BANKA SLOVENIJE

BANK OF SLOVENIA

MONETARY POLICY IMPLEMENTATION REPORT

OCTOBER 2002

CONTENTS

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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 join the European Economic and Monetary Union in the shortest possible time. 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 to 4% by the end of 2003. The Bank of Slovenia also undertook to prepare a regular inflation report as a way of reporting publicly on the implementation of its short-term monetary stance.

The purpose of this document is to analyse current inflation trends and assess the action taken by the Bank of Slovenia in the most recent period, specifically its monetary and exchange rate policy. Our primary intention is to describe the outlook and possible trends in macroeconomic variables over a medium-term horizon. The analysis and projections are focused on the medium-term objectives to which the Bank of Slovenia is committed. In conclusion, indications for future action by the Bank of Slovenia and forecasts of the effects of its monetary policy are presented. The present document is the vehicle by which the Bank of Slovenia intends to inform the public about its performance of the tasks laid down for it in the Law on the Bank of Slovenia, thereby promoting transparency in the conduct of monetary policy.

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Inflation remains high at a little over seven per cent, and the year-on-year inflation rate at the end of the year is expected to increase further to about 7.5%. It is not expected to fall until the first few months of next year. The persistence of high inflation this year is mainly attributable to cost factors: a tax shock and a shock to administered prices at the start of the year. This precedent for price-setting was carried over from the public sector to the free market, where a substantial level of market power and collusive pricing are contributing to rather rapid price growth. Trends in core inflation suggest that inflation will fall in the future. Year-on-year core inflation was about 6% and is not expected to climb by the end of the year. There are no discernible signs of inflationary pressures on the demand side. Attention should be drawn, however, to the ever-present uncertainty as to short-term inflationary effects from the international environment, associated mainly with world oil price movements.

Monetary policy in 2002 was primarily affected by two factors: high inflation and strong capital inflows associated with foreign direct investment. The Bank of Slovenia intervened on foreign exchange markets throughout the year in order to prevent adverse shocks to economic activity. The maintenance of a high rate of sterilisation against a background of strong capital inflows posed a problem for the conduct of monetary policy, since the Bank of Slovenia is constrained in its ability to raise interest rates by the principle of uncovered interest parity and the consequent danger of triggering further, interest rate-sensitive capital inflows. The Bank of Slovenia was nevertheless successful in sterilising excess liquidity in the banking system and thereby preventing excessive growth in the money supply, which might have given rise to inflationary pressures on the demand side.

Economic growth in 2002 will be below its long-run equilibrium rate for a second consecutive year. The main reason for the slow growth of GDP has been the flagging international economy and the slower-than-expected recovery of Slovenia's largest trading partners. Factors preventing economic growth in Slovenia from being even more sluggish have been an increase in exports to the former Yugoslavia and Russia and much improved terms of trade. With the global economic recovery, Slovenian GDP growth will climb back towards its long-run rate, which it is projected to reach by 2004. Our projections indicate that the main engine of economic growth in the coming period will be foreign trade, reflecting continued favourable terms of trade and an increase in investment spending. Private consumption is likely to recover more slowly, as are labour market conditions. On the revised assumptions, only a gradual easing of inflationary pressure is predicted.

According to the latest forecasts, which are based on new assumptions about international and domestic determinants of inflation, economic policy assumptions and the trends in inflation already observed this year, the inflation target at the end of 2003 will be exceeded. A prerequisite for entry to ERM2 without serious repercussions for the Slovenian economy is a reduction of the inflation rate to around 4% by the end of 2003. A finding that emerges from this report is that unforeseen fiscal measures and rises in prices under the control of the Slovenian Government have been a major contributing factor in this year's inflation rate failing to meet the target set for it last autumn. In our view, of the internal variables, the factor most seriously jeopardising this target is the risk that tight monetary policy may continue to lack the backing of an adequately tight economic policy, particularly in those areas that are under the control of the Government. Given effective collaboration among all macroeconomic policy-makers, we believe that bringing inflation close to target remains feasible in the current circumstances.

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This inflation report contains four further sections. Appendices supporting the analyses and results presented in the main body of the report 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 in the present year. This is followed by an account of actions 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 document is one in a series of reports that the Bank of Slovenia is publishing on inflation in the context of forecast macroeconomic trends and short-term monetary policy. The next inflation report will be prepared in spring 2003.

2. INFLATION TRENDS

Inflation remains high at a little over seven per cent, and shows no sign of falling by the end of the year to any appreciable extent. It is not expected to ease until the first few months of next year. The stubbornly high level of inflation is mainly due to a tax shock and a shock to administered prices at the start of the year. There is also continual uncertainty with regard to short-term prospective inflation associated with world oil prices.

The persistence of high inflation this year is mainly attributable to cost-push factors that appear to have shifted from being temporary to being structural. In our assessment, the main factors keeping inflation at a high level this year have been fiscal policy and administered price policy. Fiscal policy, with higher rates of VAT and excise duty, has added about 1.5 percentage points to this year's price growth. This, coupled with a round of increases in administered prices early in the year, is a typical case of cost-push inflation. Inflation is thornier and harder to control when it stems from inflationary pressure on the demand side. This arises when consumer spending races ahead, usually due to strong consumer purchasing power as a result of loose monetary and incomes policy. Slovenian inflation is not of this nature.

