previous documents on monetary policy orientations,<sup>6</sup> which refer, among other things, to a gradual reduction in the rate of depreciation of the domestic currency.

The first section of the forecast presents the anticipated trends in selected variables from the international environment. This is followed by an account of the forecasts of economic activity, employment and wages. The third section shows the trend in domestic demand broken down by expenditure components. The external balance is analysed in section four. Sections five and six examine the conditions of financing and trends in monetary aggregates. The final section presents forecast price movements. A summary of the forecasts and a comparison with the October estimates are given in Table 4.8 at the end of the section.

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<sup>5</sup> The assumptions regarding exogenous factors were approved at the 265<sup>th</sup> session of the Governing Board of the Bank of Slovenia on 10 March 2003.

<sup>6</sup> *Medium-term Monetary Policy Framework*, November 2001; *Short-term Implementation of Medium-term Monetary Policy Framework*, May 2002; *Monetary Policy Implementation Report*, October 2002.

## 4.1 International environment

The international environment is dominated by a large measure of uncertainty the cause of which lies not only in current geopolitical tensions in the Middle East. Even before the outbreak of hostilities in Iraq the global economy was weak and prospects for recovery uncertain. Thus the global economic recovery expected to begin in the second half of 2003 will be considerably slower than we assumed in October last year. Furthermore, projections of economic activity are continuing to be revised downwards and this is an important risk factor incorporated in the present forecasts. The slowness of the global economic recovery means that we are not anticipating significant demand-side price pressures abroad. Most of the factors that could cause inflationary pressures are concentrated on the supply side and are linked to oil and commodity prices.

Table 4.1: Exogenous variables in the international environment

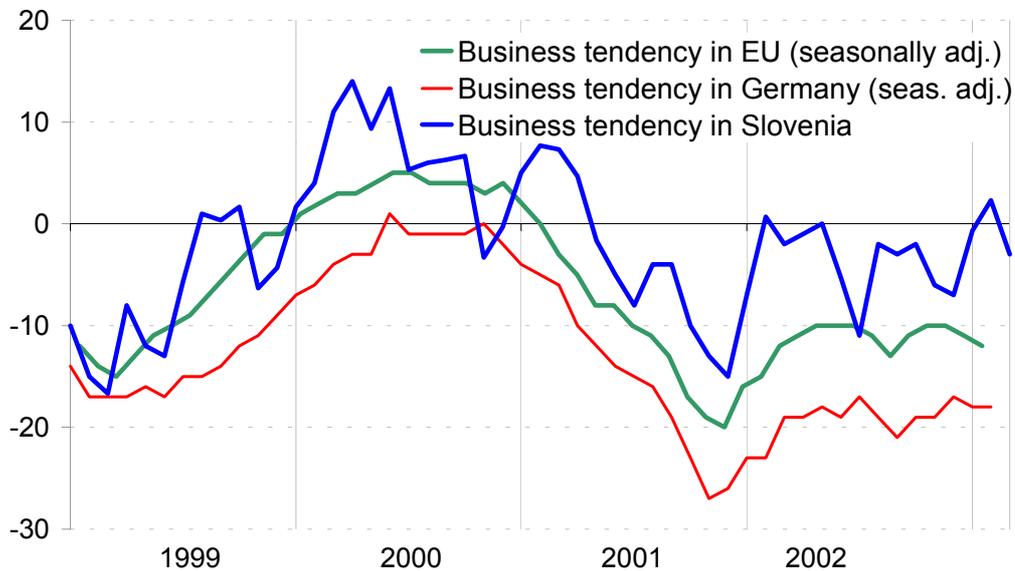
	2000	2001	2002	2003			2004		
				Nov 02	Apr 03	Diff.	Nov 02	Apr 03	Diff.
Foreign demand	9.8	4.0	1.7	7.7	6.1	-1.6	7.7	7.6	-0.1
USD/EUR	0.924	0.895	0.944	1.010	1.050	0.040	1.020	1.060	0.040
Oil price USD/barrel	28.5	24.4	25.0	25.0	29.0	4.0	23.3	25.0	1.7
Commodities	3.2	-6.5	4.6	2.8	4.5	1.7	2.8	3.0	0.2
Inflation in EMU	2.3	2.6	2.2	1.8	1.7	-0.1	1.8	1.6	-0.2
PPI Germany	3.3	1.3	-0.3	1.3	0.8	-0.5	1.3	1.2	-0.1
EURIBOR 3m	4.4	4.3	3.3	4.1	2.4	-1.7	4.1	2.7	-1.4

Source: Consensus Forecasts, JP Morgan, OECD Outlook, IMF World Economic Outlook, Analysis and Research Department

Demand is not expected to recover in Slovenia's main trading partners until the second half of 2003, after which stable growth should continue into 2004. Subdued foreign demand in 2003 reflects mostly the faltering recovery in private sector demand in the EU, despite assumptions about the high level of demand from Central and East European countries remaining unchanged. The main causes of the weak demand in the EU in 2002 were low household consumption and restrictions on government spending. Weak private consumption in the EU, and particularly in Germany, on the whole reflects the poor outlook in the jobs market, while the Stability and Growth Pact, which determines the permitted level of budget deficits in EMU countries, places a restriction on more expansively oriented government spending. Surveys indicate that expectations at the start of this year are brighter than at the corresponding time last year, but the mood is nevertheless still quite pessimistic.

The latest forecasts show that downward adjustments in economic activity trends are still possible, especially as far as the EU is concerned, although rising levels of pessimism have eased in recent months.

Figure 4.1: Business tendency abroad and in Slovenia

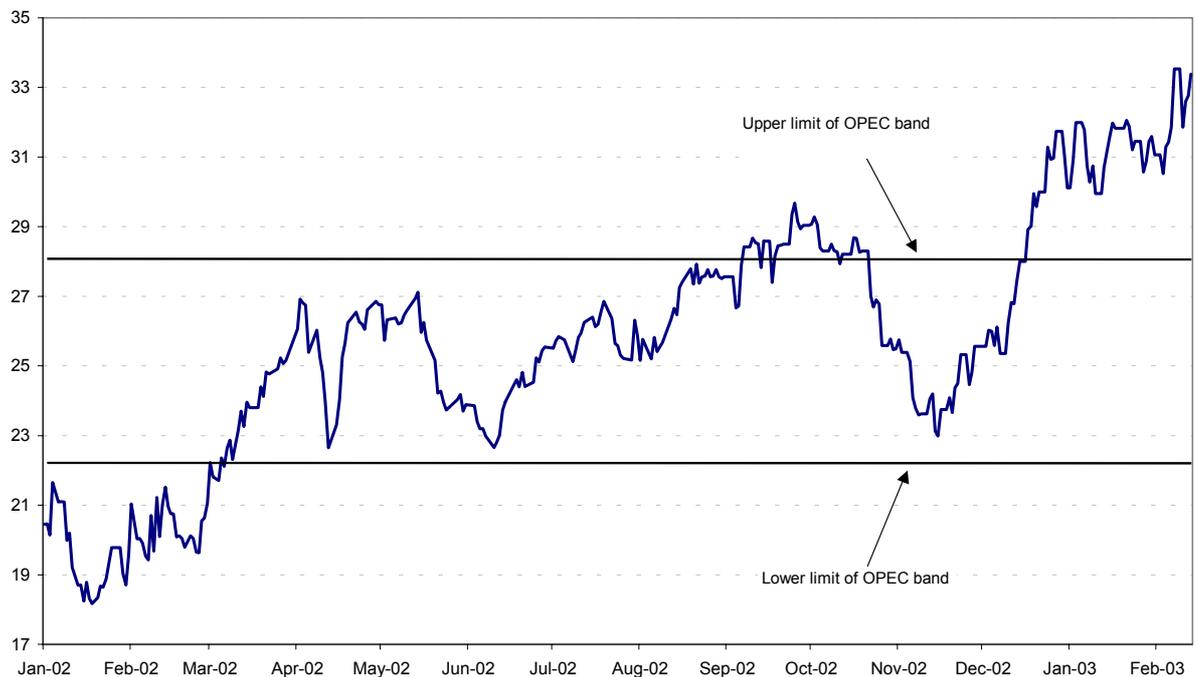


Source: Statistical Office of the Republic of Slovenia

The rapid appreciation of the euro in the second half of 2002 and at the start of 2003 has meant an upward revision of the expected EUR/USD exchange rate in 2003 and 2004. In view of the high level reached by the euro at the start of 2003 (January average EUR/USD = 1.061; February average EUR/USD = 1.078), in the revised forecasts we have taken a value from the upper part of the range of forecasts from various foreign institutions. Most foreign institutions predict a greater likelihood of the euro appreciating than a rise in the value of the dollar.

The main factors affecting forecasts of oil price trends are the uncertainty surrounding the development of events and the political situation in Iraq, Venezuela and certain other major petroleum exporters, and the very low levels of oil stocks in the industrialised countries. We have revised our assumption about oil prices in 2003 using the upper part of the range of oil price forecasts from foreign institutions. In the short term the price of oil should be determined by the duration of the conflict in Iraq. In our forecasts we have used the assumption that the average price of oil will begin to fall by the second quarter of 2003. In 2004 the oil price is forecast to be somewhere around the middle of the Opec band at a level of USD 25 a barrel.

Figure 4.2: Changes in oil prices in the period January 2002 – February 2003 (Brent oil, USD/barrel)



Source: Reuters

Unfavourable weather conditions and the political circumstances in some of the major commodity exporting countries caused a strong rise in the prices of food and other agricultural produce in the second half of 2002 (foodstuffs make up around 60% of the commodities index excluding energy sources). Even if commodity prices were to remain at the level they reached at the end of 2002, the average rise in 2003 would be more than 7%, which is more than we envisaged in the October forecasts. Therefore the assumptions about movements in commodity prices have been revised upwards compared to our October forecasts. The expected strengthening in demand resulting from the economic recovery in 2004 will mean renewed pressure on prices, which should be constrained primarily through non-utilised capacities for commodity production. In line with this we expect the growth in commodity prices to be appreciably slower than at the end of 2002, when several unfavourable supply-side factors were simultaneously acting to push prices up.

The lower economic growth forecast and the appreciation of the euro are the main factors behind the reduction in the inflation estimate in the EMU compared to the October assumption. These two factors should more than outweigh the inflationary pressures caused by higher energy prices at the end of 2002 and the beginning of 2003. Company profits are expected to be lower as a result of the limited transmission of higher commodity prices to

final product prices because of weak demand. The ECB published its latest inflation forecasts in December (1.3%-2.3% in 2003 and 1.0%-2.2% in 2004). The ECB revised downwards its June forecasts, mostly on account of the assumption of lower domestic costs in 2003 and lower import prices in 2004. German producer price forecasts by foreign institutions have also been lowered on account of the relatively slow recovery in economic activity despite higher prices for energy sources and other commodities. Therefore we have revised downwards our October forecast of German producer price trends in 2003 and 2004.

Interest rate forecasts have been lowered in line with the reduction in projected inflation. In the absence of inflationary pressures central banks will have greater scope for actively influencing economic recovery. Foreign interest rates measured in terms of the three-monthly Euribor are approximately 0.5 percentage points lower than the October forecasts. As a result, our assumptions about interest rate developments have also been revised downwards significantly since the October forecasts. A further lowering of interest rates is expected in the first half of 2003. The upturn in economic activity in the second half of 2003 should lead to a tightening of economic policy once more, i.e. a raising of interest rates abroad, at the beginning of 2004.

#### **4.2 Activity, employment and wages**

In view of the worsening conditions in the international environment and the increased uncertainty in which the domestic economy will consequently be operating, we have lowered our economic growth forecasts for this year and next year. Domestic economic activity in 2003 will grow at a very similar rate to last year – for the third year in succession the growth rate will be around 3%. The improved operating conditions abroad and at home will see economic activity strengthen somewhat in 2004 and move towards a growth rate of 4%. This will mean Slovenia's economy continuing to grow two to three times faster than GDP in the European Union.

Projected growth in added value by sector points to added value growing faster in services than in manufacturing as a result of the still very limited foreign demand and the slow recovery of domestic demand. The service sectors for which we forecast above-average growth in the next two years are restaurants and hotels, transport and financial intermediation. In view of the expectation of continued growth in investments, added value in construction will grow by more than the average. But the need for even greater restrictive orientation in fiscal policy means there is a good deal of uncertainty surrounding public sector investment activity.

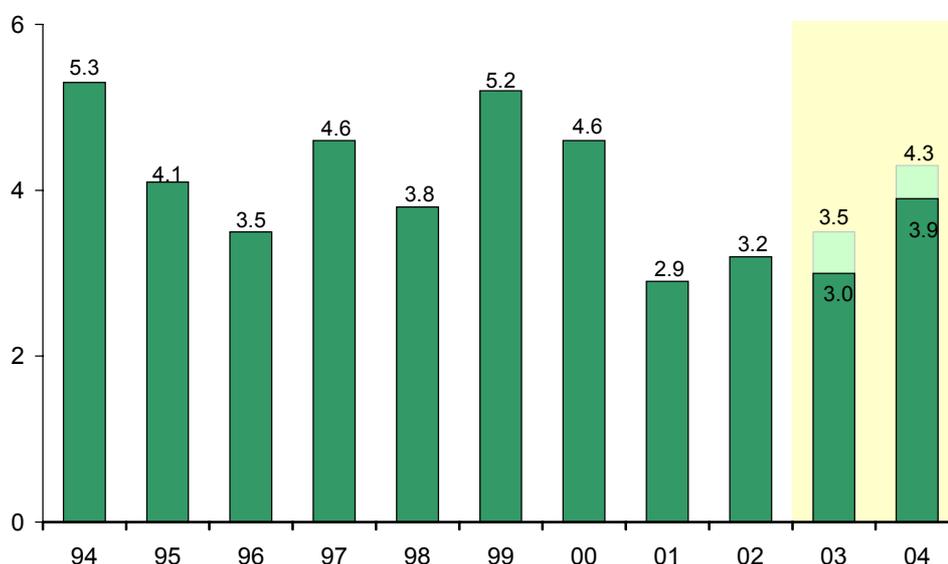
Table 4.2: Economic activity, employment and wages

	2000	2001	2002	Forecast		2003			2004		
				2003	2004	Previous forecast	New forecast	Change	Previous forecast	New forecast	Change
	annual percentage changes in real terms unless indicated										
GDP	4.6	2.9	3.2	3.0	3.9	3.5	3.0	-0.5	4.3	3.9	-0.4
GDP per capita (USD)	9,017	9,366	10,598	12,348	13,365	11,859	12,348	489	12,722	13,365	643.0
Employment	1.1	1.0	0.4	0.3	0.5	0.5	0.3	-0.2	0.8	0.5	-0.3
Net wages	1.4	3.1	2.1	2.2	2.4	2.2	2.2	0.0	2.2	2.4	0.2
Productivity	3.5	2.0	2.8	2.7	3.4	3.0	2.7	-0.3	3.5	3.4	-0.1

\* National accounts are estimated using the old methodology for calculating GDP and are not directly comparable with official SORS data.

Source: Analysis and Research Department

Figure 4.3: Economic activity (real annual % growth of GDP)



Source: Analysis and Research Department

Employment growth in 2002 was among the lowest in the last few years. Labour market conditions were particularly poor at the end of the year and have improved only marginally in the early part of 2003. Reflecting the uncertain prospects for an improvement in demand from abroad, expectations of future employment opportunities based on surveys are quite pessimistic. Therefore in our forecasts for this year we have assumed slower employment growth than last year and a very slow recovery in 2004. These trends are in line with the planned restrictive measures concerning employment in the public sector.

Wages growth will be in line with anticipated developments on the labour market and forecast economic trends. The assumption of real net wage growth in 2003 used in the forecasts is 2.2%, which is the same as in 2002. In 2004 we expect somewhat faster activity

growth and wages growth of 2.4%, lagging behind productivity growth by one percentage point. In spite of the declared need for savings to be made in public expenditure – the wages indexation method has already been agreed – we are not anticipating significant changes in public sector wage trends in 2003. Any changes as far as wages alignment is concerned would require the statutory frameworks to be amended, which is highly unlikely.

The method by which wages will be increased in 2004 has not yet been agreed for the business and public sectors. The existing provisions are only valid until the end of 2003, with the last envisaged alignment of wages with inflation being in December 2003 or January 2004. We are not expecting any major relaxation of the restrictive incomes policy as we assume that the social partners will be willing to reach a sensible agreement in terms of the wages policy in the future. The social agreement signed in April also sets a foundation for an incomes policy that will contribute to economic stability by ensuring competition and restricting inflationary pressures. A law regulating public sector wages comes into force at the beginning of 2004. This should ensure greater wage transparency, regulate the setting of public sector wages in a more centralised manner, and reduce the pressure for partial wage rises in particular areas of the public sector.

#### **4.3 Components of GDP expenditure**

Developments within the economy in the second half of 2002 were marked by a slow recovery of domestic demand. Household expenditure and investment expenditure made roughly equal contributions to economic growth. Foreign trade also made a positive contribution last year. In 2003 we are again expecting gradual growth in the components of domestic demand and only minor adjustments in composition of spending in favour of private consumption and investment spending. According to our projections the contribution of general government expenditure to economic growth will be similar to last year, while the contribution made by private consumption and investment spending will be around 0.5 percentage points higher. These two components will grow slightly faster than GDP. We project a negative contribution to economic growth in 2003 and 2004 from foreign trade.

The downward revision of the October forecasts notwithstanding, domestic demand will be the main impetus for economic growth in the coming two years. This is despite the fact that we expect foreign demand to recover because foreign trade will make a negative contribution to economic growth in the next two years due to the gradual strengthening of domestic demand. We expect movements in general government expenditure to be similar to 2002 as

a result of the low revenues achieved in 2002 and expectations of further declines on the revenues side. Consequently, the contribution of general government expenditure to economic growth will be 0.3–0.5 percentage points lower than the average contributions in the last few years.

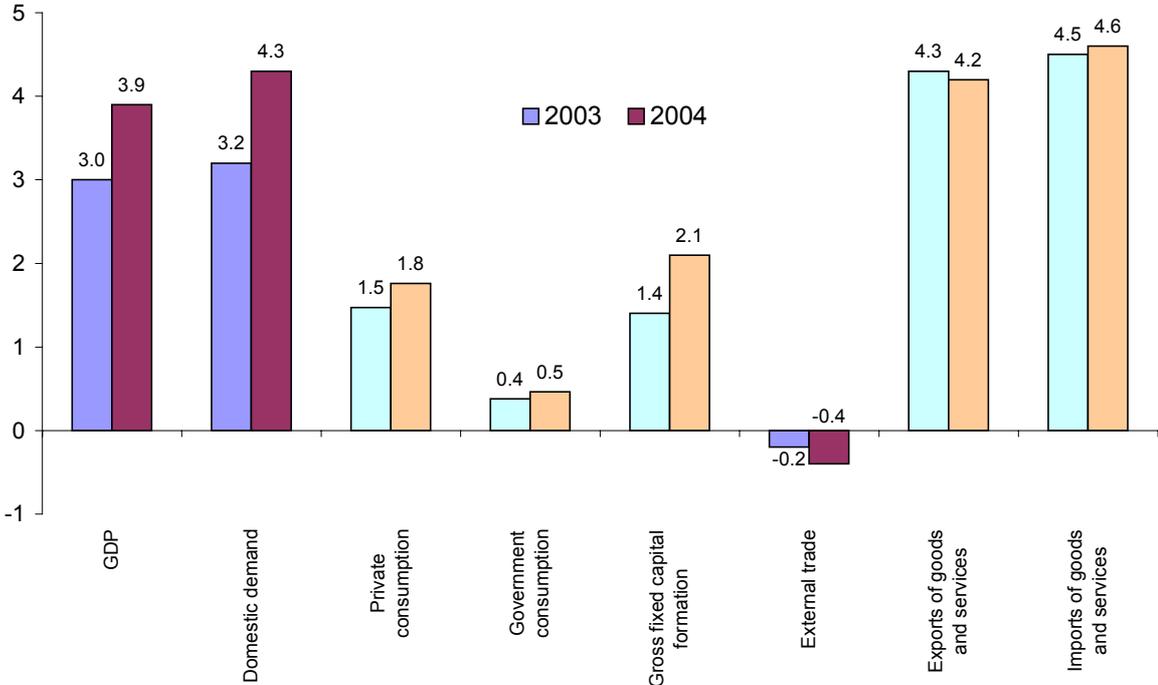
Table 4.3: Components of demand

				Forecast		2003			2004		
	2000	2001	2002	2003	2004	Previous forecast	New forecast	Change	Previous forecast	New forecast	Change
	real annual percentage change										
Gross domestic product	4.6	2.9	3.2	3.0	3.9	3.5	3.0	-0.5	4.3	3.9	-0.4
Domestic demand	1.1	0.5	2.3	3.2	4.2	3.8	3.2	-0.6	4.7	4.2	-0.5
Household consumption	0.8	2.6	1.9	2.8	3.3	3.1	2.8	-0.3	3.6	3.3	-0.3
Government consumption	3.1	4.0	2.7	1.9	2.3	3.3	1.9	-1.4	3.1	2.3	-0.8
Gross fixed cap. formation	0.5	-4.6	3.7	5.2	7.4	5.4	5.2	-0.2	8.0	7.4	-0.6
Exp. goods and services	12.7	6.4	6.1	6.4	6.0	5.7	6.4	0.7	6.4	6.0	-0.4
Imp. goods and services	6.1	3.0	4.8	6.6	6.5	6.1	6.6	0.5	7.0	6.5	-0.5

\* National accounts are estimated using the old methodology for calculating GDP and are not directly comparable with official SORS data.