2. 1. Analysis of inflation and its composition

Overall inflation for the year to September was 7.2%. Consumer goods rose in price by 6.1% since the beginning of the year. In the last five months, year-on-year inflation fell by 1.2 percentage points from a high level of 8.4% in April to 7.2% in September, although this fall was smaller than forecast in May this year. Core inflation[1] fell from a year-on-year rate of 6.5% in April to 6.1% in September.

Year-on-year inflation is expected to rise again slightly at the end of the year to about 7.5%. This is actually a statistical effect, as the rise in prices compared with the same time last year mainly reflects the fact that the all-items consumer price index was pushed down then by a sharp fall in prices of refined petroleum products. There will be no other major changes by the end of the year. We therefore expect core inflation to stand at

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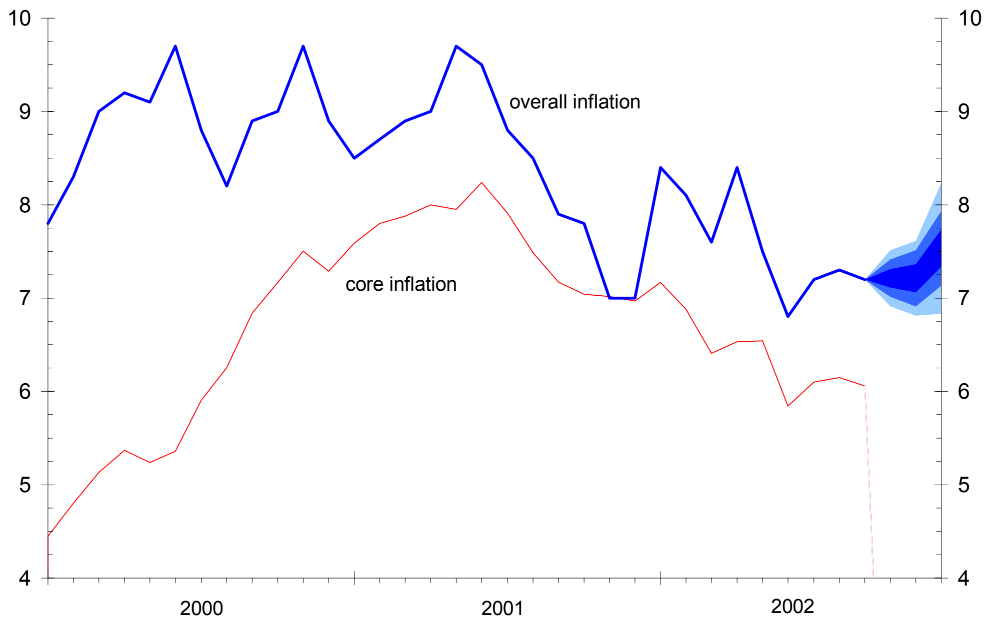
[1] Core inflation is defined as headline (overall) inflation less the following exogenous components: prices of energy sources (petrol, gas, fuel oil, district heating and electricity), seasonal components in the two most volatile groups (fruit and vegetables, and clothing and footwear (sales)) and the effects of changes in the rate of VAT and tobacco excise duty.

around 6% by the end of the year. There is a risk, albeit a small one, of an increase in food prices reaching Slovenia, caused by the destruction of the harvest in Central Europe as a result of extreme weather events. A seasonal rise in the price of clothing and footwear can be expected, which will be partly offset by a seasonal drop in the price of package holidays. No further rises in administered prices are envisaged this year, with the exception of municipal services at local level in October and November. The biggest question mark over inflation at the end of the year concerns prices of refined petroleum products. These depend on unpredictable fluctuations in world oil prices and on movements in the US dollar.

The rest of this section gives three alternative breakdowns of inflation. The first looks at the composition of core inflation according to the different behaviour of the price groups, the second according to the international classification used by the Statistical Office of the Republic of Slovenia, and the third according to the mode of price-setting.

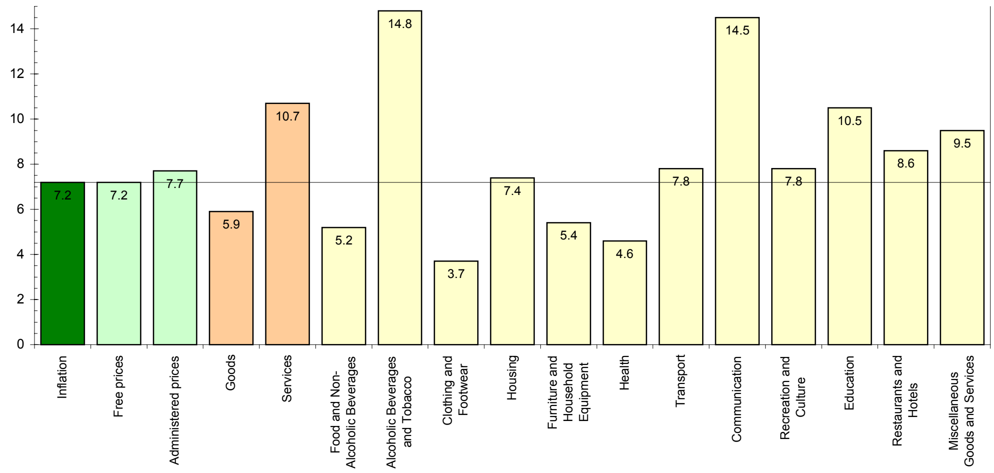
Figure 2.1: Inflation and the inflation forecast for the end of the year



Source: Analysis and Research Department

<u>Core inflation</u> can be split into two main price groups on the basis of their quite different behaviour: prices in the tradable and non-tradable sectors. The prices of **manufactured goods** (in the consumer price index) are used as an approximation to prices in the tradable sector, while prices of **services** are taken as a proxy for the non-tradable sector. **Food** prices are placed in a separate category. Of these groups, prices are growing fastest in services, which make up about 26% of the index of core inflation. Year-on-year growth in these prices was 10.2% in September. Over the same period, prices of manufactured goods (50% of the index) grew by 6.3% and prices of food (24% of the index) by 5.3%.

Figure 2.2: Composition of consumer price growth



Source: Analytical and Research Centre

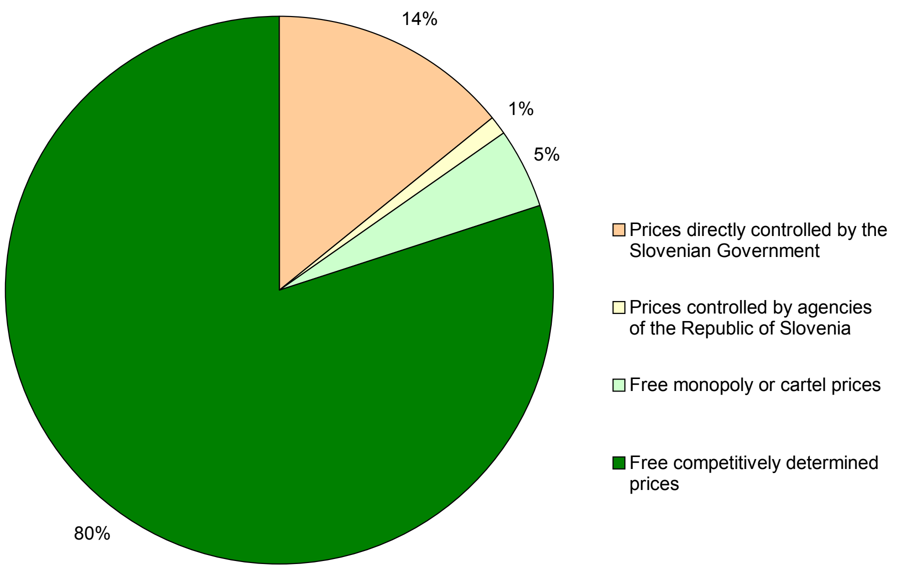
Among the **major divisions of consumer goods** in the consumer price index, price growth in alcoholic beverages and tobacco and in communication has been particularly pronounced. Inflation in these two categories is more than twice the rate for the consumer price index as a whole. These groups have absorbed part of the fiscal impact insofar as tobacco excise duty is a major factor in this year's high inflation. The rises in tobacco excise duty in January and July added 0.5 percentage points to this year's inflation through higher producer prices of cigarettes. The increase in tobacco excise duty is due to the harmonisation of Slovenian legislation with European Union directives. Communication saw a steep rise in the price of telephony subscriptions and fixed-line telephone calls in February and a rise in mobile telephony prices in August, and price increases in postal services in February and September. These price increases were made in agreement with the Slovenian Government or its agencies. The next largest rises have been in education, miscellaneous goods and services, and hotels and restaurants. In education, the highest increases were in the pre-school category, while those in miscellaneous goods and services were for package holidays, compulsory automobile insurance and supplementary health insurance. Prices of clothing and footwear, food and non-alcoholic beverages[2], health, and furniture and household equipment grew by less than 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.

A noteworthy feature of 2002 is that price growth of services has significantly outpaced that of goods. Year-on-year inflation to September was 10.7% for services and 5.9% for goods, a difference of 4.8 percentage points. The gap in price growth between goods and services has thus widened further this year. The discrepancy suggests that service activities are slower to respond to the dip in economic activity and reduced consumer spending, reflecting less intense competition in the service sector.

An understanding of the **mode of price-setting** is essential for a central bank in determining monetary policy. We have 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[3]
- prices controlled by agencies of the Republic of Slovenia
- free monopoly or cartel prices
- free competitively determined prices.

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



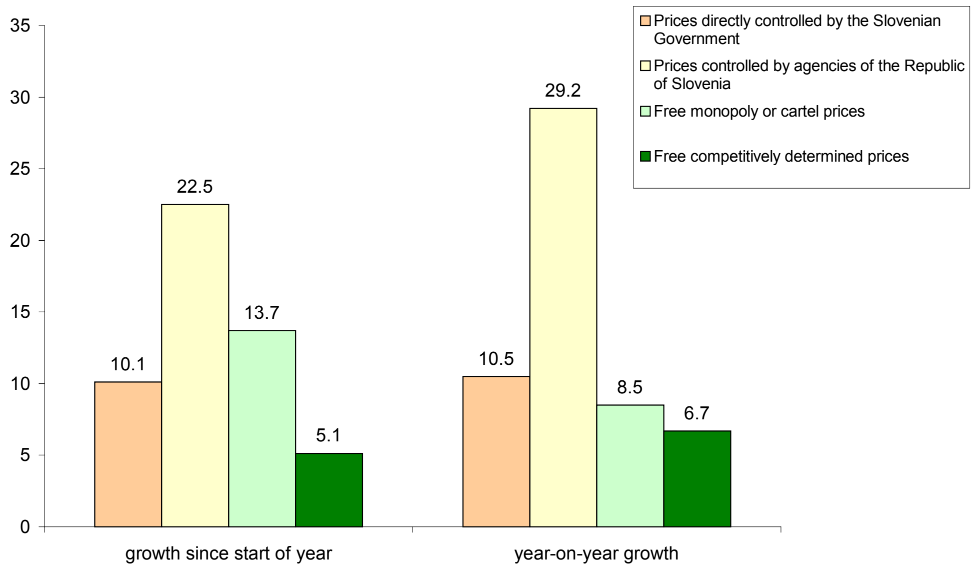
Source: Analysis and Research Department

[2] The steepest price growth within this group was in oils and fats (24.3% year-on-year growth) and bread and cereals (14.8%).
[3] Prices set by the Slovenian Government or prices of government 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 services and goods that are in principle freely determined are suspected of in fact being set in a coordinated and collusive manner.