Source. Analysis and Research Department

Figure 4.4: Contribution of individual components to GDP growth in 2003 and 2004 (percentage points)

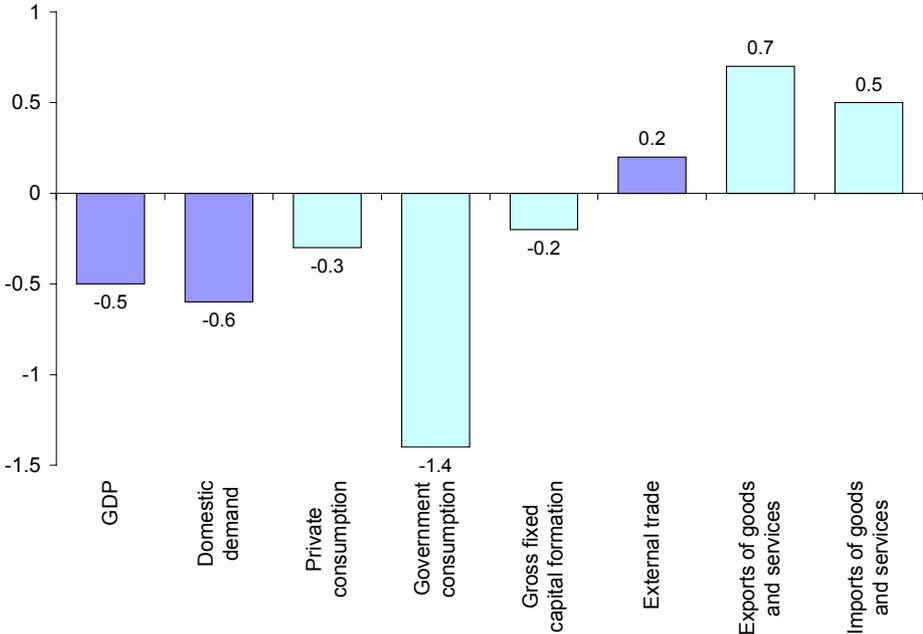


Source. Analysis and Research Department

In view of the likelihood of restrictions on budget expenditure a further recovery of the investment spending begun in 2002 is questionable. According to the figures in the budget memorandum, general government investment spending should still contribute a sizable share to the growth in overall investments in 2003 in spite of a probable contraction in spending on road infrastructure construction. We project growth of around 5% for both private and public sector investments in 2003. A major contraction of general government investment spending could affect the rate of recovery of private sector investment, which accounts for around 85% of overall investment expenditure. An appreciable reduction in general government investment could also have a negative impact on aggregate economic activity via the high multiplier of the former. Given a full upturn in the economic cycle and a reduction in business uncertainty we expect the private sector once again to contribute a larger share to investment spending in 2004.

In the next two years we expect a gradual increase in consumer spending. This will come on the back of a moderate growth in real wages, gradual employment growth, the release of some of the funds from the National Housing Saving Scheme and increased consumer confidence accompanying entry to the EU. But with saving still dominated by long-term motives we do not anticipate a major rise in consumer spending over this period. According to our projections consumer spending as a percentage of GDP will remain stable at around 53–54% in the coming years.

Figure 4.5: Changes in projected GDP components in 2003 compared to October forecasts



Source: Analysis and Research Department

## Box 4.1

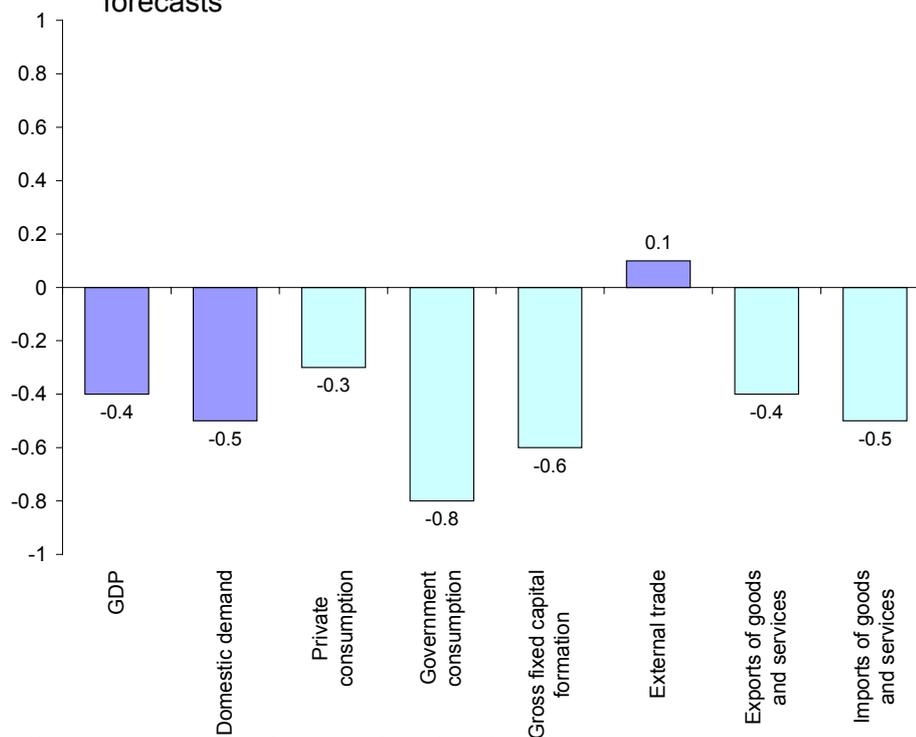
### Very little likelihood of stronger upturn in consumer spending

Consumer spending forecasts discount the possibility of above-average growth in the next two years. Although consumer spending will recover gradually, we do not anticipate a consumer spending boom despite the fact that the time span of previous consumption cycles points to this possibility and despite Slovenia's increasing involvement in European integration. This is because the last consumer spending boom in 1999 was fuelled by high levels of household indebtedness. Furthermore, a number of structural changes have occurred in the last few years which we believe will restrict consumer spending in the coming years.

The time span of the three consumption cycles so far indicates that another surge in household consumption could occur in the next couple of years. However, there is little likelihood of new spending growth being encouraged by the same factors that caused the three earlier cycles. The main cause of the first two cycles were high wages, while the last appreciable increase in consumer spending occurred as a result of tax reforms. The first leap in household consumption occurred in 1993, when it grew by 14.4%. In that same year real net wages rose by 17.2%. The next consumption cycle happened in 1995, when consumer spending grew by 9.7% in real terms. Real net wage growth of 6.0% in 1994 and in 4.7% in 1995 was still relatively high, although not of the same magnitude as in 1993. The last spending boom, a 6.1% real growth in 1999, resulted primarily from changes to the tax system, as wage growth in the preceding years was steady at just 3% on an average annual level. This substantial increase in consumer spending was supported by high levels of consumer indebtedness.

Along with the high levels of indebtedness following the last consumption cycle, a number of structural changes have occurred in the last few years which we believe will continue to restrict consumer spending going forward. The structural changes which shifted saving patterns towards longer-term saving were institutional reform of pensions legislation and the introduction of a number of longer-term savings instruments, including the National Housing Saving Scheme. There have also been changes to the distribution of wages in favour of higher income population groups with a lower marginal propensity to consume. This has been accompanied by a growing awareness on the part of the social partners that incomes policy, too, must contribute to stabilising the economy and to reducing cost pressures both in the tradable and nontradable sectors. The social partners have demonstrated their readiness to play their part by accepting longer-term wage agreements. Partly as a result of this, consumer spending in the last three years has been very subdued, growing by just 1.5% per annum on average over the period 2000-2002.

Figure 4.6: Changes in projected GDP components in 2004 compared to October forecasts



Source: Analysis and Research Department

#### 4.4 Balance of payments

Our projections point to a further increase in Slovenia's current account surplus despite expectations of a very slow improvement in foreign demand and a recovery in domestic demand. The surplus will rise in 2003 and 2004 compared both to the actual figure for 2002 as well as to our latest forecasts made at the end of last year. The main cause of the further improvement in the result of current transactions in both years is improved terms of trade, and in 2004 an increase in net transfers as a result of Slovenia entering the EU will also be significant. One of the important risks here is the assumption of a significant improvement in foreign demand compared to the actual figure for 2002.

Table 4.4: Balance of payments current account

				Forecast		2003			2004		
	2000	2001	2002	2003	2004	Previous forecast	New forecast	Change	Previous forecast	New forecast	Change
	Exp. goods and services	11.5	5.4	6.4	6.4	6.0	5.7	6.4	0.7	6.4	6.0
Imp. goods and services	3.6	0.9	5.4	6.6	6.5	6.1	6.6	0.5	7.0	6.5	-0.5
Current account: USD m	-548	31	375	595	760	492	595	103	512	760	247
as % of GDP	-3.0	0.2	1.8	2.4	2.8	2.1	2.4	0.3	2.0	2.8	0.8
Terms of trade	-5.2	0.9	1.9	1.5	1.3	1.2	1.5	0.3	0.4	1.3	1.0

Source: Analysis and Research Department

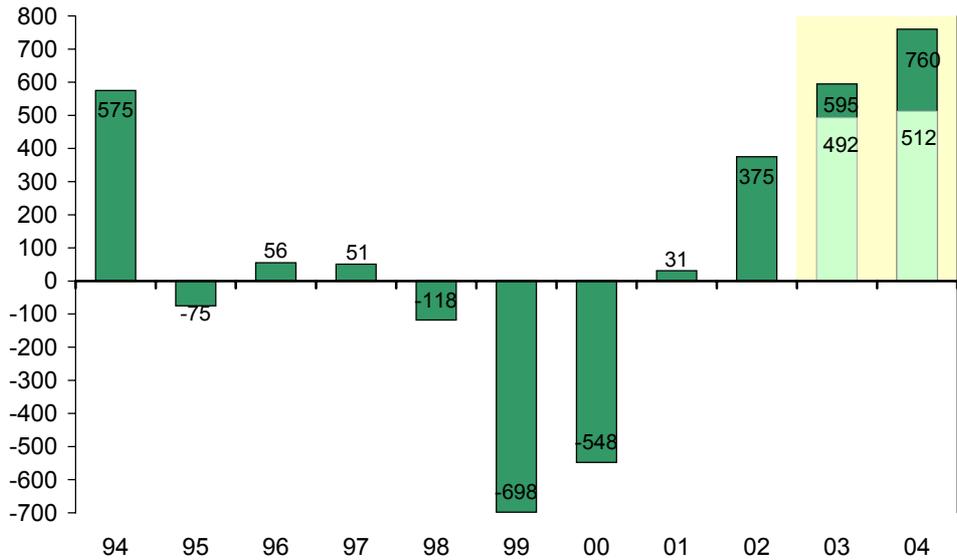
We estimate that the surplus in current transactions will rise from USD 375 million in 2002 to around USD 600 million this year. As a proportion of GDP this will mean the surplus in current transactions rising from 1.8% in 2002 to 2.4% this year. In 2004 the surplus will increase even further to a little over USD 700 million, some 2.8% of GDP. In US dollar terms this will mean the current account surplus returning to its 1994 level.

Real export volumes will increase by 6.4% this year and 6.3% in 2004, which is more than one percentage point higher than originally forecast. The expected recovery in the global economy will have a positive effect on the growth in export volumes in 2003 and 2004. Import demand for Slovenian goods (measured in terms of a weighted average of demand from the nine main trading partners) will grow by 6.1% this year and 7.6% next year according to our projections. Within the structure of import demand, given a gradual recovery in the EU partners in the coming years we expect continued above-average growth in merchandise trade with the countries of Cefta, the former Yugoslavia and the former Soviet Union. These assumptions contain a significant degree of uncertainty concerning both a further downward revision of economic growth forecasts in the EU countries, particularly

Germany, and question marks over the sustainability of demand in the Cefta countries as well as the payment capabilities of the countries of the former Yugoslavia.

On the goods imports side, in line with the gradual recovery of domestic demand we anticipate an increase in excess of three percentage points in the volume of imports compared with the actual value in 2002. In 2003 and 2004 real growth in imports of goods will be a little over 6% a year. The growth in import volumes will be 0.4 percentage points higher in 2003 and 0.6 percentage points lower in 2004 than the figures contained in our October forecasts. The volume of imports of intermediate goods will grow in line with export volume growth. We expect imports of capital goods to increase somewhat faster than in the last two years. Compared to the most recent forecasts, imports of capital goods will grow by 0.3 per cent more in 2003 and by a full two percentage points less in 2004. Mainly as a result of the fall in the value of the US dollar against the euro, the real appreciation of the effective exchange rate of the domestic currency, measured in terms of consumer goods prices, has risen by over one percentage point compared to our most recent forecast. The increase in the real purchasing power of household incomes as a result of the real appreciation of the tolar will cause a somewhat faster growth in real imports of consumer goods. In line with these assumptions, after growing by 2.1% in 2002 real imports of consumer goods will rise in the next two years, when consumer spending picks up, by 3.5% and 4% respectively.

Figure 4.7: Balance of payments current account



Source: Analysis and Research Department

We project dollar export price growth in excess of 11% and dollar import price growth of 9.5% in 2003. This will be despite the prices of refined petroleum products and commodities growing faster this year than previously forecast. The main reasons for this discrepancy in the movements of export prices and import prices are the fall in the value of the dollar and the currency composition of Slovenia's foreign trade, in which the dollar has a lower share on the export side than on the import side.

With the fall in the value of the dollar and the rise in the value of the euro, exports, in which the euro accounts for a relatively larger share, are increasing in price faster than imports. These trends will result in an improvement in the terms of trade this year of 1.5%. This is less than the 1.9% improvement in 2002 but still 0.3 percentage points more than we projected in our most recent forecasts. According to our projections, the difference in the balance of payments current account surplus resulting from the improved terms of trade in 2003 will be around 0.1 percentage points of GDP. In 2004 we expect the prices of refined petroleum products to come back within Opec target values, which, given more or less unchanged EUR/USD rate, will contribute to a slightly smaller improvement in the terms of trade in 2004 (1.3%). Compared to our most recent forecasts this represents a revision of approximately one percentage point, or an increase in the current account surplus of around 0.4 percentage points of GDP.

The balance of trade in services will increase this year to a little over USD 600 million and will remain steady at this level in 2004. This is the level we anticipated in our most recent forecasts, and the structure will also remain relatively unchanged.

Exports of transport services will grow somewhat faster than imports. In coming years this assumption will continue to be affected primarily by changes in the regional structure of Slovenian goods exports. Continued strong exports of goods to the countries of Cefta, the former Yugoslavia and the former Soviet Union should be followed by increased exports of transport services. We expect a continuation of the trend for imports of travel to grow faster than exports of travel this year and in the next few years, partly due to the boost in the purchasing power of domestic consumers from the real appreciation of the tolar. We expect the deficit in other services to widen in the next two years, reflecting the faster growth in imports of computer services and other technical business services associated with the expansion of foreign and domestic investment in the Slovenian economy.

No major changes are expected in the next couple of years to labour income, other than those resulting from changes in exchange rates. Looking at investment income, a gradual

increase in net expenditures is expected in the next few years. On the one hand we expect interest income to make a positive contribution to the balance of investment income as a result of foreign currency reserves growing faster than foreign currency liabilities. In view of the forecast movements in balance of payments we expect the level of foreign currency reserves to exceed the level of foreign currency liabilities (external debt) by the end of 2003. On the other hand, the growth in FDI will also increase investment expenditures through distribution and reinvestment of profits. We expect profits to grow relatively rapidly in the next few years, which will help to increase the deficit in investment income.

As far as transfers are concerned, we are anticipating expenditures to grow faster than receipts until Slovenia joins the EU. However, from the second quarter of 2004 onwards our forecasts have taken into account a faster growth in receipts based on official transfers from the EU as a result of Slovenia's net budget surplus position vis-à-vis the EU. On an annual level these transfers should amount to between USD 80 million and USD 90 million on average, which in 2004 alone represents an improvement of around 0.3% of GDP in the current account balance.

#### **4.5 Conditions of financing**

Forecast trends in the real sector and the current account of the balance of payments will also affect the means and conditions of financing of the different sectors of the economy. Net financial inflows from the rest of the world in 2003 and 2004 will be appreciably smaller than in previous years and will amount to around 2% of GDP. Net financial inflows in 2003 will be slightly smaller than we forecast in October. In 2004 they will be broadly in line with the October forecasts. The main reasons for the reduction in net financial inflows in 2003 will be the larger outflow of households' foreign currency and a somewhat larger volume of lending abroad by residents.

Although in October we forecast that replenishment of foreign currency holdings, in other words outflows of foreign currency through the household sector, would come to an end in the second half of 2002, this process has still not yet been completed. Outflows of currency from the household sector in 2002 amounted to USD 554 million and were 80% of the currency inflows in 2001. The biggest contribution to the large volume of inflows of foreign currency in 2001 came from exchanging euro zone currencies into euros. In view of the strong outflows in 2002 we forecast an increase in currency outflows in 2003 from 0 to USD 200 million.

Table 4.5: External financial flows

	2000	2001	2002	Forecast		2003			2004		
				2003	2004	Previous forecast	New forecast	Change	Previous forecast	New forecast	Change
	<i>as % of GDP</i>										
Net financial flow	5.6	8.2	4.8	2.1	1.8	3.9	2.1	-1.8	1.6	1.8	0.2
foreign direct investments	0.8	2.7	8.6	3.4	3.0	3.1	3.4	0.3	1.9	3.0	1.1
	<i>balance at year's end</i>										
Forex reserves (USD m)	4,376	5,747	8,152	9,330	10,871	9,304	9,330	26	10,231	10,871	640
- as % of GDP	24.1	30.6	38.4	37.8	40.7	39.2	37.8	-1.4	40.2	40.7	0.5
External debt (USD m)	6,217	6,717	8,799	9,229	9,992	8,852	9,229	377	9,508	9,992	484
- as % of GDP	34.2	35.7	41.5	37.4	37.4	37.3	37.4	0.1	37.4	37.4	0.0

Search: Analysis and Research Department

The second important component, which can explain the decline in net financial inflows from abroad in 2003 is lending abroad by residents. In view of the strong outflows through loans made by banks and companies in 2002, amounting to USD 215 million, we have revised upwards the October forecasts of outflows from both sectors by USD 120 million in 2003 and in 2004, and thereby brought these outflows up to the 2002 level.

Commercial credits, which in 2002 were 1.5 times larger than in 2001, will continue to be among the most important outflows in the capital account. On the one hand this is due to the reorientation of exports to markets with lower purchasing power, mainly the countries of the former Yugoslavia and Soviet Union, and the need to finance such exports. On the other hand, it can also be put down to the extension of payment deadlines due to the weak economic situation in Slovenia's major EU partners. We have assumed continued growth in the volume of this type of financing of foreign trading partners for the next two years, as a result both of the continued export growth to countries of the former Soviet Union and Yugoslavia and as well as the recovery in the EU countries, which will be slower than anticipated. We have made only very minor adjustments to our October forecasts concerning the volume of net commercial credits.

Direct investments make up the biggest proportion of the other components of the balance of payments capital account. Our forecast for foreign direct investments is similar to the autumn forecast both for foreign investments in Slovenia and for investments by Slovenian residents abroad. As far as large one-off capital inflows are concerned we can only take into account the Government's announcement that in 2003 there will be no major sale of assets, while the start of the privatisation of Telekom has been announced for 2004 but this is not taken into account in the present forecasts. Due to expectations of a continued high level of activity by

Slovenian companies in the markets of the former Yugoslavia and the other countries in transition, we have increased the forecast for the volume of direct investments abroad by Slovenian residents compared to the actual figure for 2002.

In 2003 foreign exchange reserves will remain unchanged from the October forecasts, as the increased surplus in the current account will be wholly compensated for by lower financial inflows. However, in 2004 the current account surplus will exceed the lower financial inflows and hence we predict a rise in the foreign exchange reserves of around USD 0.7 billion. The external debt will also rise, although at a slower pace than foreign exchange reserves, so that by the end of 2003 the balance of foreign exchange reserves will exceed the external debt.

We estimate that total domestic and foreign financing of enterprises in 2003 and 2004 will grow in line with the expected increase in economic activity based on a gradual recovery of domestic demand and against a background of falling inflation. We expect enterprises to meet a substantial proportion of their investment financing needs by raising loans abroad, while the growth in domestic borrowing will result mainly from increased domestic debt accumulation by the Government.

Domestic borrowing by the Government will remain at a high level in the next two years, growing at a rate of around 18% rather than the October forecast figure of around 9%. This may be seen as a result of the widening deficit, a shift from foreign to domestic sources of finance and the repayment of a large volume of matured Eurobond liabilities. In 2002 the Government continued the process of restructuring the debt in favour of domestic sources of finance. At the end of 2001 domestic debt made up 51.7% of total government debt but by the end of the third quarter of 2002 this share has risen to 57.4%. We expect the Government to continue the restructuring of the currency make-up of the debt this year. Eurobond obligations of approximately EUR 200 million will fall due for payment in mid-2004. This will partly be reflected in the sustaining of a high level of domestic debt contracting and partly in an increase in investment in securities. In our October forecasts we predicted a growth of around 7% in investments in securities at the end of 2003 and in 2004; our latest projections, however, point to this item growing by around 18%. There will therefore be a slight fall in domestic borrowing requirements over the next two years – at the end of 2002 year-on-year growth in domestic debt contracting was 27.4% – but year-on-year growth in domestic debt contracting at the end of 2004 will remain high at 18.5%.

With a gradual rise in private consumption we expect household borrowing over the next two years also to rise slightly in spite of the stagnation in household credit growth in 2002. According to our estimates the falling trend in net household borrowing will not be as strong in 2003 as it has been since 1999, and the level of household credit in 2004 will be unchanged from 2003.