The consumer price index is dominated by prices that are formed freely and competitively. These make up around 80% of consumer goods. Prices directly controlled by the Slovenian Government make up around 14% of the index, while those controlled by state agencies make up 1%. Free prices that we have identified as being set in a monopolistic or collusive fashion account for around 5%.

Figure 2.4: Consumer price growth by mode of price-setting



Source: Analysis and Research Department

It is notable that the fastest-growing prices are those controlled by state agencies. These grew by 29.2% year-on-year. Growth of free prices of goods and services with a predominantly monopolistic or oligopolistic market structure was also rapid. This group includes compulsory automobile and health insurance and fuels whose prices are not controlled by the Slovenian Government or state agencies. Prices controlled by the Slovenian Government have also grown sharply this year. Prices of municipal services alone have grown by 29.1%. The bulk of these increases are attributable to the introduction of environment taxes in January (part of harmonisation with European Union law) and a rise in local authority charges in April. Together these taxes added around 0.4 percentage points to this year's inflation.

2. 2. Inflation factors in 2002

In deciding monetary policy measures it is important to appreciate the causes of inflation, and specifically whether they are:

- 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, which may be caused by loose monetary and/or incomes policy or a rise 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 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.[4]

Events within the **international environment** are exacerbating current uncertainty, while pressures on inflation are being characterised by broad fluctuations and offsetting effects. World oil prices and the US dollar exchange rate are exerting a particularly large influence on consumer price trends.

The most important factor on the international scene affecting trends in consumer prices in Slovenia is the world oil price, which this year has been high and volatile. After descending to low levels at the end of 2001, the oil price grew strongly on world markets in 2002. The oil price fell slightly in May and June but has risen in every other month. The reason for increased oil prices in the first half of the year was the Middle East crisis, while in recent months they have been pushed up by expectations of a possible attack on Iraq.

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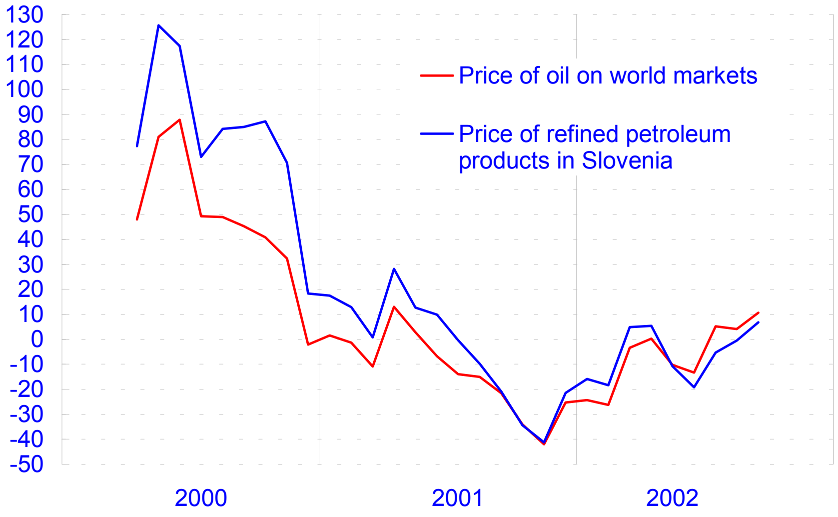
[4] For example, wage inflation can act as a demand factor creating additional consumer purchasing power or be treated as an increase in firms' costs of production. The same applies to monetary policy (interest rates), the exchange rate and certain other factors.

The **US dollar exchange rate** against the euro fell between March and July inclusive. The most marked falls in the value of the dollar were observed in May, June and July. The dollar/euro exchange rate is currently fairly settled. The weaker dollar had a benign effect on consumer prices in Slovenia by making imports cheaper. Among other things it mitigated the effect of the high international oil price on growth in the price of refined petroleum products.

The **world oil price** and the US dollar exchange rate affect Slovenian prices directly through their impact on the pricing model for refined petroleum products and indirectly through other prices. The fortnightly alignment of prices of refined petroleum products with the oil price on world markets and the US dollar exchange rate makes for an almost instant transmission of uncertainty from the international environment to the domestic economy. As a result of international developments, the price of refined petroleum products in Slovenia, having risen steeply in April, fell somewhat in the next three months. Since August, however, they have again been on the rise because of the uncertain situation in the Middle East and American preparations for war with Iraq. Figure 2.5 shows fluctuations in the twelve-month growth of the world oil price and prices of refined petroleum products in Slovenia since April 2000.

Figure 2.5: World oil price and prices of refined petroleum products in Slovenia (twelve-month percentage change)

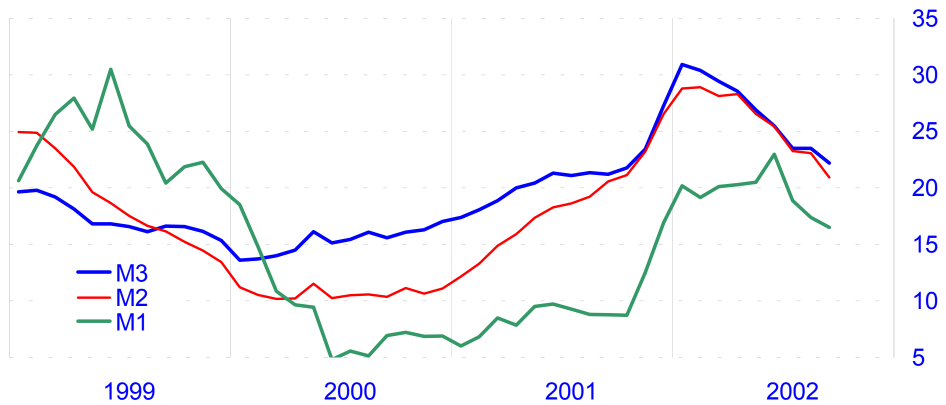


Source: Analysis and Research Department

There are no indications of **<u>demand factors</u>** having generated or accelerated inflation this year. We judge the determinants of aggregate demand, which include monetary policy and wage growth, to have been among the factors that have restrained price growth.

This year has seen fast **growth in monetary aggregates**, although this has slowed greatly in recent months. The reasons for it were the euro cash changeover, the transfer of payments from the Agency for Payments of the Republic of Slovenia to the banks, the transfer of government payments to the Bank of Slovenia, and foreign currency inflows monetised by the Bank of Slovenia. After high growth in June associated with the reform of the payments system, the path of M1 quickly returned to normal during the summer months. The quantity of this monetary aggregate has now fallen to its May level. The M3 aggregate, having grown strongly at the end of the last year in connection with the conversion of national currencies to the euro, has grown at a slower rate this year. It grew by a cumulative 1.3% in July and August. One factor that could upset this pattern of moderate growth are the inflows of foreign capital that are expected to accompany the change in the ownership of enterprises in the last quarter of the year. Figure 2.6 shows twelve-month growth in monetary aggregates.

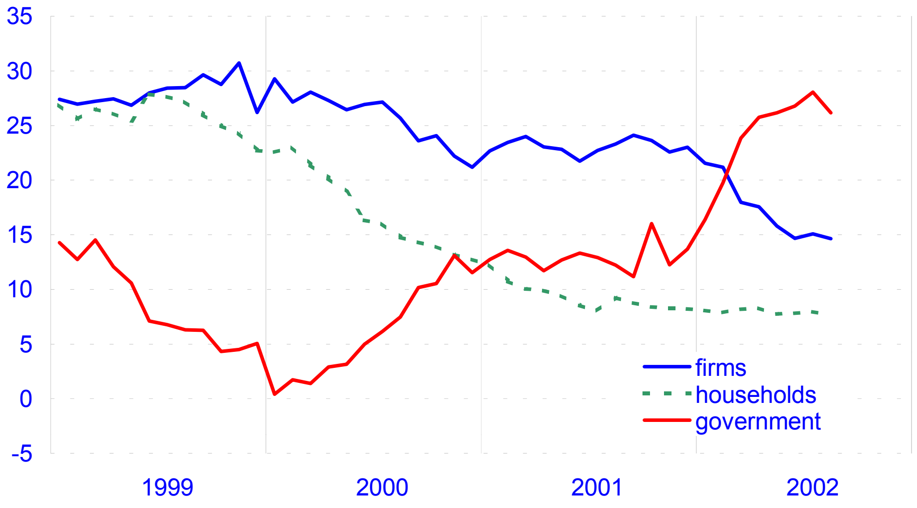
Figure 2.6: Monetary aggregates (twelve-month percentage changes)



Source: Analysis and Research Department

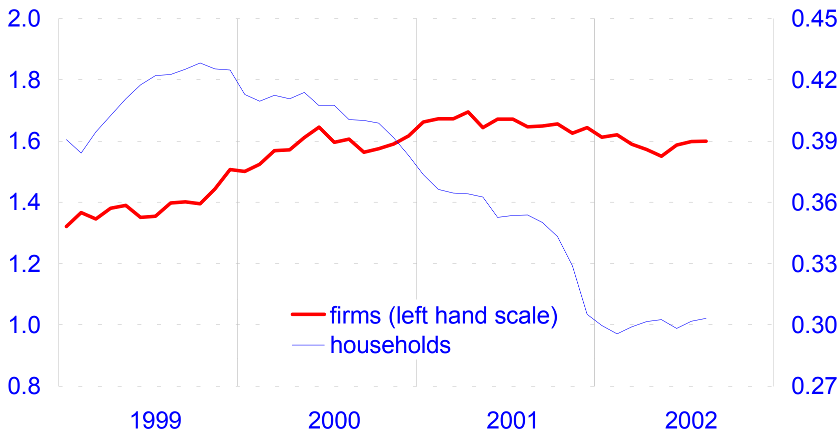
In the last two years, household savings behaviour has been dominated by long-term motives, expressed in housing savings and supplementary retirement insurance. Increased financial savings are restraining final consumption and preventing major demand-side pressures on prices from emerging, despite the increased volume of money in circulation. This is confirmed by the modest demand for retail credit. The cycle of private consumption expenditure shows no sign yet of being on the upturn, although consumer debt repayment has slowed.