In line with the restructuring of the maturity of deposits towards long-term saving, we expect a continuation of the realignment from short-term borrowing towards long-term borrowing over the next two years. As far as demand for credit is concerned this will be aided mainly by the expected continuation of a gradual recovery in investment spending. Given expectations of quite substantial foreign borrowing by banks, lending in foreign currency will continue to grow faster than tolar lending in the context of a slow and predictable depreciation of the tolar.

We expect the influence of balance of payments flows on the issuance of broad money to remain substantial. However, their impact will not be the main driving force as it has been in previous years, when the rise in net foreign assets accounted for more than 50% of broad money creation. The structure of inflow contributions to the formation of broad money in 2003 and 2004 will be more equally distributed than we assumed in the autumn forecasts. According to the autumn forecasts net foreign assets would grow rapidly in 2003 and much more slowly in 2004. But our latest estimates indicate domestic credit contributing more to M3 growth at the end of 2004 than NFA. The next section describes the formation of monetary sector liabilities.

#### **4.6 Projections of monetary aggregates**

A slowdown in the growth of monetary aggregates is expected over the next two years. The reduction in growth rates will be particularly pronounced for the broad M3 and M2 aggregates, for which the growth rates should halve compared to 2002. The decline in the growth of M1 narrow money will be somewhat lower, which is in line with the expected gradual strengthening of domestic economic activity.

Table 4.6: Monetary system

	2000	2001	2002	Forecast		Previous forecast	2003	Change	Previous forecast	2004	Change
				2003	2004		New forecast			New forecast	
M1	7.0	12.8	14.8	13.6	10.9	11.5	13.6	2.1	11.3	10.9	-0.4
M3	16.5	23.9	22.4	11.6	9.8	11.4	11.6	0.2	10.9	9.8	-1.1
Total credits	17.8	19.3	17.0	12.2	11.6	9.8	12.2	2.4	9.0	11.6	2.6

Source: Analysis and Research Department

The biggest influence on our projections for M3 growth this year and next year will come from the growth of tolar deposits because in terms of the currency composition of broad money foreign currency deposits will grow more slowly than tolar deposits. The yield on foreign currency deposits will fall compared to tolar deposits both because of lower nominal interest rates and also because of an anticipated reduction in the rate of depreciation of the domestic currency compared to the inflation trend. Total foreign currency deposits (households and firms) at the end of 2003 will be at the same level as last year, while at the end of 2004 their year-on-year growth will be a little below 2%. Given the anticipated stagnation in total foreign currency deposits, movements in M2 and M3 will thus be very similar, although M3 will grow slightly more quickly than M2.

A somewhat slower decline in M1 growth over the next two years will be caused primarily by increased demand for M1 transaction money due to the anticipated recovery of economic activity at the end of 2003 and in 2004. Movements in the opportunity costs of currency holdings also have an important influence on M1 growth. In view of our expectation of a continuation in the rate of decline of inflation and the related lowering of interest rates, the reduction of opportunity costs will mean a greater willingness on the part of economic agents to hold transaction money.

The currency composition of tolar deposits will continue to change in favour of long-term deposits of over one year. Changes in relative returns mean we will also see a widening of the gap between growth in long-term deposits and shorter-term deposits in the next two years, so that by the end of 2004 long-term deposit growth will be approximately three times as high as short-term deposit growth.

## 4.7 Inflation

Based on data currently available about the inflation trend in the early part of 2003 and taking into account the assumptions about movements in exogenous variables in the next two years, we do not anticipate price growth rates deviating significantly from our October forecasts. This applies in particular to average annual growth rates. There are differences, however, in terms of year-on-year growth rates in last quarters of both years, resulting from different assumptions about movements in exogenous variables from international environment and different timing of administered price rises within the year. Inflation is expected to be around 5.0% at the end of 2003, and 3.7% at the end of 2004.

Assuming the Government continues its policy adopted in mid-January 2003 of restricting administered price growth and that the rises in administered prices which have already been agreed are spread evenly, the main uncertainty again surrounds movements in oil prices on world markets and the prices of refined petroleum products on the domestic market.

At the start of the year our pessimistic expectations about oil price movements on world markets which we set out in October were realised. The average oil price in 2003, which we took into account as our assumption in the October forecasts, was USD 25 per barrel. In view of changed market conditions we have used USD 29 per barrel as the average oil price for this year in the base case in the present forecasts. At the start of this year oil prices on world markets reached almost USD 35 per barrel before settling at a level below USD 30 per barrel. Further movements in oil prices will depend primarily on how events in Iraq develop and on the situation in the Middle East, as well as on political conditions in certain other major petroleum exporters.

Table 4.7: Price developments

	2000	2001	2002	Forecast		Previous forecast	2003 New forecast	Change	Previous forecast	2004 New forecast	Change
				2003	2004						
	<i>average annual percentage changes</i>										
Consumer prices	8,9	8,5	7,5	5,5	4,1	5,6	5,5	-0,1	4,1	4,1	0,0
Free prices	7,0	7,7	7,6	5,4	3,9	5,4	5,4	0,0	3,8	3,9	0,1
Administered prices	18,9	12,2	7,5	6,2	4,9	6,7	6,2	-0,5	5,1	4,9	-0,2
	<i>annual percentage changes (last quarter)</i>										
Consumer prices	9,2	7,3	7,1	5,0	3,7	5,3	5,0	-0,3	3,4	3,7	0,3
Free prices	6,9	7,9	6,9	4,9	3,4	5,1	4,9	-0,2	3,0	3,4	0,4
Administered prices	21,7	5,0	8,8	5,5	5,0	5,7	5,5	-0,2	5,0	5,0	0,0

Source: Analysis and Research Department

Inflationary pressures caused by higher oil prices have, as yet, not materialised because, by reducing excise duty, the Slovenian Government ensured that the strong growth in oil prices on world markets was not transmitted to prices of refined petroleum products on the domestic market. Two related effects remain the most important factors of uncertainty regarding the transmission of world oil prices to domestic prices: uncertainty about changes in prices of oil on the world market, and the ability of the Government to absorb any price rises by lowering excise duty. In 2004 the Government's room for manoeuvre as far as reducing excise duty on refined petroleum products is concerned will be curtailed by the need to align with the EU regarding absolute levels of excise duty and, not least, by the sustainability of the budget deficit arising as a consequence of lowering the tax burden. Excise duties on diesel and heating oil have already been lowered to minimum levels, but there is still some scope for a further reduction in excise duty on petrol.

We expect a contribution to the lowering of inflation and inflationary expectations in the remainder of this year and in 2004 to come not only from the Government's measures concerning administered prices, which have already contributed significantly to lowering year-on-year price growth rates at the start of this year, but also from increased coordination of economic policy-making, a continuation of restrictive monetary policy and from certain exogenous factors.

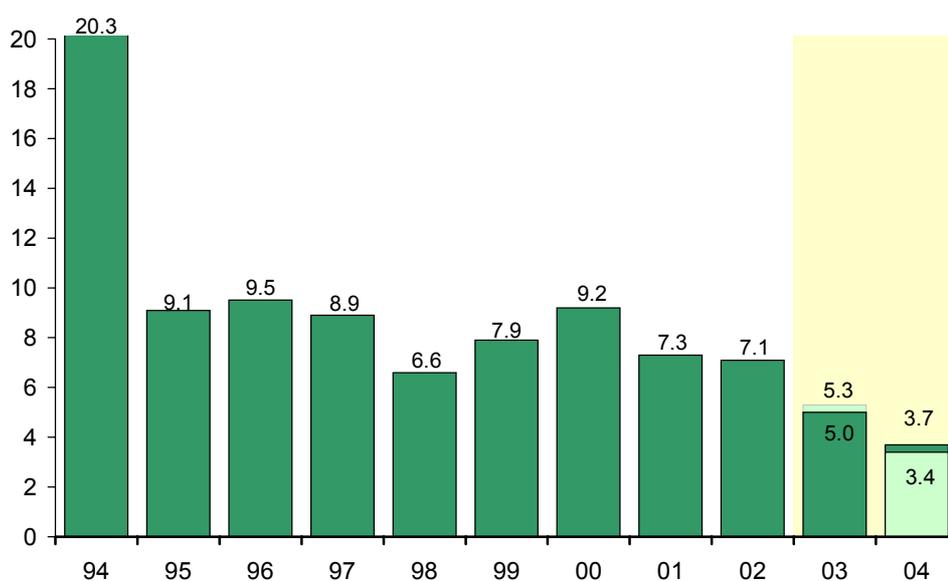
We foresee a continuation of the falling growth trend in free prices over the next couple of years. This will be influenced in particular by the assumption of a reduction in the rate of depreciation of the tolar, which is already lagging behind inflation, and the assumption of an appreciable strengthening of the euro against the US dollar in 2003. Both assumptions exert a restraining effect on inflation through a reduction in the growth of import prices. Despite the assumption of higher commodity prices, import price growth will be lower than the October forecasts by 0.6 percentage points in 2003 and 0.9 percentage points in 2004.

We forecast year-on-year growth in free prices of 4.9% at the end of 2003 and 3.4% at the end of 2004. The latter figure is 0.4 percentage points higher than our October forecast and reflects new information concerning inflationary pressures from the international environment and restrictions in fiscal policy measures:

- we have raised the projected oil price in 2004 from USD 23.3 per barrel to USD 25 per barrel;
- we have raised the projected growth in commodity prices in 2004 from 2.8% to 3.0%;
- the increase in the value of the euro in 2004 will not compensate so strongly for the rise in oil and commodity prices as in 2003. We are assuming a rise of 1% in the

value of the euro against the dollar in 2004 (unchanged from the October forecasts), whereas in 2003 we expect the euro to appreciate against the dollar by as much as 11% (compared to 6.7% in our October forecasts).

Figure 4.8: Price growth (y-o-y growth to final quarter, per cent)



Source: Analysis and Research Department

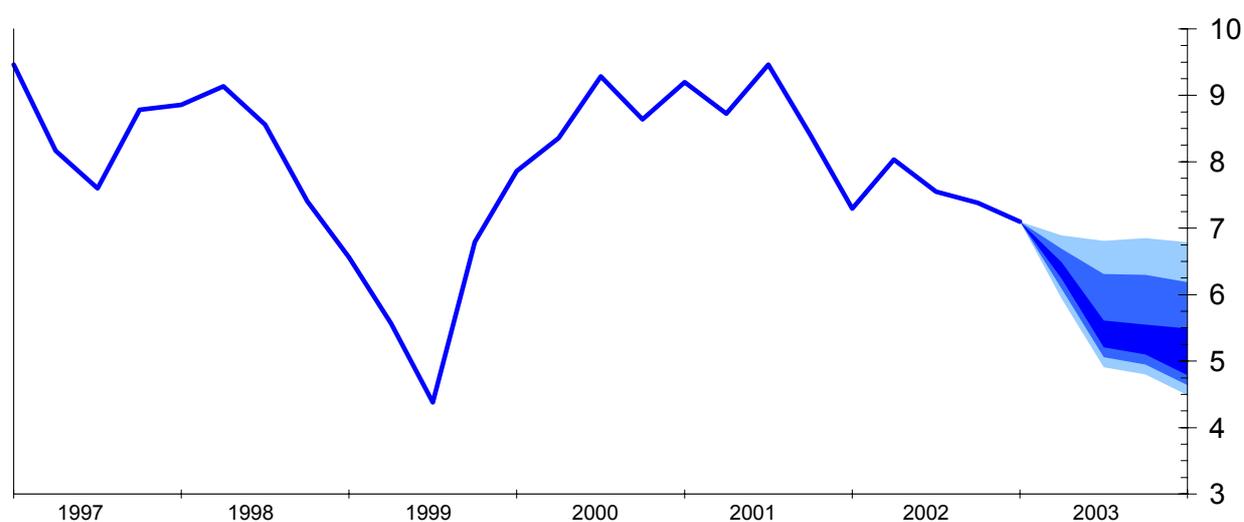
In the next two years we expect the growth of free and administered prices to be more evenly matched than has been the case in recent years. This trend has already begun at the end of last year. Whereas administered prices grew by over 10 percentage points faster than free prices in 2000, and by a little under 5 percentage points in 2001, on average in 2002 their growth rates were identical. Thus in 2003 and 2004 we expect that the growth in administered prices on average will not be more than one percentage point higher than the growth in free prices.

In view of the unpredictable circumstances in the international environment and the possibility of changes in the factors affected by domestic economic policy, the price forecasts set out in Table 4.7 and Figure 4.8 should be taken only as a basic, most likely scenario.

Figure 4.9 presents the risks of point prediction of inflation trends. Among the factors that could bring about an inflation level higher than our forecast, and which we have not incorporated here, are:

- different tax and other administrative measures (e.g. a rise in the costs of rent on non-profit housing, various import taxes);
- unfavourable developments regarding inflationary pressures stemming from the international environment, where oil prices and commodity prices are the biggest risk;
- monopolistic and oligopolistic sectors and certain interest groups not adjusting appropriately to the conditions of lower inflation.

Figure 4.9: Inflation projection (year-on-year; quarterly data)



Source: Analysis and Research Department

Notable factors which could contribute to inflation being below our forecasts, but which we were unable to take into account in the base scenario for lack of information and therefore carry a certain degree of uncertainty, are:

- the anticipated gradual reduction in customs duties accompanying EU convergence. The main unknown quantity here is the rate at which customs duties are reduced;
- restrictions on increases in excise duties with which the Ministry of Finance will make up for the drop in revenues in the period when it had to reduce excise duties in order to neutralise the effects of high oil prices on world markets. As well as being influenced by uncertainties over lower oil prices, a fiscal response of this nature depends, in particular, on the public finance situation and outlook at a given moment;
- realignment of the incomes policy towards a lesser degree of indexation.

According to our projections, year-on-year growth in consumer prices at the end of 2003 will most likely be around 5%. This projection is in line with risk factor estimates and primarily reflects the increased coordination of all economic policies towards the goal of combating inflation. A further reduction in inflation is expected in 2004 in line with the criteria for the nominal convergence of the Slovenian economy in the context of participation in European monetary integration.

Table 4.8: Selected main indicators

				Forecast		Previous forecast	2003 New forecast	Change	Previous forecast	2004 New forecast	Change
	2000	2001*	2002*	2003	2004						
<b>Activity, employment wages</b>	<i>real percentage change</i>										
Real GDP	4,6	2,9	3,2	3,0	3,9	3,5	3,0	-0,5	4,3	3,9	-0,4
Per capita GDP (USD)	9.017	9.366	10.598	12.348	13.365	11.859	12.348	489	12.722	13.365	643,0
Employment	1,1	1,0	0,4	0,3	0,5	0,5	0,3	-0,2	0,8	0,5	-0,3
Net wages	1,4	3,1	2,1	2,2	2,4	2,2	2,2	0,0	2,2	2,4	0,2
Productivity	3,5	2,0	2,6	2,7	3,4	3,0	2,7	-0,3	3,5	3,4	-0,1
<b>Domestic demand</b>	<i>real percentage change</i>										
Domestic demand	1,1	0,5	2,3	3,2	4,2	3,8	3,2	-0,6	4,7	4,2	-0,5
Private consumption	0,8	2,6	1,9	2,8	3,3	3,1	2,8	-0,3	3,6	3,3	-0,3
Government consumption	3,1	4,0	2,7	1,9	2,3	3,3	1,9	-1,4	3,1	2,3	-0,8
Gross fixed capital formation	0,5	-4,6	3,7	5,2	7,4	5,4	5,2	-0,2	8,0	7,4	-0,6
<b>Balance of payments</b>	<i>real percentage change</i>										
Exports of goods and services	11,5	5,4	6,4	6,4	6,0	5,7	6,4	0,7	6,4	6,0	-0,4
Imports of goods and services	3,6	0,9	5,4	6,6	6,5	6,1	6,6	0,5	7,0	6,5	-0,5
Current account: USD m	-548	31	375	595	760	492	595	103	512	760	247
as % of GDP	-3,0	0,2	1,8	2,4	2,8	2,1	2,4	0,3	2,0	2,8	0,8
Terms of trade	-5,2	0,9	1,9	1,5	1,3	1,2	1,5	0,3	0,4	1,3	1,0
Net financial flows (as % of GDP)	5,6	8,2	4,8	2,1	1,8	3,9	2,1	-1,8	1,6	1,8	0,2
of which: foreign direct investments	0,8	2,7	8,6	3,4	3,0	3,1	3,4	0,3	1,9	3,0	1,1
Foreign exchange reserves (USD m)	4.376	5.738	8.152	9.330	10.871	9.304	9.330	26,0	10.231	10.871	640
- as % of GDP	24,1	30,6	38,4	37,8	40,7	39,2	37,8	-1,4	40,2	40,7	0,5
External debt (USD m)	6.217	6.717	8.799	9.229	9.992	8.852	9.229	377	9.508	9.992	484
- as % of GDP	34,2	35,7	41,5	37,4	37,4	37,3	37,4	0,1	37,4	37,4	0,0
<b>Monetary system</b>	<i>annual percentage change (Q4/Q4)</i>										
M1	7,0	12,8	14,8	13,6	10,9	11,5	13,6	2,1	11,3	10,9	-0,4
M3	16,5	23,9	22,4	11,6	9,8	11,4	11,6	0,2	10,9	9,8	-1,1
Total credits	17,8	19,3	17,0	12,2	11,6	9,8	12,2	2,4	9,0	11,6	2,6
<b>Prices</b>	<i>annual percentage change (last quarter)</i>										
Consumer prices	9,2	7,3	7,1	5,0	3,7	5,3	5,0	-0,3	3,4	3,7	0,3
Free prices	6,9	7,9	6,9	4,9	3,4	5,1	4,9	-0,2	3,0	3,4	0,4
Administered prices	21,7	5,0	8,8	5,5	5,0	5,7	5,5	-0,2	5,0	5,0	0,0
<b>International factors</b>	<i>annual percentage change</i>										
Foreign demand**	9,8	4,0	1,7	6,1	7,6	7,7	6,1	-1,6	7,7	7,6	-0,1
EUR/USD	0,924	0,895	0,944	1,050	1,060	1,010	1,050	0,040	1,020	1,060	0,040
Oil price (USD/barrel)	28,5	24,4	25,0	29,0	25,0	25,0	29,0	4,0	23,3	25,0	1,7
Commodities	3,2	-6,5	4,6	4,5	3,0	2,8	4,5	1,7	2,8	3,0	0,2
Inflation in EMU	2,3	2,6	2,2	1,7	1,6	1,8	1,7	-0,1	1,8	1,6	-0,2
PPI Germany	3,3	1,3	-0,3	0,8	1,2	1,3	0,8	-0,5	1,3	1,2	-0,1
EURIBOR 3m (%)	4,4	4,3	3,3	2,4	2,7	4,1	2,4	-1,7	4,1	2,7	-1,4

\* Foreign demand in 2002 is the ARC estimate. National accounts figures for 2001 and 2002 are official data. Forecasts are made using old methodology for calculating GDP and are therefore not directly comparable with official SURS data.

\*\* Volume of imports of a basket of goods from foreign partners; data are not directly comparable with previous forecasts due to change in sample of countries.

Source: Analysis and Research Department, Consensus Forecasts, JP Morgan, OECD Outlook, IMF World Economic Outlook, Statistical Office RS

## 5. MONETARY POLICY CONDUCT AND SHORT-TERM ORIENTATION

In this section we will summarise the main orientations of the Bank of Slovenia's monetary policy in the next short-term period, highlighting the most influential factors that will shape monetary policy implementation in the future. In the light of current macroeconomic trends the principles underlying monetary policy actions are summarised and limitations connected with the free flow of capital are pointed out. Despite the unfavourable macroeconomic circumstances we expect the Bank of Slovenia's counter-inflationary policy, working together with economic policies under the control of the Slovenian Government, to succeed in gradually, continuously and sustainably bringing inflation down to a level which will permit entry to ERM2 and adoption of the euro.

### 5.1. Introduction

**This year has seen key improvements made in coordination between Bank of Slovenia monetary policy and the fiscal policy of the Slovenian Government, which is vitally important as far as the efforts to achieve sustained reduction in inflation are concerned.** Last year's inflation was strongly at variance with the forecasts and expectations set out by the Bank of Slovenia at the end of 2001. Previous issues of *Short-term Monetary Policy Orientations* have highlighted the main reasons for this variance as being the strong rises in prices under the control of the Slovenian Government and the effects on prices of the fiscal measures of increasing excise duty. The Government's aim with these measures was to make up shortfalls arising from the growing budgetary imbalance. Adoption of the euro as soon as possible is a common goal of both the Bank of Slovenia and the Slovenian Government, and one of the conditions for successful integration in the euro zone is to achieve a sustained low level of inflation. Without the support of the macroeconomic policies under the control of the Government, reducing inflation would require monetary policy to be even more restrictive. As we will show in this section, this can cause damage to the economy which, in the given circumstances, can still be avoided. The Bank of Slovenia is therefore expecting continuing cooperation from the Government in terms of action to counter inflation and considers the Government's initial measures in this direction to be encouraging.<sup>7</sup> Sustainability of public finances is one of the key prerequisites for sustaining a low level of

inflation.<sup>8</sup> Equally, coordination with the economic policies under the control of the Government is vital, in terms of the identified inflationary factors, in order to achieve effective reduction of inflation to a low equilibrium level.

**Monetary policy of the Bank of Slovenia will continue to be oriented towards bringing down inflation while taking account of the fact that the main sources of inflation at present are cost-push in nature.** The Bank of Slovenia will take account of current macroeconomic factors in determining movements in nominal interest rates and the exchange rate. The economic circumstances accompanying high inflation do not generally give a clear indication as to what type of policy should be applied. Therefore the central bank has to weigh up the sometimes contradictory effects of different macroeconomic factors in determining the intensity of its policy. Decisions on interest rates and exchange rate growth are influenced by the fact that in the short term we are not anticipating demand-side inflationary pressures or an excessive expansion of credit. These two elements remain highly subdued, below their long-term trend, which is also the case for general economic activity. Further retarding of these elements is probably not to be recommended. They need to be weighed against the need for still relatively high real interest rates, as the central bank is obliged to maintain high interest rates in order to ensure the desired level of restrictiveness. Suitably high interest rates prevent a turnaround in consumption and enable interest inelastic capital inflows from abroad to be sterilised and the supply of money in circulation to be controlled (in the context of an assumed strengthening of the tolar).

## **5.2. Principles underlying Bank of Slovenia monetary policy**

**The Bank of Slovenia's monetary policy will continue to be moderately restrictive,** with the emphasis on control of (narrow) monetary aggregates and restrictions on consumption. By adjusting interest rates the central bank influences the monetary aggregates and, via a suitable response from financial intermediaries, also domestic consumption. In this way it seeks to achieve the desired restrictiveness or expansiveness of monetary policy. In the most recent period the trends in broader monetary aggregates have been exogenous as far

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<sup>9</sup> See sections two and four.

<sup>8</sup> For an explanation of the theory, see, for example, Woodford (1995), Price-level determinacy without control of a monetary aggregate, *Carnegie-Rochester Series on Public Policy* 43. In practice an illustrative (although extreme) case is that of Argentina: Mussa (2003), Argentina and the Fund: from triumph to tragedy, *Policy Analyses in International Economy* No. 67, Institute for International Economics.

as monetary policy is concerned and are strongly affected by interest inelastic elements, especially capital inflows from abroad. These effects take a long time to work through because they primarily involve adjusting the assets portfolio and increased depth of financial intermediation. And because they stem not from the supply of money but from the demand for money, they can be accommodated without affecting inflation.<sup>9</sup> Given the difficulty, in the context of fully liberalised capital flows, in setting an operational target in the sense of a monetary aggregate,<sup>10</sup> the central bank tied the use of interest rates as an instrument with which to adjust the level of restrictiveness in the money market, or aggregate demand, to indicators of real and monetary activity. Modern macroeconomic theory of open economies also supports the regulation of economic activity and influencing the inflation by the adjustment of real interest rates (or money in circulation).<sup>11</sup> This points to the optimal monetary policy being one which is oriented towards management of domestic economic trends and inflationary pressures with the aid of interest rates in the same way as in a closed economy.<sup>12</sup> By setting suitably high interest rates the Bank of Slovenia ensures the necessary withdrawal of money from circulation (it sterilises surplus liquidity stemming from interest inelastic capital flows from abroad) and the curbing of consumption and lending. Aggregate demand is thereby maintained at a level which reduces inflationary pressures.

**A managed floating exchange rate regime remains the best choice for conducting exchange rate policy.** On the one hand, a well-recognised value of a managed floating policy is that high frequency fluctuations, which are damaging to a small, open economy, can be smoothed out by managing the exchange rate dynamics. In particular, this allows stable and predictable conditions of financing and saving to be achieved, and hence more efficient use of resources. On the other hand, fixing the nominal exchange rate is not the best choice (in normal economies where there are no hyperinflationary pressures) because changes in

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<sup>9</sup> For a theoretical foundation in the case of economies aiming to achieve price stabilisation in the context of strong capital inflows see Calvo (1991), *The Perils of Sterilization, IMF Staff Papers, Vol 38, No. 4 (December)*.

<sup>10</sup> High frequency fluctuations and seasonal components, variability in the face of interest inelastic capital flows and balanced growth in real demand for money (financial deepening) as a result of the falling inflation trend make it hard to determine a (reasonable, credible and stable) long-term relationship between inflation and monetary aggregates.

<sup>11</sup> For a summary of the results see, for example, Clarida, Gali and Gertler (2001), *Optimal monetary policy in open versus closed economies: an integrated approach, AEA Papers and proceedings, Vol. 91, No. 2*.

<sup>12</sup> Bole (2003), *Managed Floating as a Second Best Option: Lessons from Slovenia, mimeo*, shows empirically that the price response to monetary restrictiveness is the same in the tradable and nontradable sectors, whereas the price response to exchange rate restrictiveness is appreciably stronger in the tradable sector than in the nontradable sector. Based on this analysis, using the exchange rate as an instrument of restrictiveness would (in the short run) introduce a further distortion of relative prices into the economy and would be reflected as an additional supply-side shock. This analysis supports the use of monetary policy, in comparison with exchange rate policy, as a means to stabilise aggregate demand.

the terms of trade can be optimally (partially) accommodated and cyclical trends in the economy can be reacted to.<sup>13</sup> Fixed exchange rate regimes are also potential targets of speculative attacks on the currency which directly threaten the stability of the financial system, and consequently also the price levels.

In the middle of 1999 all the main restrictions on external financial flows were ultimately lifted. Free capital flows mean that domestic interest rates are dependent on the external environment. The selection of exchange rate regime determines whether the central bank can maintain control over interest rates and conduct an independent monetary policy even in the context of free flow of capital, or leaves control over consumption to the effects of fiscal policy. Of the three typical choices (hard peg, floating and soft peg), only a floating exchange rate regime (including managed floating<sup>14</sup>) offers the possibility of conducting an independent monetary policy.<sup>15</sup> A fixed (hard peg) regime removes this role from monetary policy and creates fiscal policy dominance.

On this basis a managed floating exchange rate regime is the best option in the case of a small, open economy until it becomes a part of the European monetary integration. But the selection of a managed floating exchange rate also envisages that the central bank does not publicly commit itself to a specific (short-term) exchange rate path, so this decision still has to be justified.

**Using the monetary policy instruments at its disposal, the Bank of Slovenia will continue to contribute to stable conditions of financing.** By adjusting uncovered interest parity it will enable a gradual nominal convergence of interest rates with the Maastricht criteria and simultaneously prevent the possibility of rapid gains and the related fluctuations in flows of short-term speculative capital. Adjusting uncovered interest parity equalises the conditions for borrowing at home and abroad and allows domestic lending rates to be brought into line with lending rates abroad. This approach is oriented towards maintaining a stable long-term external equilibrium without risking inflation over the long run. On the investments side the adjusting of uncovered interest parity helps to equalise expected rates of return on investments in tolar and foreign currency instruments of equivalent value. Thus it

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<sup>13</sup> For example, see Corsetti and Presenti (2001), International dimensions of optimal monetary policy, *NBER Working Paper No. 8320 (April)*.

<sup>14</sup> We talk about a managed floating exchange rate when the central bank intervenes actively in the foreign currency market to adjust the exchange rate of the domestic currency without disclosing its desired (short-term) exchange rate path (summarised from the definition in the IMF's *International Financial Statistics*).

<sup>15</sup> A more detailed analysis of exchange rate regimes can be found in the article "Exchange rate regimes for emerging market economies", *ECB Bulletin, February 2003*.

works to restrain the motives triggering inflows of speculative capital which in the short term could destabilise the financial market and consequently the stability of prices.<sup>16</sup>

Monetary policy independence is also a key argument behind the decision to implement a managed floating exchange rate regime. Because the central bank is not bound by a specific (short-term) exchange rate path it is able to adjust this instrument in line with interest-rate policy requirements. The implementation of this policy in practice is described in detail in section three. Maintaining a long-term stable external equilibrium and preventing speculative pressures is vital for stability in the financial system, which in turn is an essential aspect of maintaining monetary policy as an effective lever on economic activity and prices.<sup>17</sup>

Evaluating the reasons for inflation and for inflationary expectations is crucially important as far as using the nominal exchange rate of the tolar as an instrument to support interest-rate policy is concerned. And when it comes to implementing a restrictive policy it is vital that the elasticity of inflation on nominal interest rates is greater than the elasticity of inflation on the nominal exchange rate. In other words, the negative responsiveness of inflation in the nontradable sector due to smaller pressures from demand and money in circulation as a result of higher interest rates must more than outweigh the positive responsiveness of inflation on greater supply-side costs in the tradable sector caused by a fall in the value of the tolar. When economic activity and inflation are influenced by supply-side dynamics, a policy of high interest rates alone may prove insufficient.<sup>18</sup> This is particularly likely when

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<sup>16</sup> Interest parity can also be closed by changing the direction not only of the expected dynamics but also the level of the exchange rate at the same time. The advantage of this strategy is an expectation of smaller depreciation on average and thus greater exchange rate restrictiveness on the part of the central bank. This strategy for using the exchange rate is modelled on the dynamics of “over-shooting” as described in Dornbusch (1976), Expectations and Exchange Rate Dynamics, *Journal of Political Economy* 84 (December). In the context of a managed floating exchange rate regime this strategy cannot be used for three reasons. Firstly, a greater variability in the nominal exchange rate is not desired because it introduces an additional element of risk to operations because every change in interest rates changes not only the dynamics but also the level of the exchange rate. Secondly, due to expectations on the part of economic agents that the exchange rate will change (and cause costs or profits, depending on the direction of the change, for all those with open positions) every time there is a change in interest rates (i.e. relatively frequently), every expectation of a change in interest rates would expose the central bank to a possibility of speculative attack. Such an attack could occur because by adjusting the exchange rate, using the instruments at its disposal the central bank enables (in principle without restriction) the purchase or sale of foreign currency. This policy would thus not contribute to stability in the financial system. Thirdly, in order for the central bank to be able to carry out such a policy operationally and change the exchange rate level correctly, it would have to know exactly the time frame in which future domestic interest rates would deviate from foreign interest rates, but the central bank does not have perfect foresight.

<sup>17</sup> See Lipschitz, Lane, Mormouras (2002), Capital Flows to Transition Economies: Master or Servant? *IMF Working Paper No. 02/11*

<sup>18</sup> A more detailed analysis of the limitations on managing monetary policy with interest rates can be found in Kerr and King (1996), Limits on Interest Rate Rules in the IS-LM Model, *Federal Reserve Bank of Richmond Quarterly, Volume 82/2 (Spring)*, and the references cited by the authors.

demand is below its long-term trend and further restrictiveness in monetary policy is increasingly less effective. High interest rates in this case cannot have a significant effect on inflation. But cost elements connected with exchange rate dynamics (and interest rate levels themselves) can have a strong impact on inflation, so that inflation may stabilise at a higher level. If the Bank of Slovenia judges that inflationary expectations are low and that there is little likelihood of increased consumption then it has to lower interest rates and reduce exchange rate growth.

A differentiated monetary policy response depending on the nature of the prevailing economic shock is a well-known and acknowledged outcome of macroeconomic policy and practice.<sup>19</sup> The logic of a monetary policy which is restricted by parallel movements in exchange rate dynamics and interest rates is always to apply the most effective means to reduce inflation. A summary of differentiated responses and the effect on inflation is contained in the May 2002 publication *Short-Term Implementation of Medium-Term Monetary Policy Framework*.

**In order to achieve disinflation without significant costs<sup>20</sup> to the economy and sustainable low inflation, the Bank of Slovenia must pay particularly close attention to its influence on inflationary expectations.** Inflationary expectations are an important element of monetary policy conduct because they have to be taken into account when determining nominal interest rates in order to achieve the desired real interest rate and thus the desired level of restrictiveness. A restrictive policy which fails to take account of parallel adjustments in expectations leads to a decline in output and to unemployment because producer price policy is not optimally aligned with the actual situation of real demand and supply in the economy. And because central bank policy has an important influence on future inflation, inflationary expectations are dependent in part on monetary policy. The central bank must be able to evaluate them. Because expectations about inflation trends are rational, it is essential for the central bank's counter-inflationary action to be credible. This means that a central bank endeavouring to create expectations of a reduction in inflation must have the

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<sup>19</sup> For a contemporary approach see the influential article by Clarida, Gali and Gertler (1999), *The Science of Monetary Policy: a New Keynesian Perspective*, *Journal of Economic Literature*, Vol XXXVII (December). The authors show that the optimal monetary policy approach is to act restrictively in the case of demand side-shocks and to accommodate shocks from the supply side. In an economy with a low equilibrium level of inflation this means unchanged interest rates in the case of a supply-side shock.

<sup>20</sup> The real costs to the economy in the case of independent and aggressively restrictive action by the Bank of Slovenia could be reflected in a decline in output (potentially by several percentage points of annual GDP in cumulative terms) and in the emergence of additional or intensified macroeconomic imbalances (current account, budget deficit, ...). In this case the sustainability of lower inflation is questionable and does not justify the high costs of disinflation.

possibility to implement a policy that can achieve this. In the case of the Bank of Slovenia we have shown that this condition is met by it having the opportunity to align exchange rate and monetary policy in a way that is always counter-inflationary with regard to the nature of the shocks from which inflation derives.

### **5.3. Monetary policy intensity**

The approach to monetary policy conduct described above takes place in Slovenia in an environment defined by the following characteristics:

- Price growth in the tradable sector, in which prices are formed in a competitive external environment, is half the rate of price growth in the nontradable sector. Exposure to international competition and the poorer operating conditions worldwide mean that it is compelled to draw on internal reserves and seek improvements in productivity because the growth in tradable prices is not keeping pace with the growth in costs. This situation is best reflected in the fact that producer prices are growing much more slowly than consumer prices, labour costs and the exchange rate.
- The nontradable sector (primarily the public services) is less exposed to external competition and therefore in terms of price setting is less sensitive to external operating conditions and exchange rate movements, and is dependent primarily on domestic demand. A moderately restrictive monetary policy limits the scope for such demand in a sustainable way. Subdued wage growth in 2003 is further restricting this possibility and helping to reduce costs. Although price growth in this sector is still relatively high it has been falling in the most recent period.
- In the light of Slovenia's declared wish to enter ERM2 in 2005, monetary policy is losing some of its flexibility given the requirement for nominal convergence of interest rates.

This reduction in flexibility leads the Bank of Slovenia to a moderately restrictive monetary policy and to a sustained reduction in interest rates. Such a policy increases the possibility of alignment in companies' price policies, effectively orients long-term expectations and maximises the possibility of lower inflation being sustained over the long run. For this reason credible and gradually counter-inflationary action reduces the real costs associated with disinflation.<sup>21</sup> Bank of Slovenia monetary policy is oriented in such a way that in the absence of new shocks inflation can be lowered by up to two percentage points a year. In the most

recent period inflation shocks have been highly asymmetrical and independent of monetary policy, which reinforces the need for monetary policy to be cautious in terms of determining inflationary expectations over the short term.

The Bank of Slovenia is therefore not inclined towards counter-inflationary action based exclusively on aggressive reduction of exchange rate growth or on exchange rate fixing. There are several reasons for this:

- first, the consequences of such a change in monetary policy conduct are hard to predict as far as inflation is concerned, and may cause high costs in terms of lost production – avoidable costs in the Bank of Slovenia’s opinion – and additional macroeconomic imbalances;
- second, such a policy is suitable for countries where inflation (hyperinflation) is the main problem and originates to a large extent in the monetary policy of the central bank, and there is a desire to “tie its hands”. This situation does not correspond to the circumstances in Slovenia;
- third, while stabilising prices using the exchange rate can be an effective instrument in the fight against inflation (in the short term or, as mentioned above, in certain macroeconomic configurations), in itself it is not an effective instrument for optimal macroeconomic policy (optimal response to macroeconomic shocks of varying nature, etc.) as demonstrated in this section.

Exclusive subordination to exchange rate stabilisation is thus a poorer option than a differentiated response. Moreover, if central bank policy is limited to stabilisation of the exchange rate it could disable the principal, normal lever of monetary policy, which is the transmission of monetary policy via interest rate channel. When inflation stabilises, the central bank may be incapable of shifting to an interest rate policy, as means of the optimal monetary policy, and the financial system may be unable or unprepared for transmission of such a policy. Thus this type of a change in monetary policy action is not appropriate for completing the disinflation process in the case of Slovenia.

**The Bank of Slovenia will therefore continue to gradually align long-term exchange rate movements in accordance with the conditions for participation in ERM2 and for adoption of the euro.** In the opinion of the Governing Board of the Bank of Slovenia, the adoption of the euro as the domestic currency as soon as possible is in the interest of the Slovenian economy. Therefore the priority goal of the Bank of Slovenia is to create the

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<sup>21</sup> See Ball (1995), Disinflation with Imperfect Credibility, *Journal of Monetary Economics* Vol. 35. Credible disinflation, if it is gradual, can even cause an increase in output.

conditions for entry to the ERM2 programme and for a successful two-year transitional period leading up to the adoption of the euro. Although no specific conditions (other than compatibility of the exchange rate regime) need to be fulfilled for ERM2 entry, it is clear that if the euro is to be adopted soon then the Maastricht criteria need to be fulfilled on entry to ERM2. From the point of view of the current macroeconomic situation the main requirement, as far as ERM2 entry is concerned, is a sustained reduction in inflation enabling nominal convergence of interest rates and adjustment of interest rate dynamics.<sup>22</sup> Given the orientation and implementation of monetary policy as set out in this section, nominal convergence of interest rates and exchange rate dynamics in line with the requirements of the ERM2 mechanism should be gradually achieved. The intensity of the adjustment of interest rates and of the exchange rate dynamics fulfilling this requirement is in line with the desired intensity of disinflation described above.

#### **5.4. Short-term orientation of monetary policy**

The Bank of Slovenia will continue its outlined restrictive monetary policy because the medium-term inflation trend forecasts are in line with the autumn forecasts. In fact, the inflation forecast has actually been revised downwards slightly. The additional efforts by the Slovenian Government to restrict inflationary pressures from fiscal factors and administered prices are having a particularly encouraging effect. This cooperation is increasing the effectiveness of monetary policy implementation in aggravated macroeconomic circumstances. Data for the most recent period point to a further deterioration in the international economic environment, but because of relatively high inflation we cannot expect stronger growth stimulation from domestic monetary policy. Monetary policy will continue to be marked primarily by moderate restrictiveness with the goal of effective and sustained price stabilisation and the creation of conditions for participation in European monetary integration.

Continuing the established policy of gradual but constant action to tackle inflation assumes the preservation of relatively high real interest rates, which prevents sudden excessive consumption or credit expansion from causing additional inflationary pressures. At the same time this enables a high degree of sterilisation of interest inelastic capital inflows from abroad or the withdrawal of surplus liquidity from the financial system. By means of appropriate

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<sup>22</sup> As far as exchange rate dynamics is concerned, entry to ERM2 means an exchange rate moving around the parity rate of the tolar against the euro set jointly by the European Central Bank, ECOFIN

management of interest rates and exchange rate dynamics the Bank of Slovenia will maintain the alignment of domestic and foreign interest rates and continue to prevent interest elastic financial inflows and thus contribute to stable conditions of financing. Along with a restrictive stance of monetary policy, the Bank of Slovenia will continue to adjust nominal interest rates and the dynamics of the nominal exchange rate of the tolar in a gradual and coordinated fashion in line with the conditions for successful participation in the ERM2 programme, which is a prerequisite for adoption of the euro as the domestic currency.

The Bank of Slovenia will not reduce inflation alone and expects continuing cooperation from the Slovenian Government. Coordinated action by the Bank of Slovenia and the Slovenian Government has proved successful this year. A continuation of this cooperation can give Slovenia a competitive advantage over other countries that are in the process of adopting the euro. On the other hand, if policy-making is uncoordinated, the process of adopting the euro could stall because a prerequisite for successful participation in ERM2 is a capacity for coordinated management of economic policies. The Bank of Slovenia is expecting that coordinated economic policy action will not be limited to itself and the Slovenian Government but will also include the social partners – especially as regards deindexation of wages and other labour costs. This aspect is already part of the preparations within the economy for participation in ERM2 and the adoption of the euro.

Short-term monetary policy measures will help to compensate for the projected negative effects on the inflation trend in 2004 compared to the October forecasts and to achieve the forecast year-on-year inflation rate of around 3.5% by the end of 2004.

A process of preparing economic policies for participation in ERM2 and for adoption of the euro is proceeding in parallel with the process of bringing down inflation. Although the conditions for Slovenia's participation in ERM2 remain to a large extent undefined, it is already clear that in the period between entry to ERM2 and the changeover to the euro, monetary policy will be slightly expansive. Interest rates in this period will come down to a relatively low level and approach euro interest rates. Other economic policies (fiscal and incomes) will therefore need to be actively included in the process of restricting inflationary pressures and final domestic consumption.

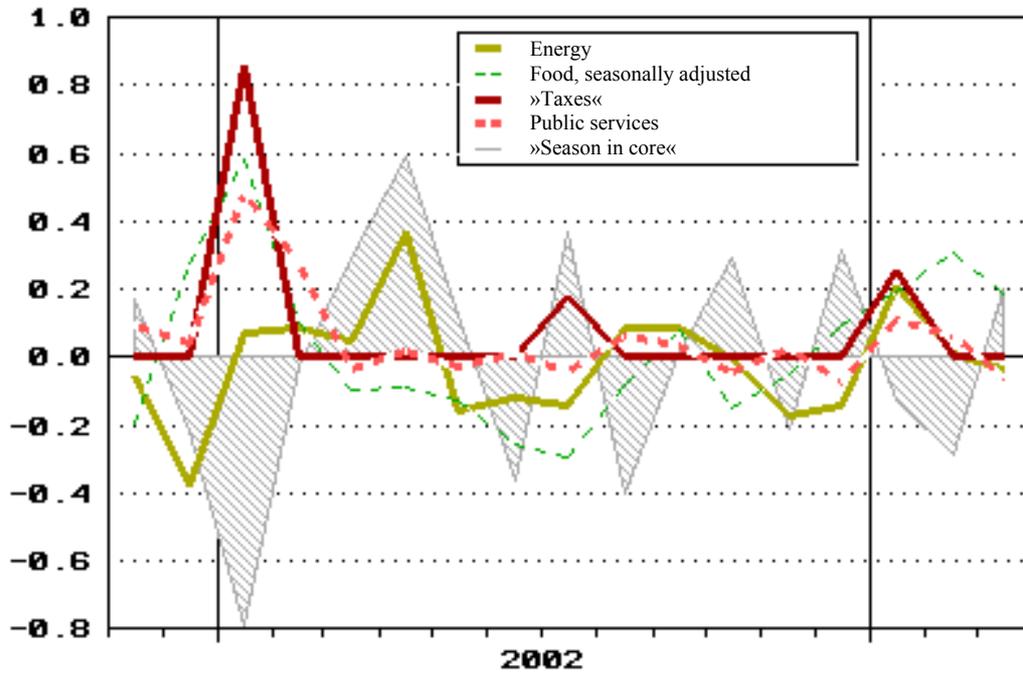
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and the national central banks. This rate can be altered (by agreement) where justified by economic circumstances.