Figure 2.7: Lending by domestic banks (twelve-month percentage changes)



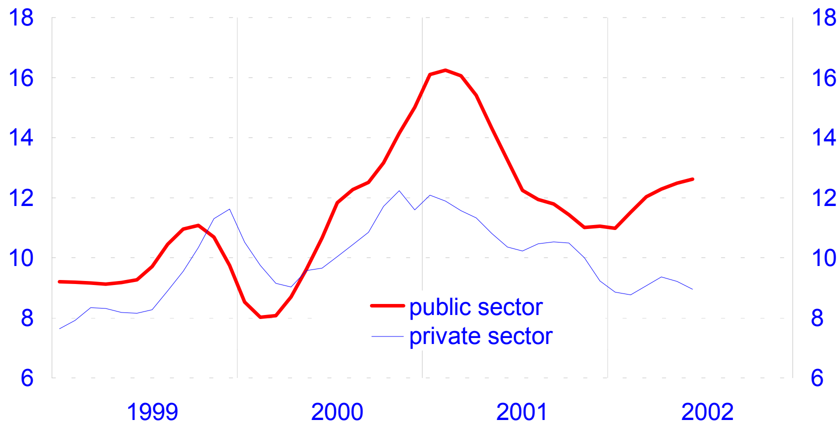
Source: Analysis and Research Department

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



Source: Analysis and Research Department

Figure 2.9: Wages in the public and private sector, seasonally adjusted (twelve-month percentage changes)



Source: Analysis and Research Department

Developments on the labour market, where employment growth halted, and relatively low **wage growth** in the private sector, have also contributed to subdued final consumption (Figure 2.9). Signs of growth in final consumption have been confined to the public sector, where public spending, public sector wage growth and social transfers are not reflecting the economic downturn.

Supply factors or cost-push factors are the main cause of the persistence of high inflation this year. These include mainly the fiscal policy and the administered price policy. The exchange rate trend lagging the inflation level has on the other hand contributed to restrict the inflation pressures.

Fiscal policy, with higher rates of VAT and excise duty on tobacco and alcohol in January, has added about 0.9 percentage points to this year's inflation. The introduction of taxes on environmental discharges at the start of January and the rise in local authority charges in April added about 0.4 percentage points. A further 0.2 percentage points were added by further increases in tobacco excise duty in July. Tax increases, while in principle one-off events, may become a more permanent source of inflationary pressure if part of a systemic pattern.

Administered price policy has been a major factor in the rise in inflation this year. After growing fast in the first four months, administered prices levelled off to some extent in the next four, but their year-on-year growth of 7.7%[5] continues to outpace growth in free prices (7.2%) and overall inflation (7.2%). A round of substantial rises in administered prices in the first few months of the year triggered inflationary expectations and highlighted the fragility of the price stability that had been achieved and the need for coordinated action across all areas of economic policy-making in order to achieve the medium-term inflation target.

The signalling effect of such price increases is a major component in inflationary expectations and has a powerful influence on price-setting in the rest of the economy. This effect is transmitted mainly to prices of goods and services where competition is less intense and where collusive pricing may even be the norm.

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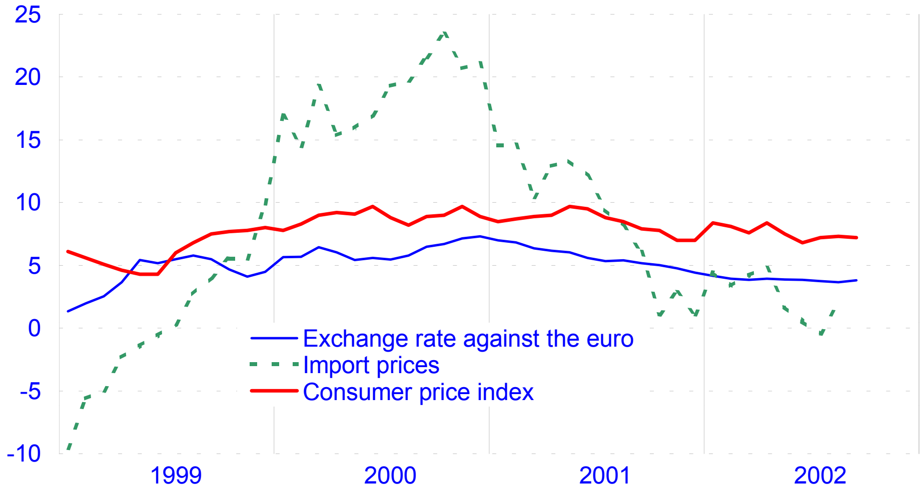
[5] Growth in administered prices is expected to be around 10% at the end of the year, around three percentage points higher than the growth in free prices and 2.5 percentage points above growth in the consumer price index overall.

Chronological overview of major supply factors in 2002:	
January:	higher rates of value-added tax
	excise duty on alcoholic beverages and tobacco
	introduction of tax on environmental discharges
February:	price increases on telephony and postal services
April:	higher prices of municipal services from increased local authority charges
July:	excise duty on tobacco
	package holidays
August:	compulsory automobile insurance
	mobile telephony
	electricity
September:	supplementary health insurance
	radio and television subscriptions
	postal services

Figure 2.10: Inflation, import prices and the exchange rate
(twelve-month percentage changes)



Source: Analysis and Research Department

Exchange rate movements helped gradually slow inflation by virtue of the fact that the tolar depreciated at a slower rate than prices grew. This year the Bank of Slovenia has further slowed the depreciation of the tolar, which was 3.8% year-on-year (and is currently running at 3.5% on an annualised basis). The exchange rate chiefly affects inflation via import prices. It also exerts an influence on movements in producer prices by affecting the prices of imported input goods in the domestic currency, which make up a large fraction of import prices. Figure 2.10 shows how growth in the tolar/euro exchange rate and in import prices have lagged behind inflation.