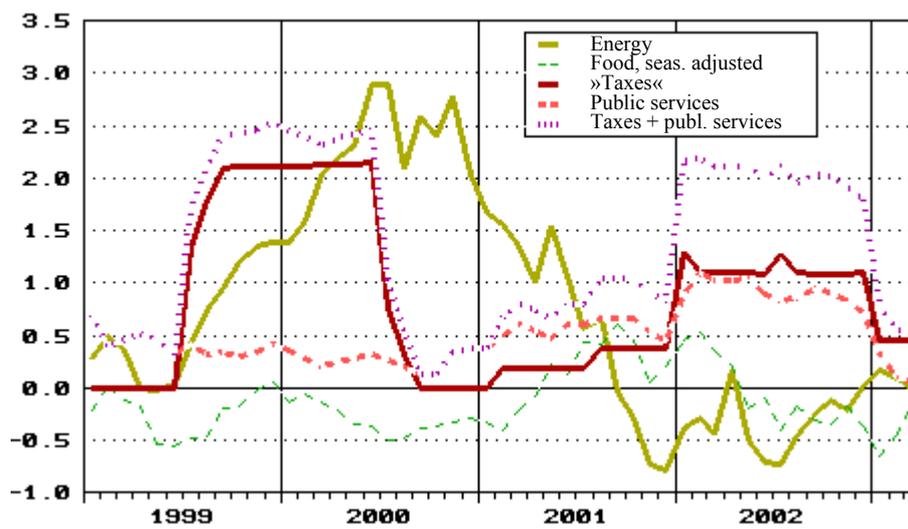
## Appendix: Monetary policy indicators

### Exogenous components of inflation

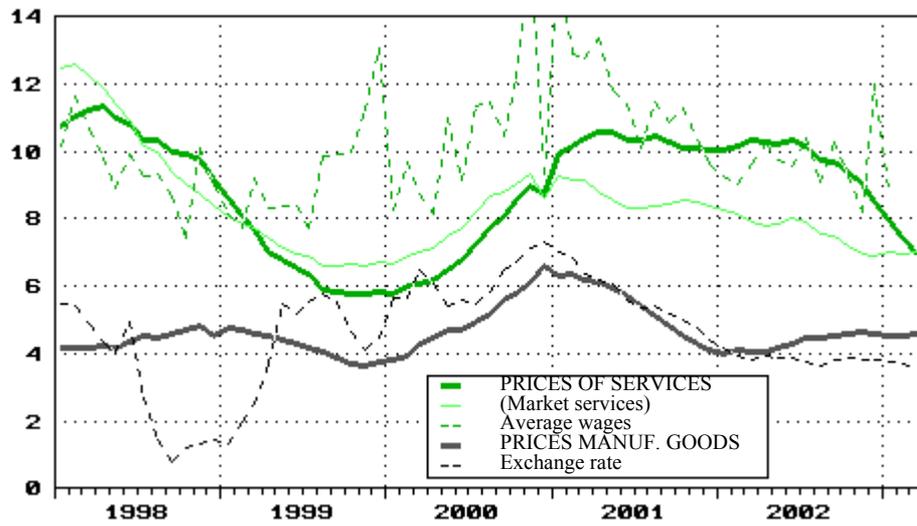
(b) percentage points of overall inflation in monthly rates



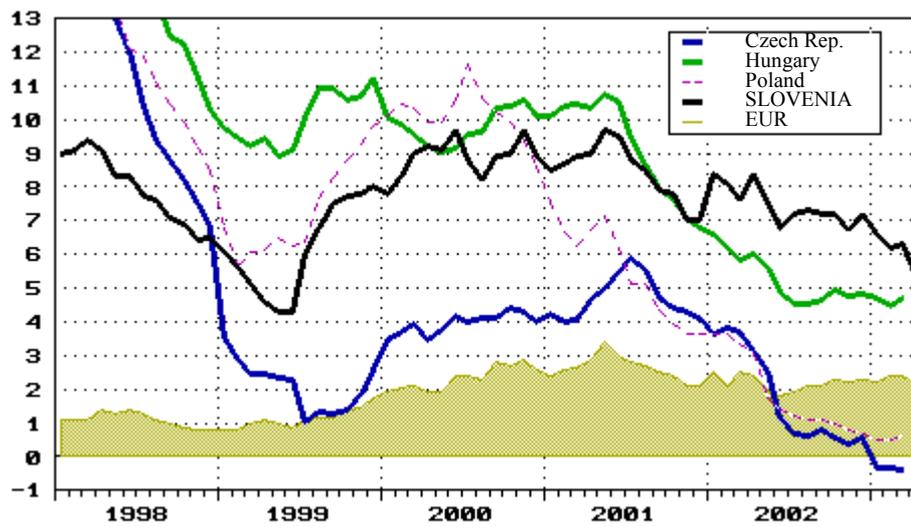
(b) year-on-year rates



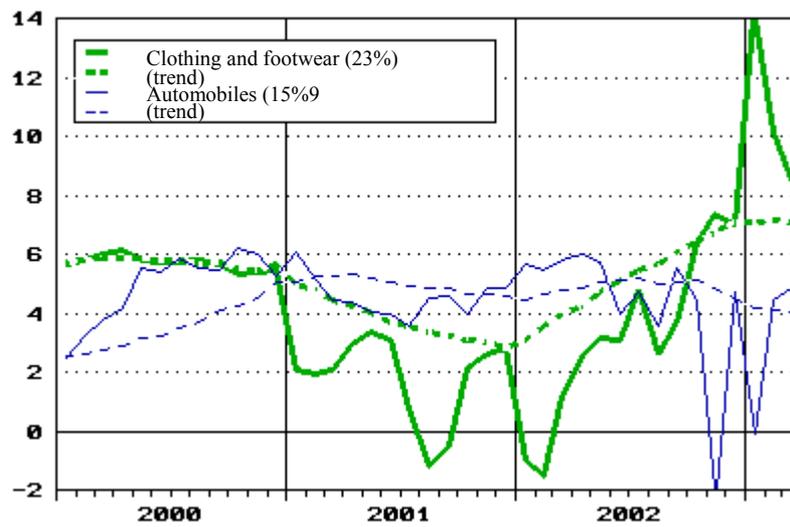
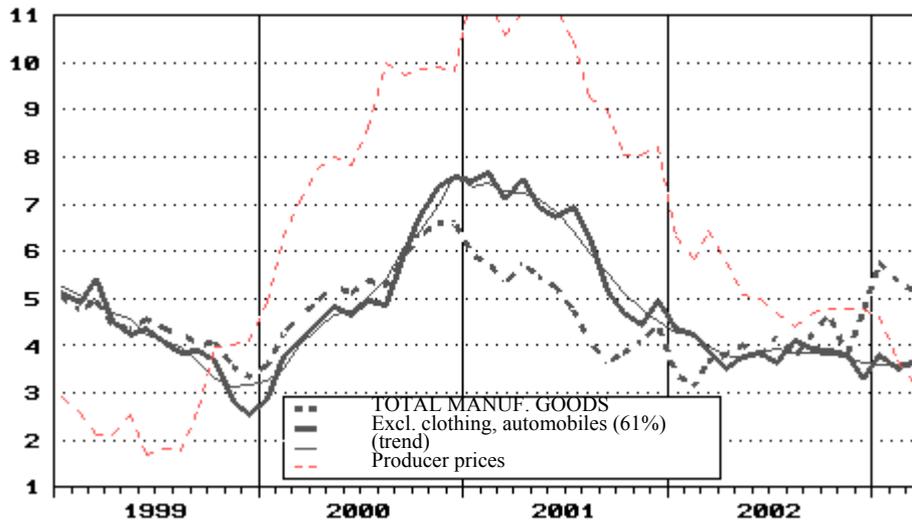
### Tradable and nontradable sector (year-on-year rates)



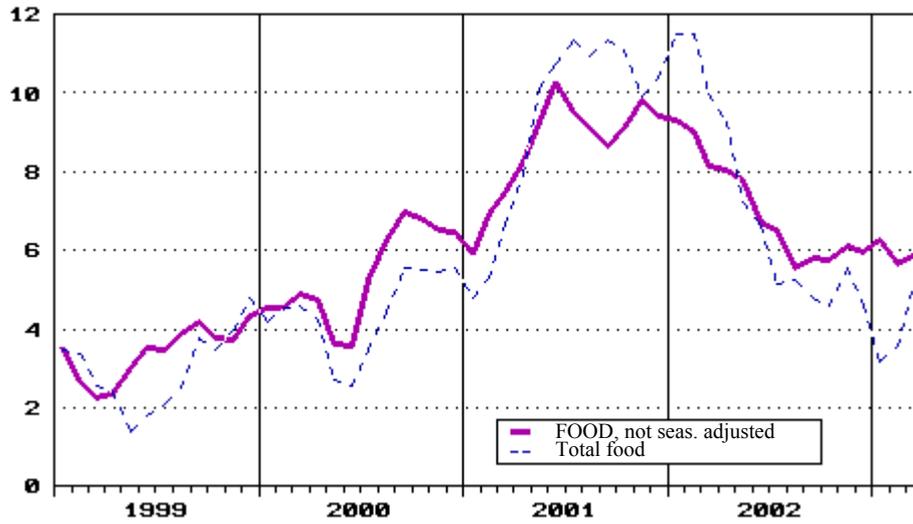
### International comparison (year-on-year)



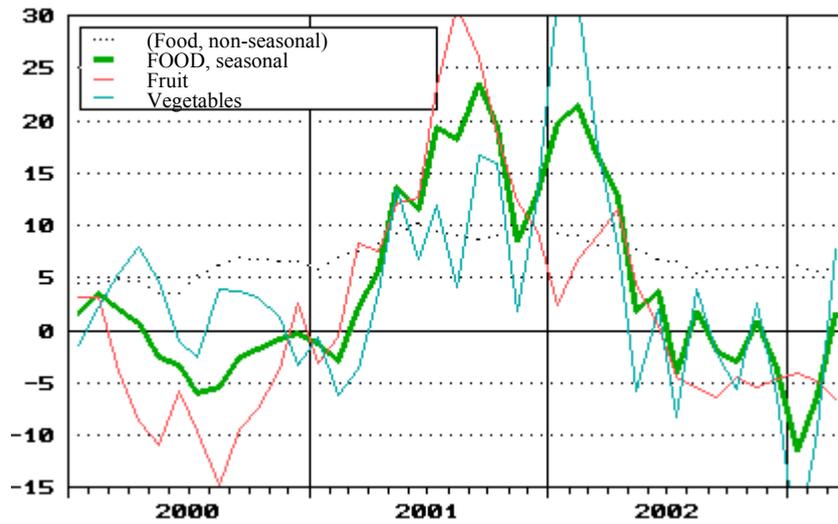
## Manufactured goods



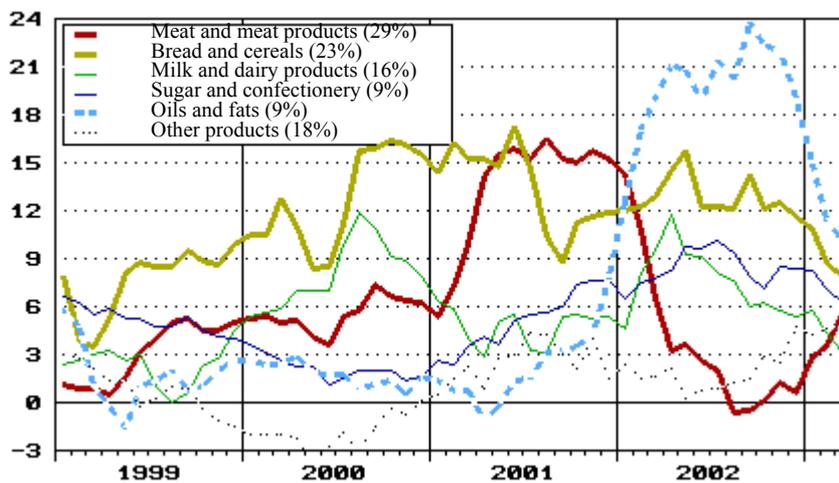
## Food



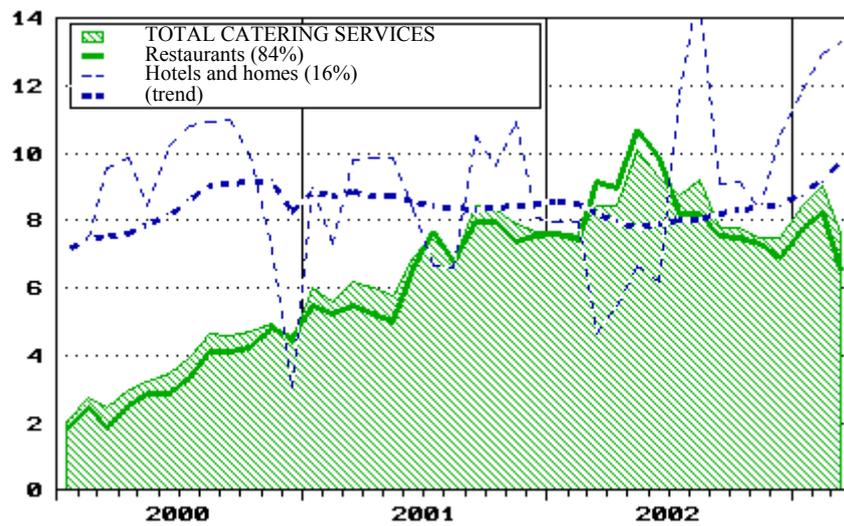
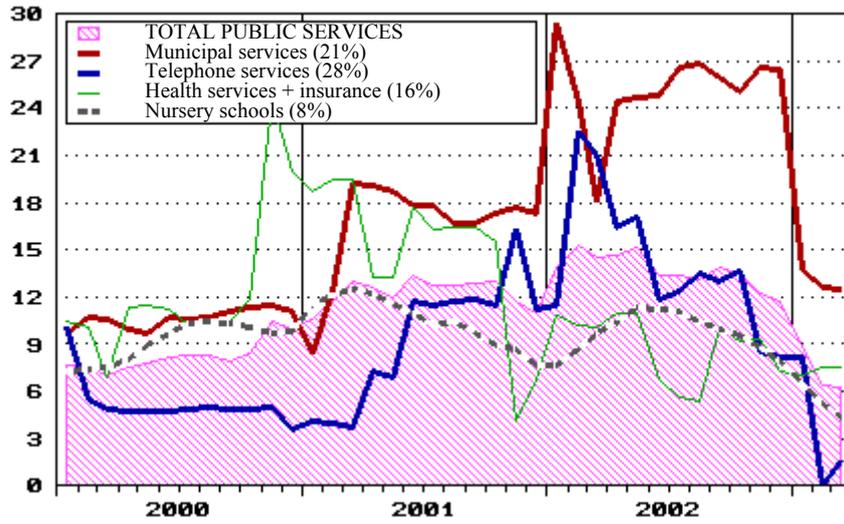
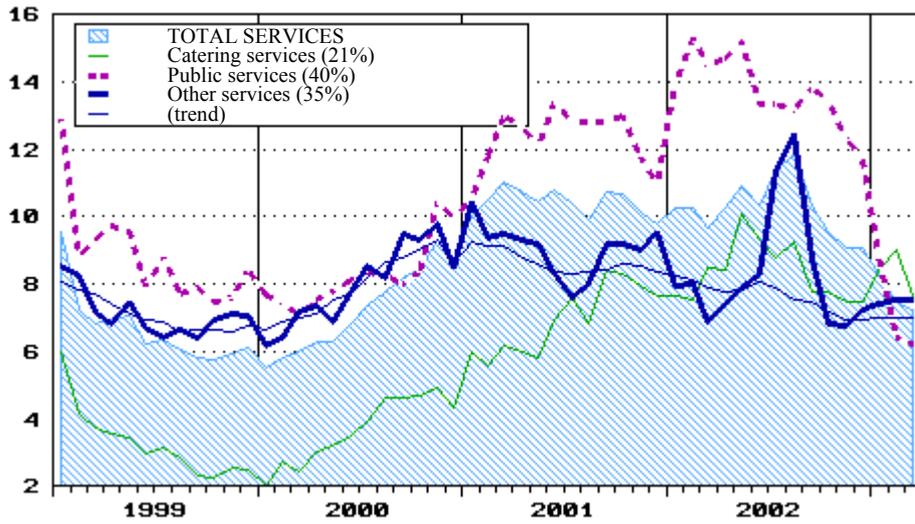
(a) Seasonal items (3.2% of overall inflation)



(b) Nonseasonal items (17.5% of overall inflation)

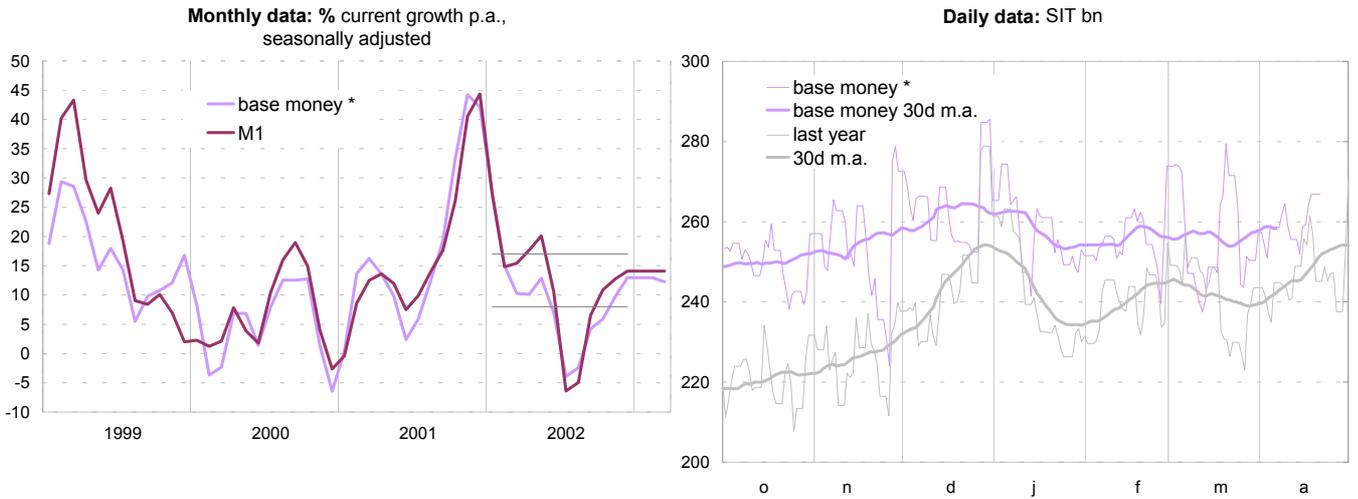


## Services

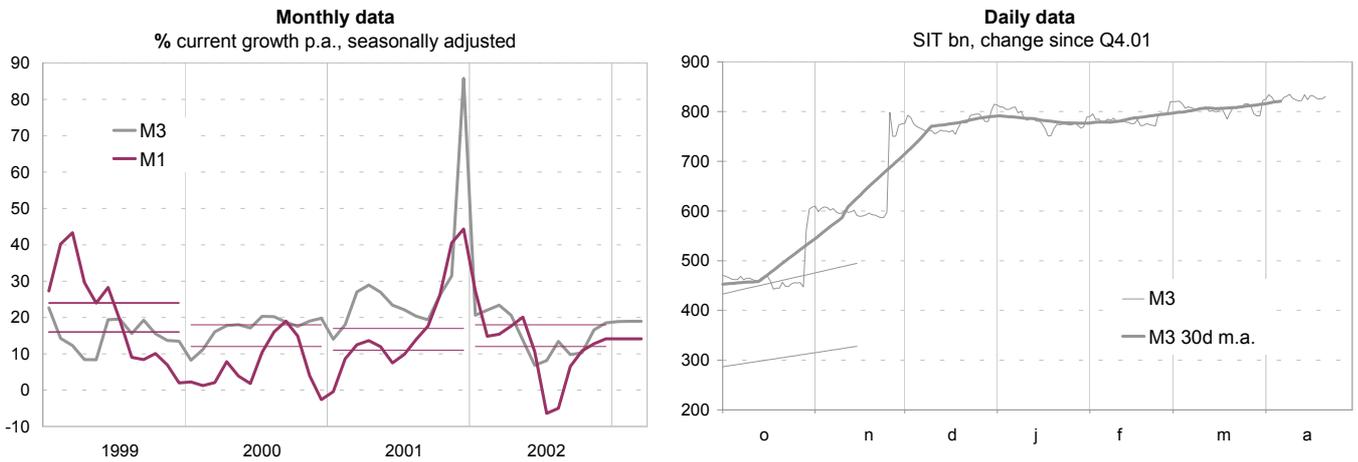


# Money and credit

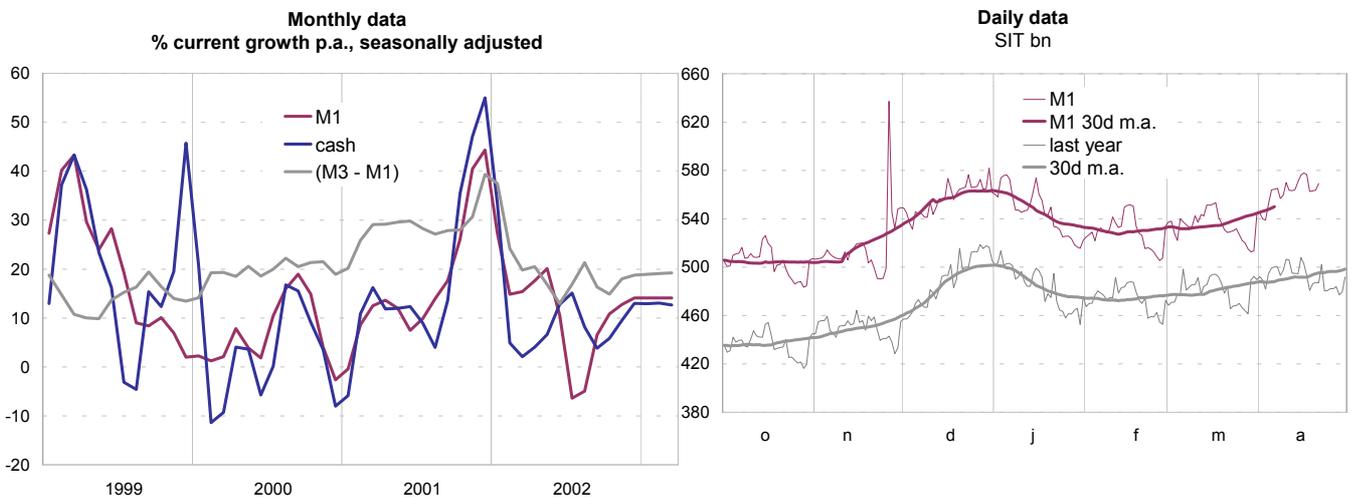
## Base money



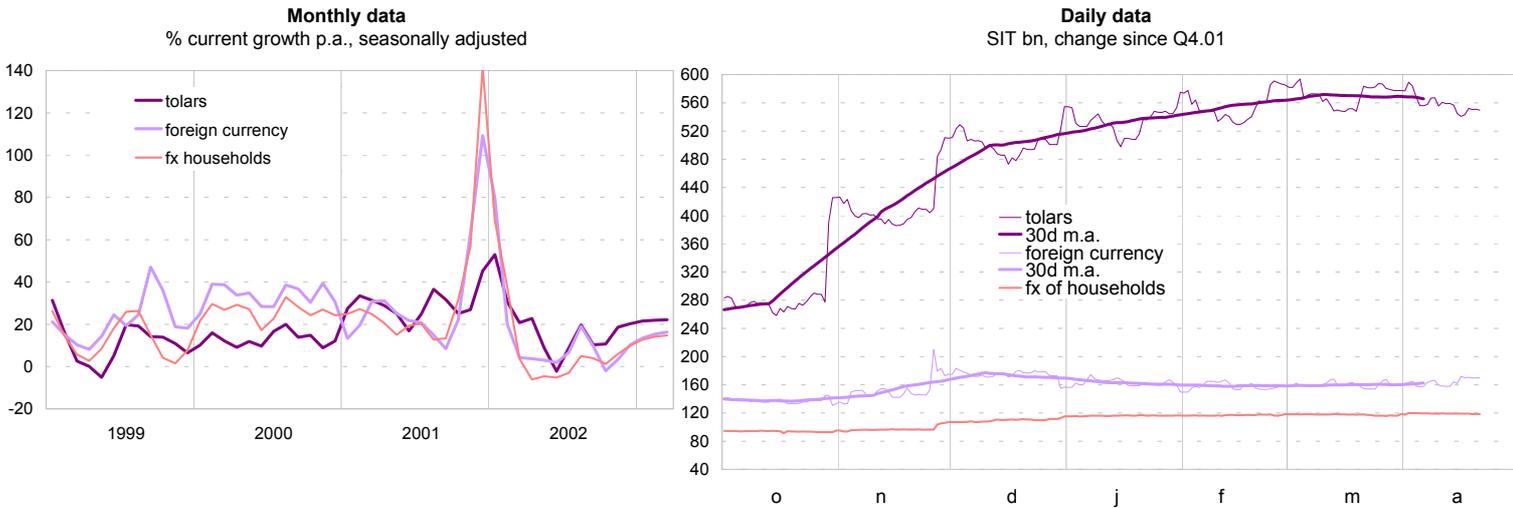
## M3



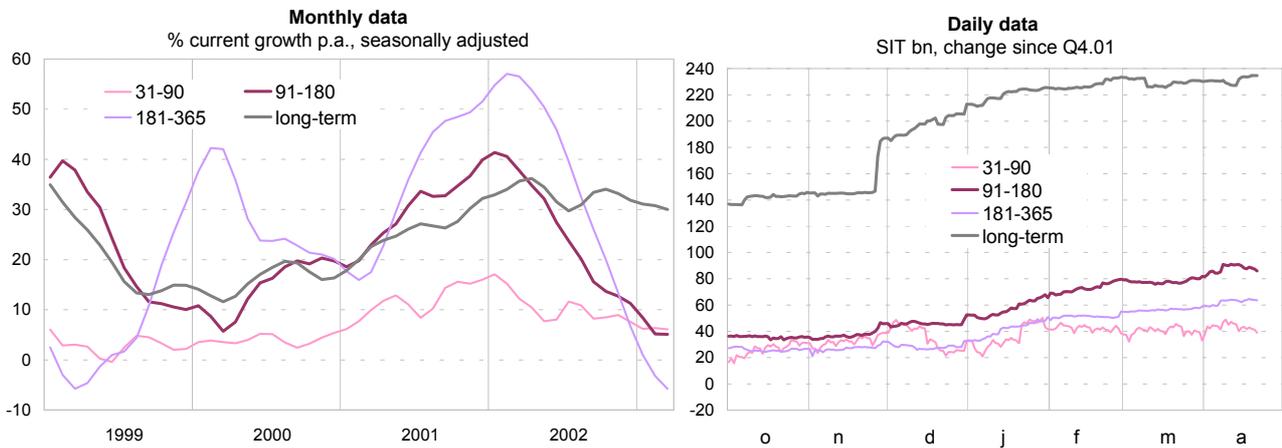
## M1



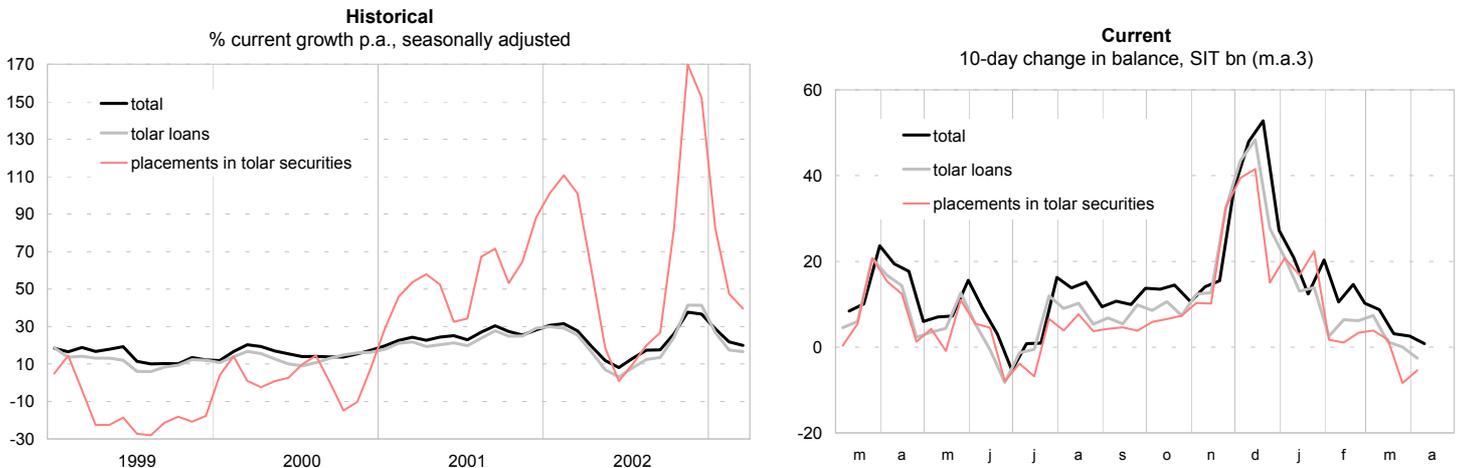
## Quasi money (M3-M1, "saving")

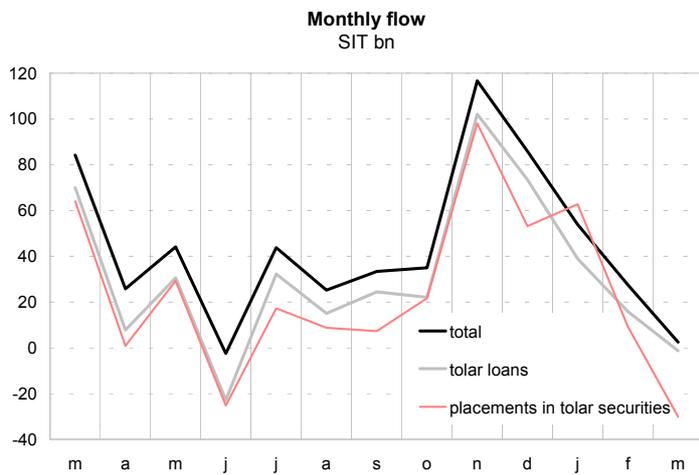


## Tolar deposits and saving

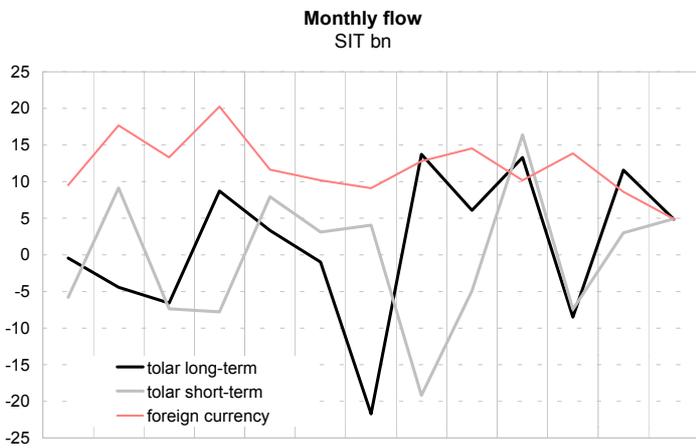
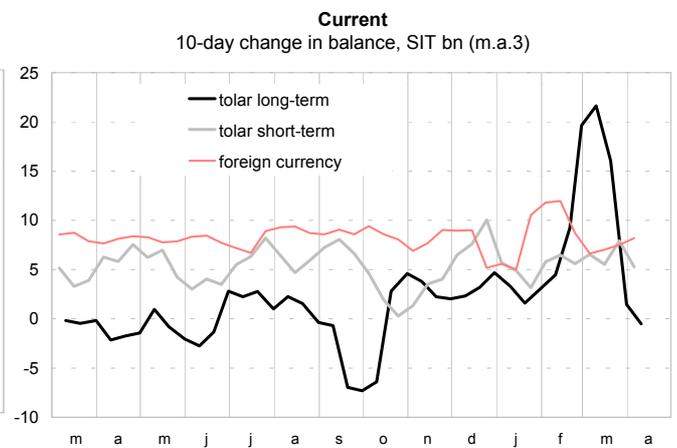
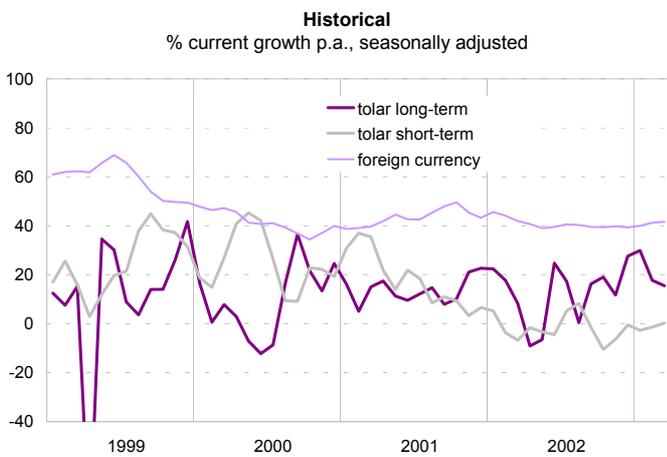


## Total loans and bank placements in securities





## Loans to enterprises

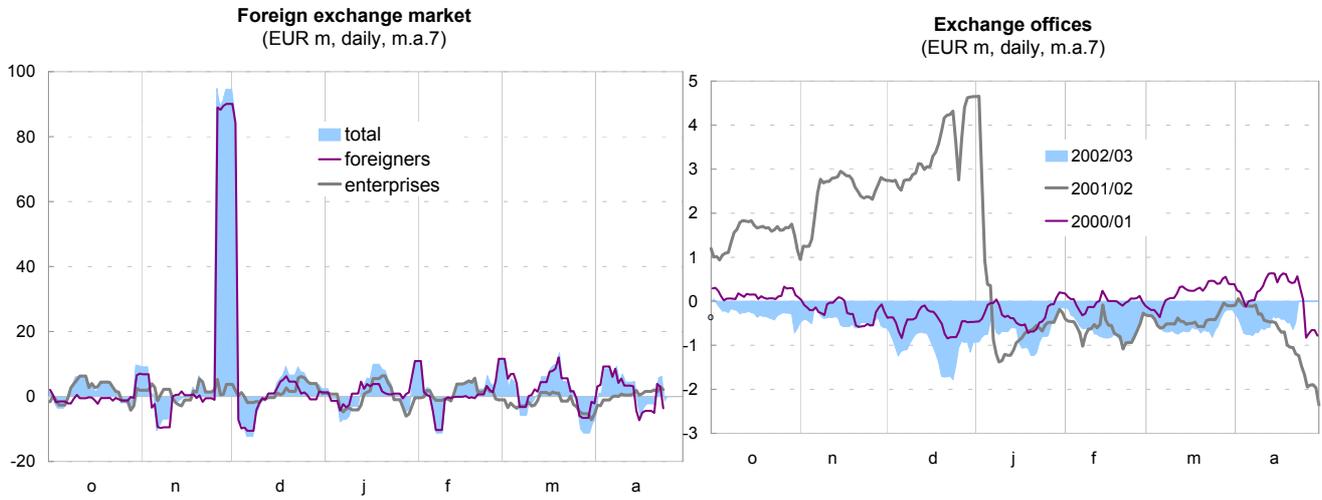


Note on methodology:

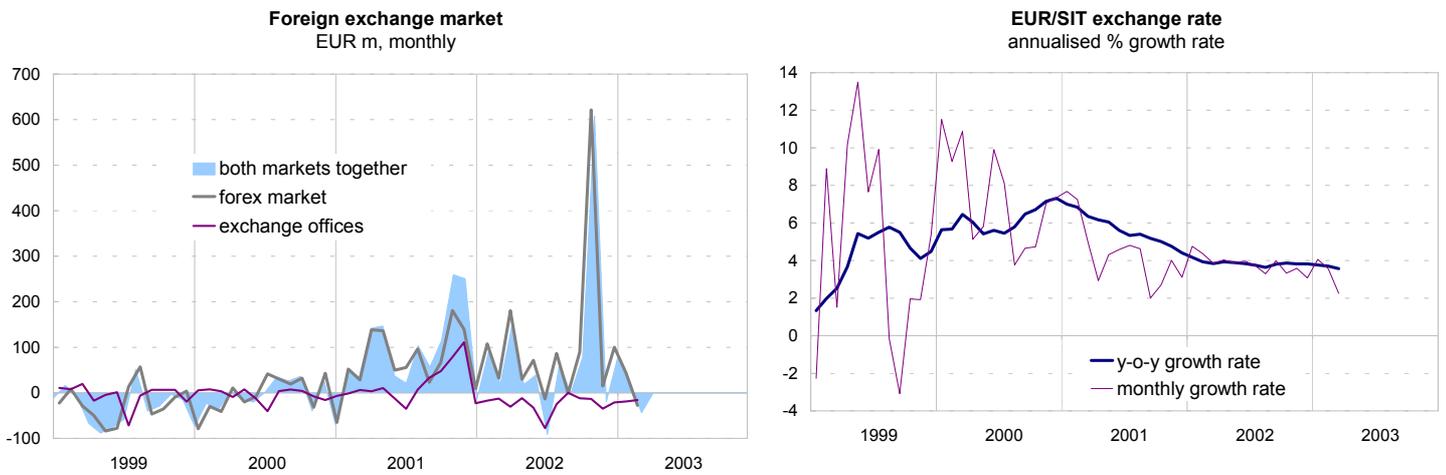
In the graphs showing loans the source for the "Historical" and "Current" graphs is the 10-day composite loan from banks, while for the "Monthly flow" the source is the Table of Flow of Funds of Slovenia (KNB) and so the data are not entirely comparable. In the "Monthly flow" graphs, *flow* for tolar instruments is defined as a change in the balance, with the exception of framework loans where revaluation interest is excluded. For foreign currency instruments *flow* is calculated as a change in balance with foreign exchange gains and losses excluded.