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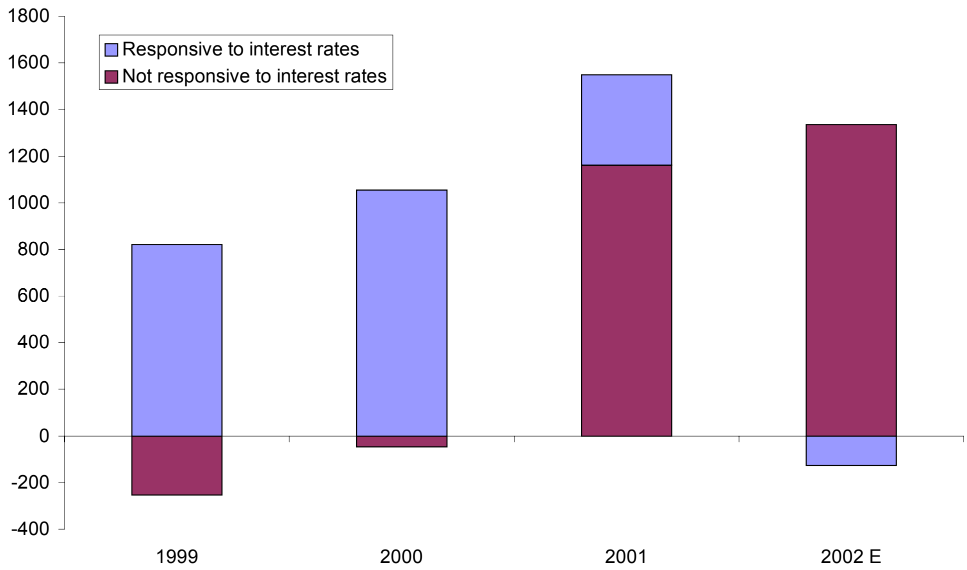
Inflation remains high at a little over seven per cent, and shows no sign of falling by the end of the year to any appreciable extent. The year-on-year inflation rate at the end of the year is actually expected to increase further, to about 7.5%. It is not expected to ease until the first few months of next year. The persistence of high inflation this year is mainly attributable to cost-push factors: a tax shock and a shock to administered prices at the start of the year. This precedent for price-setting was carried over from the public sector to the free market, where a significant degree of market power and collusive pricing are contributing to rather rapid price growth. Trends in core inflation suggest that inflation will fall in the future. Year-on-year core inflation was about 6% and is not expected to climb by the end of the year. There are no discernible signs of inflationary pressures on the demand side. However, uncertainty remains ever-present as to short-term inflationary effects from the international environment, associated mainly with world oil price movements.

3. BANK OF SLOVENIA POLICY IMPLEMENTATION IN 2002

Monetary policy in 2002 was affected by two major factors: rather high inflation, due mainly to one-off events, and heavy capital inflows from foreign direct investment. Consequently, the Bank of Slovenia geared its monetary policy towards preventing further destabilising shocks to price stability and mitigating the effects of the existing ones. The two main instruments it used in pursuing this aim were the interest rate and the foreign exchange rate.

The Bank of Slovenia pursued a monetary and exchange rate stance geared towards equalising foreign and domestic costs of finance, with the aim of preventing further financial inflows from being sparked off. Evidence that it succeeded is provided by the composition of financial inflows. These arose at the end of last year in connection with euro cash changeover, while this year they have been due to privatisation and direct investment. The Bank of Slovenia has no direct influence over the latter since it is not responsive to interest rates.

Figure 3.1: Composition of financial inflows in terms of interest rate responsiveness (USD millions)