# Foreign exchange market and exchange rate

## Foreign exchange market

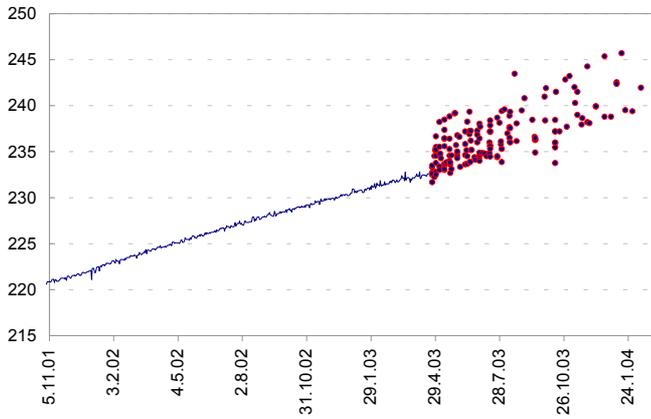


## Historical

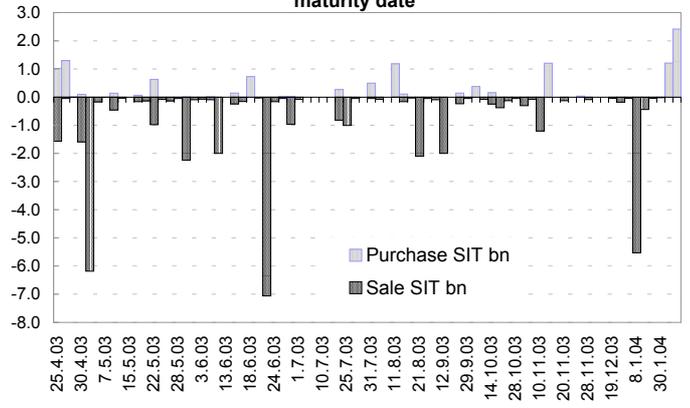


## Forward markets

Spot and forward rates by maturity date

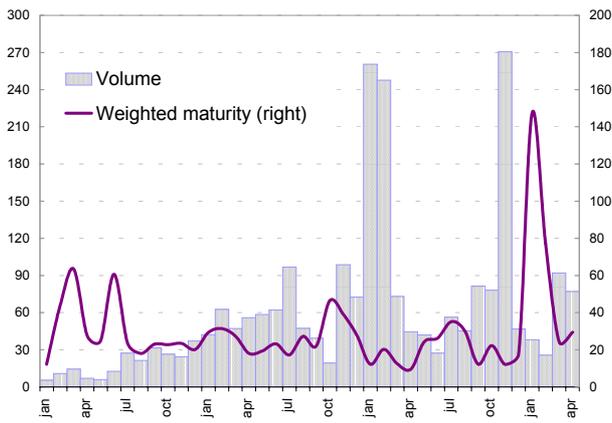


Gross flows of non-matured futures transactions by maturity date

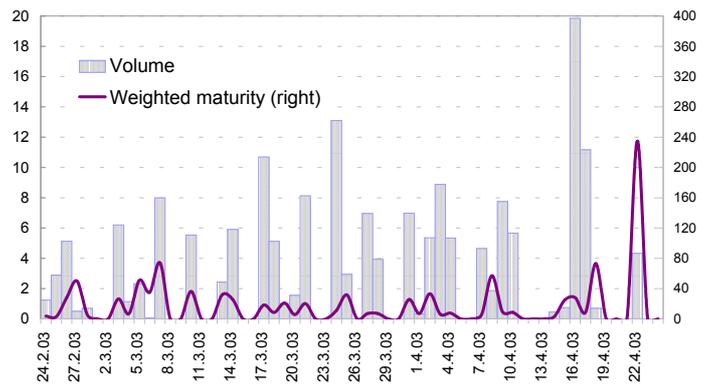


## Volume and average weighted maturity by date of transaction SIT bn, days

Monthly data



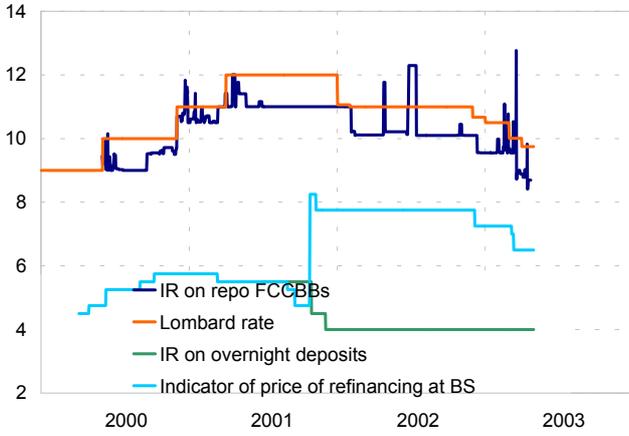
Daily data



# Money market and interest rates

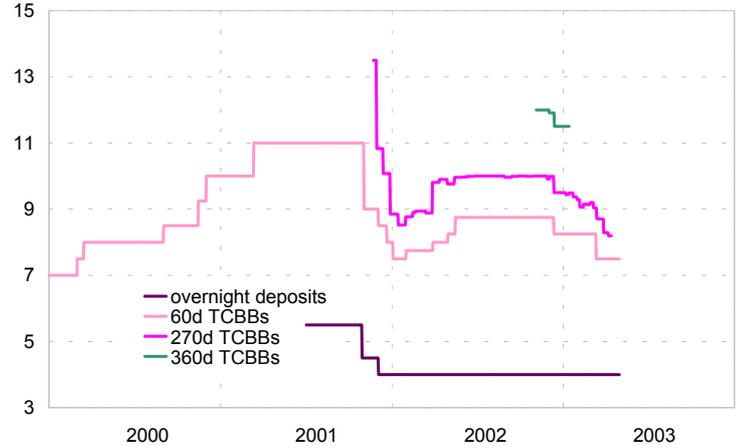
## Bank of Slovenia

Prices of liquidity management instruments



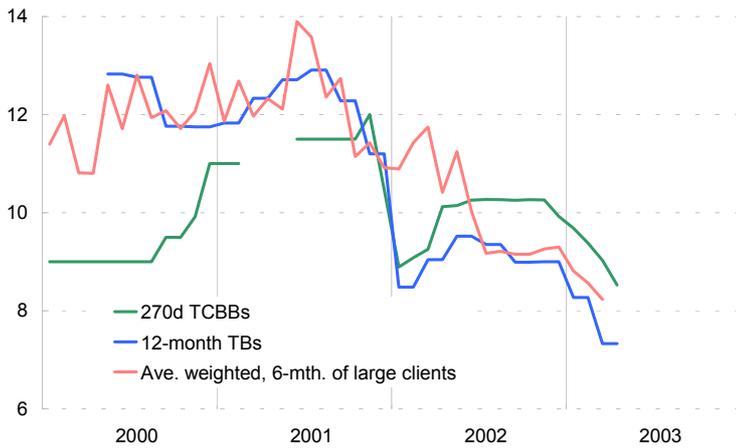
## Money market up to 1 month

Prices of money withdrawal instruments

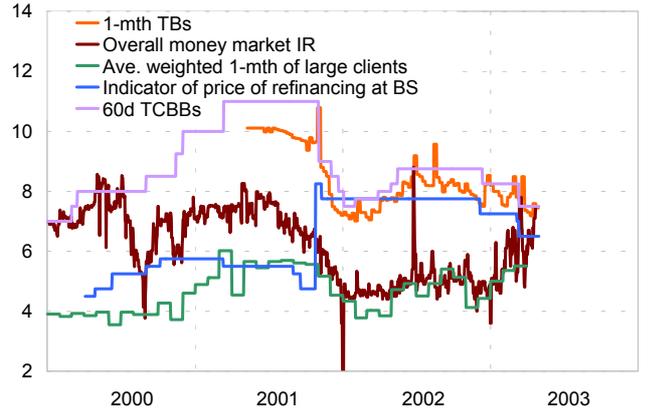


## Money market up to 1 year

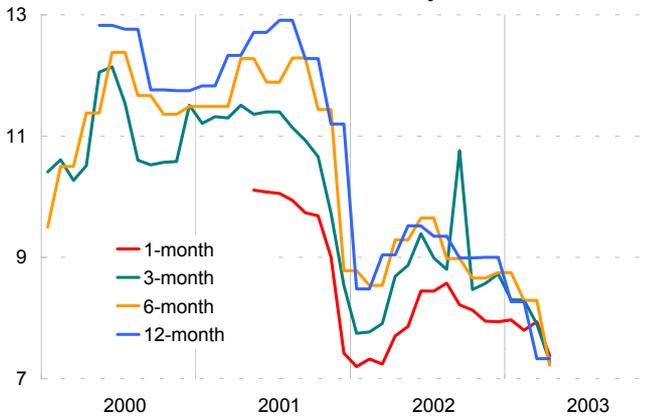
Money market interest rates



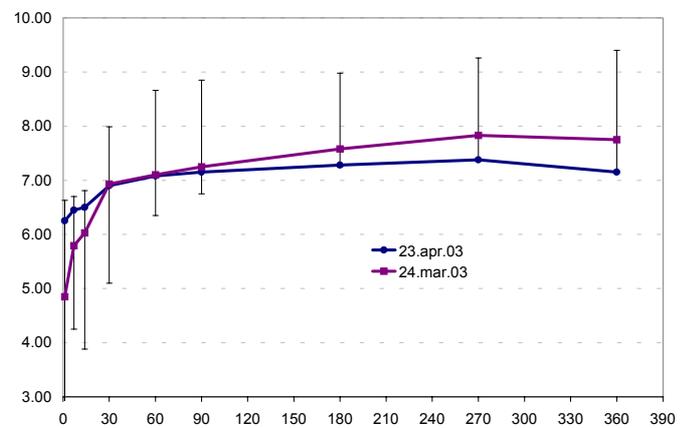
Money market interest rates - very short-term



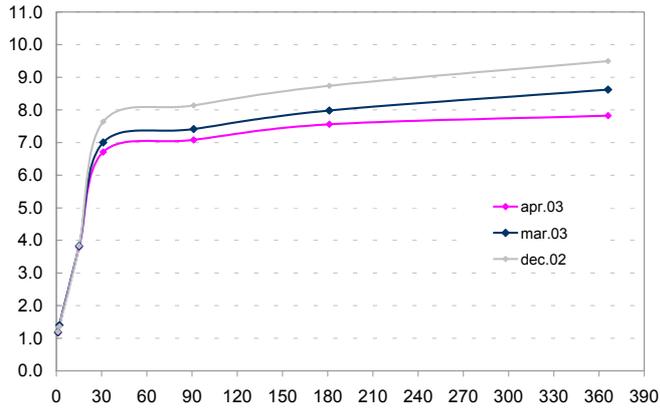
Interest rates on Treasury Bills



SMOM yield curve

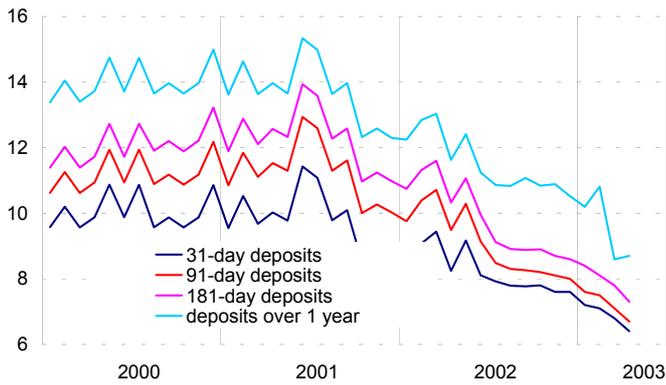


**Maturity structure of average declared fixed nominal interest rates at banks**

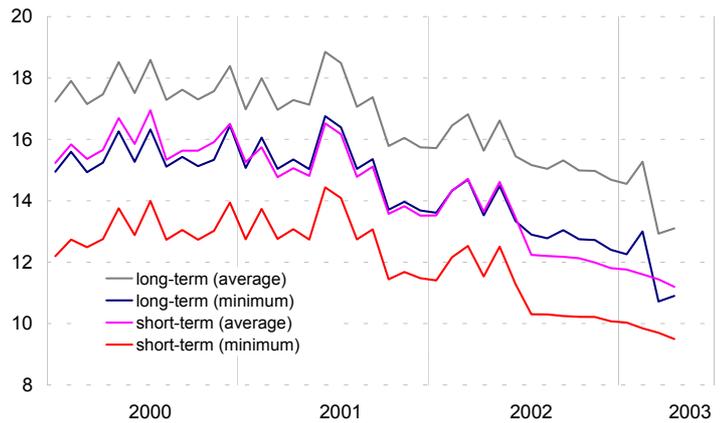


## Banks

**Declared nominal deposit rates**

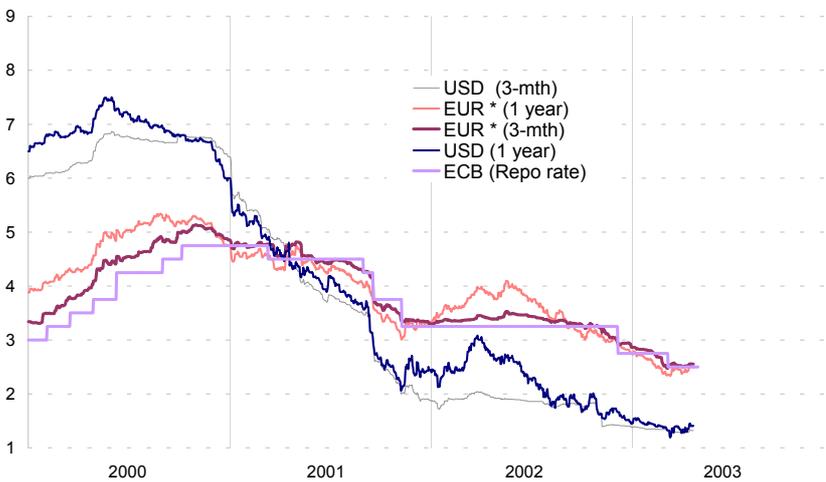


**Declared nominal lending rates**

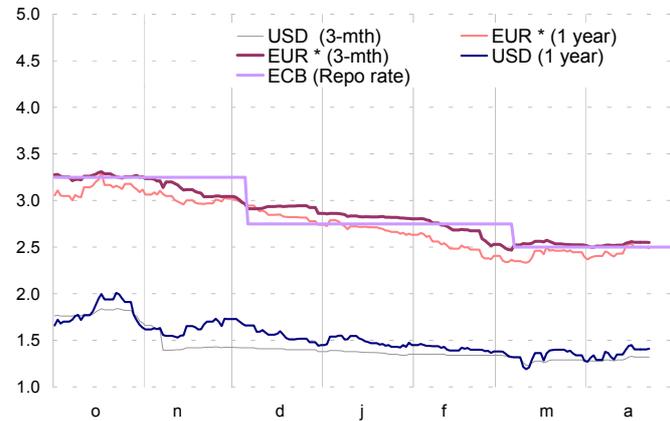


## Libor

**Historical**



**Current**



### M3 SUPPLY

Flows in SIT bn	2001		2002		2003			Stock	
	2001	2002	Q3	Q4	Q1	Jan	Feb	Mar	31.03.2003
<b>1. Net foreign assets</b>	<b>335,2</b>	<b>228,2</b>	<b>113,5</b>	<b>127,4</b>	<b>-46,4</b>	<b>-22,1</b>	<b>2,6</b>	<b>-27,0</b>	<b>1.373,9</b>
Bank of Slovenia	313,6	429,8	130,4	171,4	35,7	27,4	42,0	-33,7	1.575,1
Banks	21,6	-201,6	-16,9	-44,0	-82,1	-49,6	-39,4	6,8	-201,2
<b>2. Net domestic assets</b>	<b>349,3</b>	<b>336,2</b>	<b>-33,6</b>	<b>177,5</b>	<b>35,0</b>	<b>-16,6</b>	<b>29,3</b>	<b>22,2</b>	<b>2.762,7</b>
Domestic investments	343,5	335,9	80,2	67,3	33,9	-17,0	27,8	23,1	2.791,9
Government*	85,0	121,9	34,9	-24,7	-67,4	-37,4	-30,5	0,5	639,0
Enterprises & other fin. org.*	223,5	177,4	28,1	87,5	95,4	23,1	59,1	13,2	1.568,4
Households	35,0	36,5	17,3	4,5	5,9	-2,7	-0,8	9,3	584,5
Gov't for. cur. deposits at BS	5,8	0,3	-113,8	110,2	1,1	0,4	1,6	-0,8	-29,2
<b>3. Misc.</b>	<b>-151,2</b>	<b>-199,7</b>	<b>-43,4</b>	<b>-62,5</b>	<b>-61,1</b>	<b>-22,4</b>	<b>-26,6</b>	<b>-12,2</b>	<b>-806,1</b>
<b>4. M3 (1+2+3)</b>	<b>533,1</b>	<b>365,0</b>	<b>36,5</b>	<b>242,3</b>	<b>-72,6</b>	<b>-61,1</b>	<b>5,4</b>	<b>-17,0</b>	<b>3.330,5</b>

\* DARS was moved from State sector to Enterprises & other fin. org. sector in January and February 2003  
Source: Table of Flow of Funds of Slovenia (KNB)

### M2 SUPPLY

Flows in SIT bn	2001		2002		2003			Stock	
	2001	2002	Q3	Q4	Q1	Jan	Feb	Mar	31.03.2003
<b>1. Net foreign currency assets</b>	<b>203.2</b>	<b>178.9</b>	<b>28.0</b>	<b>238.5</b>	<b>-56.4</b>	<b>-21.0</b>	<b>-2.3</b>	<b>-33.1</b>	<b>980.8</b>
<b>- by balance sheet group</b>									
Net foreign assets (fx part)	364.4	96.3	125.5	114.2	-74.8	-39.4	-4.7	-30.7	1,475.1
FC investments to residents	51.7	123.7	18.1	35.5	16.3	12.0	8.1	-3.8	521.6
FC deposits of residents	-213.0	-41.1	-115.6	88.8	2.1	6.4	-5.6	1.4	-1,015.9
<b>- by market where created</b>									
Fx spot market	405.5	-38.5	-17.7	-47.3	68.0	24.0	9.1	34.9	
Fx forward market	-207.7	318.4	34.3	213.9	-41.1	-0.9	1.1	-41.3	
Exchange offices	53.7	-65.6	-23.2	-13.8	-13.0	-4.8	-4.4	-3.7	
MoF conversion at BoS	-10.7	51.2	-10.3	101.3	-20.5	-2.3	-2.0	-16.2	
Other (error)	-37.7	-86.6	44.9	-15.6	-49.9	-37.0	-6.1	-6.8	
<b>2. Net tolar assets</b>	<b>111.4</b>	<b>144.4</b>	<b>6.8</b>	<b>-17.5</b>	<b>-15.1</b>	<b>-34.0</b>	<b>0.5</b>	<b>18.4</b>	<b>1,363.0</b>
<b>3. M2 (1+2)</b>	<b>314.4</b>	<b>323.6</b>	<b>34.7</b>	<b>220.9</b>	<b>-71.6</b>	<b>-55.1</b>	<b>-1.8</b>	<b>-14.8</b>	<b>2,343.8</b>

Source: Table of Flow of Funds of Slovenia (KNB)

### M1 SUPPLY

Flows in SIT bn	2001		2002		2003			Stock	
	2001	2002	Q3	Q4	Q1	Jan	Feb	Mar	31.03.2003
1. Net foreign currency assets	203.2	178.9	28.0	238.5	-56.4	-21.0	-2.3	-33.1	980.8
2. Net tolar assets	111.4	144.4	6.8	-17.5	-15.1	-34.0	0.5	18.4	1,363.0
3. Time deposits in tolar	-239.1	-266.4	-35.3	-183.2	54.0	16.5	13.1	24.4	-1,797.4
<b>4. M1 (1+2+3)</b>	<b>75.3</b>	<b>57.2</b>	<b>-0.6</b>	<b>37.6</b>	<b>-17.6</b>	<b>-38.6</b>	<b>11.4</b>	<b>9.6</b>	<b>546.4</b>

Source: Table of Flow of Funds of Slovenia (KNB)

### M3 STRUCTURE

Flows in SIT bn	2001	2002	2002		2003				Stock 31.03.2003
			Q3	Q4	Q1	Jan	Feb	Mar	
<b>M3</b>	<b>622.8</b>	<b>657.7</b>	<b>65.7</b>	<b>331.6</b>	<b>31.3</b>	<b>8.1</b>	<b>0.2</b>	<b>23.0</b>	<b>3,595.5</b>
Foreign currency deposits	<b>196.6</b>	<b>127.6</b>	<b>24.5</b>	<b>33.6</b>	<b>-14.5</b>	<b>-11.7</b>	<b>-4.8</b>	<b>1.9</b>	<b>986.6</b>
- households	175.0	66.3	2.5	16.8	7.9	6.5	0.8	0.7	818.1
- enterprises	21.6	61.3	22.0	16.9	-22.5	-18.2	-5.5	1.2	168.6
<b>M2</b>	<b>426.2</b>	<b>530.1</b>	<b>41.2</b>	<b>298.0</b>	<b>45.8</b>	<b>19.8</b>	<b>4.9</b>	<b>21.1</b>	<b>2,608.8</b>
Tolar savings dep. and time dep.	<b>355.4</b>	<b>462.6</b>	<b>55.7</b>	<b>246.9</b>	<b>68.7</b>	<b>31.1</b>	<b>21.9</b>	<b>15.7</b>	<b>2,074.6</b>
- Sav. dep. & time dep. to 30 days	35.2	60.7	-7.1	36.7	-4.3	-5.0	-10.8	11.4	326.4
- Time deposits 30 to 90 days	34.1	39.3	9.0	25.5	5.0	0.7	6.5	-2.2	295.6
- Time dep. 91 to 180 days	94.0	37.6	3.5	8.9	32.1	11.4	15.8	5.0	397.7
- Time dep. 181 days to 1 year	66.8	18.3	-9.7	0.5	27.9	12.8	10.0	5.1	243.2
- Time deposits over 1 year	120.3	181.2	49.1	64.5	32.2	22.4	7.7	2.2	705.3
- Gov't time deposits at BoS	5.1	125.5	10.9	110.7	-24.2	-11.2	-7.2	-5.8	106.4
<b>M1</b>	<b>70.8</b>	<b>67.4</b>	<b>-14.5</b>	<b>51.1</b>	<b>-22.8</b>	<b>-11.3</b>	<b>-17.0</b>	<b>5.4</b>	<b>534.2</b>
Sight deposits	51.0	59.5	-16.2	46.9	-20.3	-7.7	-15.6	3.0	395.5
Currency	19.9	7.9	1.6	4.2	-2.5	-3.5	-1.4	2.4	138.7
<b>Base money</b>	<b>37.1</b>	<b>18.1</b>	<b>-6.6</b>	<b>14.5</b>	<b>-7.1</b>	<b>-6.5</b>	<b>-1.9</b>	<b>1.3</b>	<b>256.8</b>

Source: TIS (average of daily balances)

### BASE MONEY SUPPLY

Flows in SIT bn	2001	2002	2002		2003				Stock 31.03.2003
			Q3	Q4	Q1	Jan	Feb	Mar	
<b>1. Net foreign assets</b>	<b>313.6</b>	<b>429.8</b>	<b>130.4</b>	<b>171.4</b>	<b>35.7</b>	<b>27.4</b>	<b>42.0</b>	<b>-33.7</b>	<b>1,575.1</b>
<b>2. Domestic for. curr. liabilities</b>	<b>-90.5</b>	<b>-104.9</b>	<b>-132.5</b>	<b>116.6</b>	<b>9.2</b>	<b>13.8</b>	<b>4.1</b>	<b>-8.7</b>	<b>-570.2</b>
MoF foreign currency deposits	5.8	0.3	-113.8	110.2	1.1	0.4	1.6	-0.8	-29.2
For. curr. central bank bills	-78.4	-79.9	-12.4	13.6	13.0	17.3	4.0	-8.4	-541.0
Other 1)	-17.9	-25.3	-6.3	-7.2	-4.8	-3.9	-1.5	0.6	
<b>3. Net for. curr. assets (1+2)</b>	<b>223.1</b>	<b>324.9</b>	<b>-2.1</b>	<b>288.0</b>	<b>44.9</b>	<b>41.2</b>	<b>46.1</b>	<b>-42.4</b>	<b>1,004.9</b>
Purchased from banks: outright	-15.8	4.0	0.0	0.0	0.0	0.0	0.0	0.0	
temporary	245.7	281.3	5.9	192.8	19.9	22.7	23.4	-26.2	
Conversion for MoF	-10.7	51.2	-10.3	101.3	-20.5	-2.3	-2.0	-16.2	
Other	3.9	-11.6	2.3	-6.1	45.5	20.9	24.6	0.0	
<b>4. Net tolar assets</b>	<b>-178.4</b>	<b>-318.6</b>	<b>-24.6</b>	<b>-280.4</b>	<b>-54.4</b>	<b>-55.7</b>	<b>-24.0</b>	<b>25.3</b>	<b>-745.8</b>
Loans to banks	-6.3	1.1	1.1	-2.3	0.3	1.6	2.5	-3.9	1.5
Tolar central bank bills 2)	-154.3	-232.7	-14.4	-177.6	-42.4	-55.5	-2.6	15.7	-436.3
MoF deposits	-19.9	-110.4	-14.9	-110.4	31.1	18.1	0.0	13.1	-99.1
Other deposits	-0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	-4.3
Other, reserves	2.3	23.1	3.4	9.9	-43.4	-19.9	-24.0	0.4	-207.6
<b>5. Base money (3+4)</b>	<b>44.7</b>	<b>6.3</b>	<b>-26.7</b>	<b>7.6</b>	<b>-9.4</b>	<b>-14.5</b>	<b>22.2</b>	<b>-17.1</b>	<b>259.1</b>

Base money comprises notes and coin in circulation, bank reserves and other sight deposits at the Bank of Slovenia.

1) The foreign currency part of the "twin", foreign transactions and domestic and foreign interest on foreign currency

2) Includes overnight deposits

Source: Table of Flow of Funds of Slovenia (BoS Accounting Department)

Meanings of + and -:

+ for flows means an increase in claims or a decrease in liabilities of the banking system, and for balances the claims of the banking system.

+ for flows means a decrease in claims or an increase in liabilities of the banking system, and for balances the liabilities of the banking system.

For all monetary aggregates and their composition + means increase and - means decrease.

## 10-DAY MONETARY AGGREGATES (statistical definitions)

	Notes and coin in circulation	Bank reserves	Sight deposits at BS	Gov't time deposits at BS	Sight deposits at banks	Tolar non-sight deposits at banks	Foreign currency deposits at banks	BASE MONEY	M1	M2	M3
Balances (according to preliminary data) at end of period, SIT m											
April											
20.	132,340	96,700	16,085	9,000	338,887	1,693,281	933,114	245,125	487,312	2,189,593	3,122,707
30.	134,190	121,850	14,913	19,909	342,748	1,716,884	927,482	270,953	491,851	2,228,644	3,156,126
May											
20.	131,532	92,762	16,396	16,451	360,202	1,694,013	937,249	240,689	508,129	2,218,593	3,155,843
31.	135,081	105,685	14,066	17,897	355,606	1,724,086	935,417	254,833	504,754	2,246,737	3,182,154
June											
10.	133,674	104,320	14,435	2,405	382,497	1,689,122	942,777	252,428	530,606	2,222,133	3,164,910
20.	133,198	93,769	16,715	18,008	376,414	1,678,089	945,802	243,683	526,328	2,222,425	3,168,227
30.	145,876	122,471	18,447	5,000	359,236	1,716,778	934,893	286,794	523,559	2,245,338	3,180,231
July											
10.	140,726	102,938	17,674	5,000	368,581	1,686,330	940,134	261,337	526,981	2,218,310	3,158,445
20.	140,202	94,874	11,897	17,990	364,527	1,690,417	938,384	246,972	516,625	2,225,032	3,163,416
31.	137,153	114,563	11,743	19,879	360,264	1,745,006	955,920	263,458	509,159	2,274,044	3,229,965
August											
10.	137,569	94,043	8,229	19,882	359,531	1,729,341	963,148	239,842	505,330	2,254,552	3,217,700
20.	132,967	101,855	11,328	19,879	357,667	1,736,000	965,893	246,150	501,962	2,257,841	3,223,734
31.	139,891	110,083	9,708	19,878	356,600	1,753,331	960,589	259,683	506,199	2,279,408	3,239,997
September											
10.	136,766	102,860	8,594	19,879	370,443	1,733,309	972,514	248,221	515,804	2,268,991	3,241,505
20.	137,063	100,428	7,723	19,883	356,086	1,733,114	967,229	245,215	500,873	2,253,870	3,221,100
30.	138,679	111,191	8,116	19,873	373,439	1,757,891	960,636	257,986	520,234	2,297,998	3,258,634
October											
10.	137,591	105,241	7,262	19,867	366,437	1,759,129	963,513	250,095	511,290	2,290,287	3,253,800
20.	140,001	105,583	7,265	19,869	354,969	1,751,491	959,931	252,849	502,235	2,273,595	3,233,526
31.	141,315	106,667	9,073	133,461	356,605	1,796,057	960,066	257,054	506,993	2,436,510	3,396,576
November											
10.	139,676	114,783	8,291	133,471	359,255	1,771,541	972,410	262,750	507,221	2,412,233	3,384,643
20.	133,383	98,849	9,347	130,573	363,164	1,770,548	974,459	241,578	505,894	2,407,016	3,381,474
30.	140,364	119,957	12,213	130,600	396,468	1,882,866	1,001,620	272,535	549,046	2,562,512	3,564,132
December											
10.	137,874	108,222	9,319	130,611	406,782	1,868,581	997,747	255,415	553,975	2,553,167	3,550,914
20.	143,517	101,437	9,919	130,601	411,061	1,868,992	1,003,831	254,873	564,497	2,564,090	3,567,921
31.	143,096	112,772	9,405	130,276	409,320	1,928,106	983,594	265,274	561,821	2,620,203	3,603,797
January											
10.	138,456	100,428	8,489	130,568	398,363	1,907,428	993,023	247,373	545,309	2,583,305	3,576,328
20.	136,497	115,080	9,485	111,425	403,605	1,908,378	985,380	261,062	549,587	2,569,390	3,554,770
31.	137,673	105,623	8,236	112,224	376,392	1,966,546	976,610	251,532	522,301	2,601,070	3,577,681
February											
10.	137,486	109,548	8,590	112,215	395,352	1,925,178	989,994	255,623	541,428	2,578,821	3,568,815
20.	133,881	119,344	7,419	112,186	384,855	1,944,392	982,367	260,644	526,155	2,582,733	3,565,100
28.	138,937	126,093	8,803	112,192	386,159	1,976,849	985,719	273,833	533,899	2,622,941	3,608,659
March											
10.	138,507	96,128	8,185	112,201	395,848	1,953,703	987,048	242,820	542,540	2,608,444	3,595,492
20.	138,001	132,995	8,530	99,130	384,549	1,971,309	984,750	279,526	531,080	2,601,520	3,586,270
31.	141,895	108,388	6,896	99,135	395,307	1,982,075	985,565	257,179	544,098	2,625,307	3,610,872
April											
10.	142,045	110,866	6,102	99,155	421,714	1,960,112	986,439	259,012	569,860	2,629,127	3,615,566
20.	146,825	114,373	5,647	100,718	411,151	1,953,882	996,560	266,845	563,624	2,618,223	3,614,784
Monthly averages (based on all days in month), SIT m											
March	130,538	97,147	14,029	13,903	335,901	1,654,808	934,400	241,714	480,468	2,149,180	3,083,580
April	131,061	99,990	15,424	8,373	345,191	1,689,342	936,866	246,475	491,676	2,189,391	3,126,258
May	132,003	101,425	15,361	13,365	354,188	1,698,419	938,139	248,788	501,551	2,213,336	3,151,475
June	135,352	105,770	14,786	8,942	370,330	1,694,436	943,005	255,908	520,468	2,223,847	3,166,852
July	139,069	100,785	14,491	13,809	362,078	1,702,076	941,244	254,345	515,638	2,231,523	3,172,767
August	135,544	102,268	9,324	19,677	356,134	1,737,657	962,715	247,136	501,002	2,258,335	3,221,050
September	136,996	104,024	8,323	19,880	360,613	1,739,225	967,550	249,342	505,932	2,265,037	3,232,587
October	137,532	104,022	8,091	30,861	358,298	1,761,435	964,184	249,645	503,921	2,296,217	3,260,400
November	136,156	108,800	9,448	131,692	371,033	1,786,632	979,656	254,404	516,637	2,434,961	3,414,617
December	141,172	112,662	9,998	130,592	405,843	1,875,383	1,001,193	263,832	557,014	2,562,990	3,564,183
January 03	137,638	109,787	9,874	119,439	398,246	1,917,624	989,483	257,298	545,758	2,582,821	3,572,303
February	136,283	111,816	7,343	112,206	385,151	1,946,758	984,731	255,441	528,777	2,587,740	3,572,471
March	138,692	110,065	8,007	106,398	387,500	1,968,141	986,647	256,764	534,199	2,608,737	3,595,384

Source: daily data from banks and Bank of Slovenia, preliminary data

Base money: Notes and coins in circulation+Bank reserves+Sight deposits at BS. Bank reserves include cash in hand and giro accounts and mandatory reserve account. Sight deposits at BS include tolar accounts of central government budget and savings banks and credit unions.

M1: Notes and coins in circulation+Sight deposits at BS+Sight deposits at banks

M2: M1+Tolar savings deposits and time deposits at banks+Government time deposits at BS.

M3: M2+Foreign currency deposits at banks

## INDICATORS OF BANK LIQUIDITY

	Required reserves	Reserve holdings	Balance of required res. holding		Avg. ratio of req. reserves	TCBBs maturing	Open foreign currency position	
			SIT m	%			SIT m	% of capital
Balances (according to preliminary data) at end of period, SIT m								
February								
10.	109,795	108,381	-1,415	-1.29	4.73	3,290		
20.	109,608	111,250	1,641	1.50	4.71	-1,933		
28.	109,697	121,130	11,433	10.42	4.64	1,021		
March								
10.	110,001	114,600	4,598	4.18	4.68	-4,453		
20.	109,901	110,354	453	0.41	4.66	7,363		
31.	110,586	108,029	-2,557	-2.31	4.65	15,500		
April								
10.	110,732	108,282	-2,449	-2.21	4.65	3,302		
20.	110,586	109,166	-1,421	-1.28	4.68	1,632		
30.						3,462		
May								
10.						16,615		
20.						4,080		
Balances as at day of month,** SIT m							Monthly averages, SIT m	
March	99,226	100,758	1,531	1.54	5.00	3,915	7,492	2.50
April	100,277	101,533	1,256	1.25	4.94	-5,393	7,154	2.38
May	103,246	104,685	1,439	1.39	5.02	7,523	3,712	1.22
June	104,513	105,616	1,103	1.06	5.09	21,044	2,957	0.97
July	105,034	107,267	2,233	2.13	5.11	43,626		
August	103,619	104,206	586	0.57	4.97	-11,637		
September	102,243	104,579	2,336	2.29	4.90	5,908		
October	102,981	104,787	1,806	1.75	4.86	-17,672		
November	103,932	105,582	1,650	1.59	4.87	1,428		
December	109,926	111,967	2,041	1.86	4.83	14,764		
January	111,016	112,569	1,552	1.40	4.79	-6,414		
February	109,585	110,965	1,380	1.26	4.71	4,606		
March	109,938	111,219	1,281	1.17	4.64	14,061		

\*Net maturing of TCBBs: issuance (+) / withdrawal (-) of base money; interest not included on maturing TCBBs. Decadal data comprise the net maturing of TCBBs in the decade up to and including the final day. Monthly data include data from the 21<sup>st</sup> or previous month to 20<sup>th</sup> of current month.

\*\*Mandatory reserve: liability and average balance as of 21<sup>st</sup> of the month; separated on 20<sup>th</sup> of month.

## FOREIGN EXCHANGE MARKET VOLUME

	FOREIGN EXCHANGE MARKET							EXCHANGE OFFICES		
	Volume	Balance	Volume	Balance	Volume	Balance	Overall bal.	Purchase	Sale	Balance
	Spot by date of deal		Spot by date of settl.		Forward by date of settl.					
EUR million										
March										
27.	160.7	30.6	166.7	16.8	62.0	-30.1	-13.3	4.8	4.9	-0.2
28.	131.5	15.7	134.3	19.1	46.5	-46.5	-27.4	5.8	6.1	-0.4
31.	150.9	22.4	168.3	18.2	4.9	-1.7	16.5	6.3	6.7	-0.5
April										
1.	78.4	-3.2	83.6	-3.1	0.0	0.0	-3.1	4.6	5.5	-0.9
2.	97.2	25.4	108.3	33.9	0.0	0.0	33.9	4.6	5.7	-1.1
3.	101.3	14.9	92.5	9.9	39.7	-22.3	-12.4	4.4	5.7	-1.3
4.	78.5	29.3	101.8	42.6	18.6	-17.9	24.7	5.4	7.0	-1.7
7.	113.3	8.7	95.2	10.8	10.0	-10.0	0.8	6.0	6.6	-0.7
8.	83.4	-1.7	78.7	6.7	14.8	11.4	18.1	4.7	5.0	-0.4
9.	89.8	26.2	91.0	15.8	28.7	-13.0	2.8	4.5	5.6	-1.1
10.	125.6	9.5	133.5	11.8	42.8	-9.6	2.1	4.8	5.3	-0.5
11.	116.9	9.6	105.7	22.4	18.4	-15.4	7.0	4.8	6.8	-2.0
14.	144.5	0.1	127.2	15.9	17.8	-13.8	2.1	6.9	5.7	1.2
15.	127.5	11.3	142.5	-5.0	24.4	-24.0	-29.0	5.6	6.3	-0.7
16.	92.4	8.5	119.0	-7.2	20.0	-20.0	-27.2	5.5	6.4	-0.9
17.	120.5	47.0	121.1	42.2	25.6	-19.7	22.5	6.0	6.9	-0.9
18.	60.9	16.0	60.9	16.0	0.3	-0.3	15.7	7.3	9.3	-1.9
22.	100.2	3.0	84.8	12.2	49.3	17.2	29.4	7.8	7.5	0.4
Monthly volume										
March	1483.3	-67.5	1499.4	-63.1	364.8	95.3	32.3	120.2	132.7	-12.6
April	1978.6	101.2	1950.1	121.6	320.6	59.0	180.6	126.9	157.3	-30.4
May	2239.3	89.2	2259.4	69.8	205.8	-40.0	29.8	130.2	141.7	-11.5
June	1945.4	42.4	1865.3	125.2	140.0	-53.6	71.6	129.0	161.5	-32.5
July	2559.7	65.1	2591.0	6.8	219.2	-20.2	-13.4	168.4	245.9	-77.5
August	1880.2	97.0	1931.0	72.4	228.0	14.2	86.7	148.4	173.2	-24.8
September	1782.2	-175.4	1759.1	-156.6	330.1	156.0	-0.6	133.6	133.5	0.1
October	2131.3	-148.2	2052.6	-102.9	417.4	192.6	89.7	131.4	143.5	-12.1
November	2120.4	-129.8	2119.6	-121.8	1231.3	743.4	621.6	116.1	129.6	-13.5
December	2133.8	65.1	2213.4	18.3	246.1	-3.5	14.8	121.5	156.1	-34.6
January	2133.2	65.9	2072.1	104.0	121.4	-4.0	100.0	104.7	125.6	-20.9
February	1955.6	45.6	1953.0	39.2	98.2	4.9	44.1	99.7	118.7	-19.0
March	2091.9	230.1	2147.2	150.6	301.2	-178.1	-27.6	116.9	132.9	-16.0

\* Sum of balance on spot market by currency of settlement

## EXCHANGE RATE

	Official middle rate of the Bank of Slovenia						FOREX MARKET			EXCH. OFFICE
	EUR	CHF	GBP	USD	HUF	HRK	Enterpr. -> Banks	Banks-> Enterprises	Total	Average ER
	Tolars per 1 unit of foreign currency						Tolars per 1 EUR			
February										
26.	231.5113	158.1253	338.3184	214.4616	0.9478	30.3821	231.6293	231.9483	231.7935	232.0137
27.	231.5479	158.4859	339.3140	215.3734	0.9490	30.3988	231.5223	231.7776	231.6370	231.9919
28.	231.5699	158.2735	338.8497	214.0005	0.9530	30.3340	231.7655	232.1057	231.9101	232.1021
March										
3.	231.6012	158.2732	339.5414	214.5250	0.9519	30.2668	231.6573	231.8898	231.7627	232.0673
4.	231.6423	158.5071	338.0652	214.6227	0.9478	30.2090	231.6927	231.2316	231.6267	232.1298
5.	231.6749	158.7467	335.9555	212.3510	0.9454	30.1621	231.6888	231.8794	231.7676	232.1611
6.	231.7110	158.9130	336.4958	211.1647	0.9453	30.2022	231.7923	232.1321	231.9318	232.1732
7.	231.7431	158.8043	339.6499	211.7536	0.9463	30.2063	231.6492	232.0939	231.7270	232.2268
10.	231.7779	158.1238	337.6718	210.2294	0.9464	30.2069	231.7812	231.9321	231.8878	232.2353
11.	231.8090	157.8328	335.6146	210.0290	0.9458	30.3423	231.8484	232.1031	231.9861	232.3220
12.	231.8392	158.1333	335.7555	209.6764	0.9455	30.2781	231.9083	232.0987	232.0180	232.2914
13.	231.8658	158.0544	338.9355	210.1566	0.9458	30.2815	232.1701	232.7866	232.4039	232.3058
14.	231.8981	157.8827	342.1840	213.0046	0.9470	30.2937	232.1197	232.4455	232.1471	232.3813
17.	231.9239	157.9971	343.2350	215.3425	0.9486	30.3010	231.8015	231.7412	231.8473	232.3774
18.	231.9422	158.0957	339.4442	214.8807	0.9479	30.3597	232.4110	233.2551	232.7841	232.4390
19.	231.9655	157.7353	343.4491	219.5396	0.9478	30.3540	231.7749	231.9981	231.9140	232.4006
20.	231.9931	157.7326	340.0661	218.5933	0.9456	30.2784	232.0000	232.2746	232.0934	232.3752
21.	232.0209	157.7515	342.4663	218.5166	0.9439	30.1639	232.1514	232.2889	232.1926	232.5115
24.	232.0459	157.2873	343.4664	219.4910	0.9419	30.2064	231.9263	232.2138	231.9993	232.4332
25.	232.0688	157.3561	343.1955	218.2328	0.9437	30.1898	231.8190	231.7824	231.6722	232.4575
26.	232.0880	157.7113	342.0100	217.0467	0.9429	30.1139	232.1882	232.2816	232.0390	232.4599
27.	232.1055	157.4130	342.6923	218.1238	0.9428	30.2024	231.9218	232.2628	231.8950	232.4582
28.	232.1230	156.8823	340.6060	216.4519	0.9428	30.2362	232.0867	232.3680	232.1561	232.4678
31.	232.1401	157.1381	338.4460	216.3266	0.9400	30.2936	231.8977	232.2779	232.1299	232.4959
April										
1.	232.1556	157.2976	336.5062	212.9868	0.9423	30.2917	232.1685	232.4063	232.2790	232.5847
2.	232.1722	157.2556	336.1891	213.3151	0.9369	30.5409	232.2474	232.4429	232.3488	232.5689
3.	232.1888	156.6198	337.3856	214.2754	0.9387	30.6399	232.5511	232.5767	232.5881	232.6684
4.	232.1994	156.4054	339.1257	217.0494	0.9437	30.7671	232.2125	232.5000	232.3159	232.6473
7.	232.2252	156.3174	339.3617	216.7898	0.9461	30.9551	233.0003	232.8648	232.7946	232.7275
8.	232.2468	156.1638	340.2385	219.4734	0.9491	30.9766	231.9532	232.4132	232.0662	232.7533
9.	232.2723	156.4018	337.6542	217.6873	0.9496	30.9408	231.9396	232.4903	232.1304	232.6894
10.	232.2917	156.2465	336.1188	216.1456	0.9522	30.9433	232.3473	232.5393	232.3795	232.7550
11.	232.3202	155.5750	336.6959	215.2907	0.9523	30.8240	232.3941	232.6449	232.4829	232.8150
14.	232.3504	155.0139	339.7432	216.4016	0.9511	30.8239	232.4135	232.5298	232.4401	232.8464
15.	232.3774	155.3533	340.4298	216.3260	0.9484	30.8520	232.3822	232.5352	232.4480	232.8504
16.	232.4008	154.8616	339.2712	215.8455	0.9479	30.9785	232.3083	232.4292	232.3353	232.8551
17.	232.4276	155.0137	338.1257	214.7336	0.9466	30.8977	232.3203	232.4947	232.3474	232.8537
18.	232.4570	154.9300	335.9205	213.0483	0.9464	30.9242	232.5159	232.8154	232.6037	232.9184
22.	232.4772	154.9435	335.9497	213.0668	0.9465	30.9269	232.5051	232.7847	232.5367	232.9242
23.	232.5053	154.5502	334.0593	211.8885	0.9460	30.9388				
24.	232.5285	154.3092	335.1521	212.5489	0.9473	30.9090				
	<b>Average monthly exchange rate</b>									
March	223.8126	152.4773	363.6806	255.6975	0.9155	30.3445	223.9327	224.0994	224.0071	224.1921
April	224.5620	153.1699	365.8837	253.9750	0.9279	30.4400	224.6767	224.8244	224.7468	224.9171
May	225.3053	154.6487	359.1179	246.1370	0.9250	30.5983	225.4102	225.5783	225.4594	225.6222
June	225.9745	153.5540	350.9855	237.0903	0.9319	30.8348	226.0301	226.3185	226.1933	226.3243
July	226.6962	154.9766	354.5039	228.3385	0.9200	30.8331	226.8070	226.9894	226.8867	227.0095
August	227.3710	155.4272	357.6643	232.6333	0.9346	30.8757	227.4477	227.7077	227.5006	227.6863
September	228.0310	155.6284	361.4872	232.4664	0.9361	31.0871	228.1133	228.4178	228.2447	228.3376
October	228.6678	156.0785	363.1139	233.1563	0.9392	30.7818	228.7552	228.9899	228.8690	229.0210
November	229.3464	156.2916	360.3644	229.2173	0.9641	30.7724	229.4203	229.6268	229.5423	229.7418
December	229.9663	156.6234	358.2494	226.2178	0.9750	31.0100	230.0238	230.2714	230.1232	230.4315
January	230.7019	157.8315	351.1390	217.5326	0.9616	30.7075	230.7074	231.0403	230.8881	231.1023
February	231.2969	157.5873	346.2344	214.5393	0.9442	30.4581	231.4117	231.6836	231.5626	231.7182
March	231.9026	157.8920	340.0503	214.8451	0.9455	30.2470	231.9409	232.1370	231.9927	232.2813