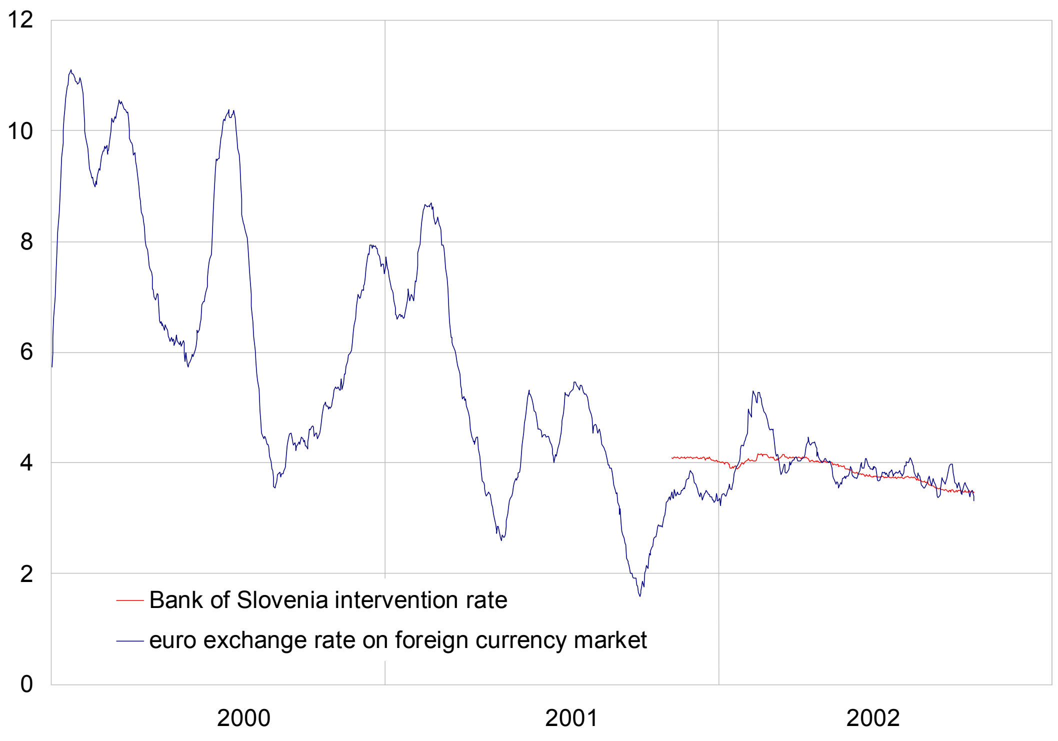


Source: Analysis and Research Department

The Bank of Slovenia has sought to avoid a recurrence of unnecessary supply shocks. It has advocated a closer degree of coordination in economic policy-making and enhanced public awareness of the importance of lowering inflation for the sake of inclusion in ERM2 and EMU, among other reasons. In the area of coordination of economic policy-making it has worked together with the Ministry of Finance on neutralising the monetary effects of the proceeds from the sale of Nova Ljubljanska Banka. The two institutions agreed to disburse the proceeds in such a way as to minimise the negative effects on monetary policy and the impact on inflation.

The Bank of Slovenia has been intervening on foreign exchange markets since September last year in order to support the value of tolar. Its interventions have been based on keeping the exchange rate of the tolar close to its long-run equilibrium level and have followed the orientation of monetary policy in line with the ongoing process of lowering inflation. Rather than reflecting changes in macroeconomic fundamentals, pressures on the exchange rate this year have primarily been caused by increased foreign currency inflows accompanying the sale of ownership stakes in enterprises to foreign investors in the course of privatisation or M&A activity.

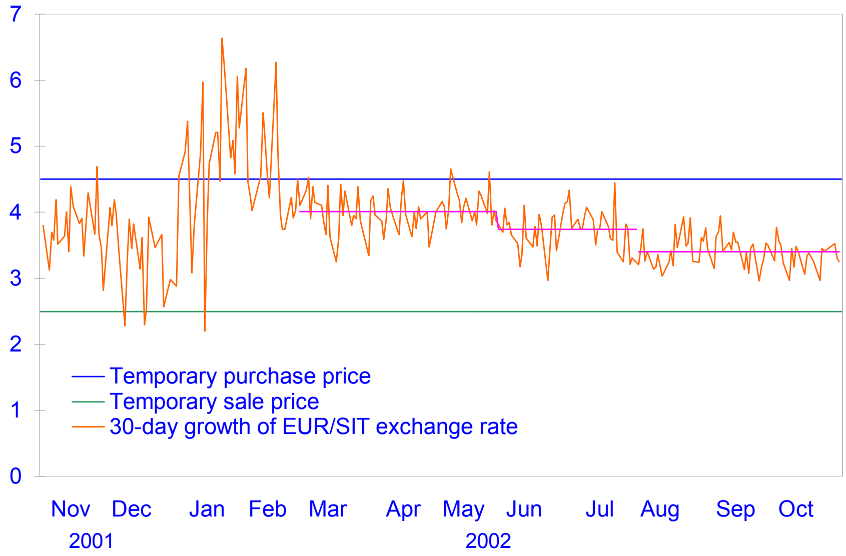
Figure 3.2: Foreign exchange rate and intervention rate of the tolar
(monthly depreciation of the tolar, per cent per annum)



Source: Analysis and Research Department

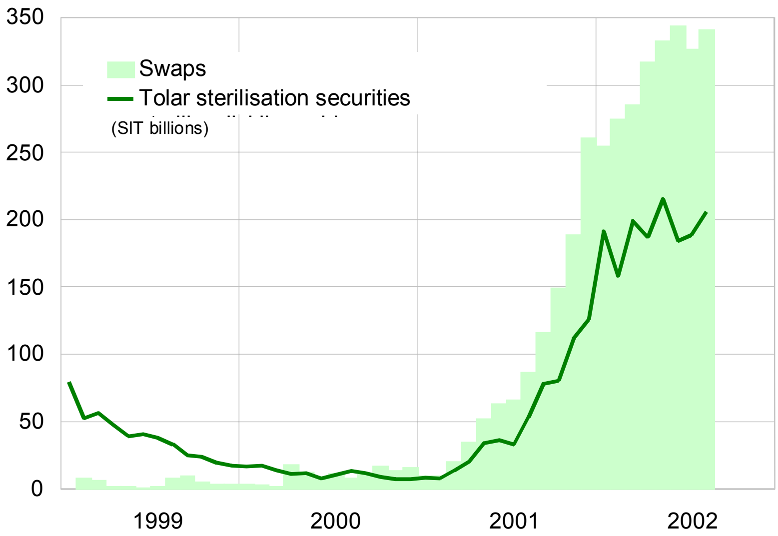
The Bank of Slovenia set interest rates on the basis of the expected level of inflation and the degree of monetary policy restrictiveness required in controlling the money supply. Thereby it also determined the rate of depreciation of the domestic currency, via uncovered interest parity. In this way the Bank of Slovenia slowed the tolar's rate of decline from an annualised 4% up to May to 3.75% from May to July and 3.5% thereafter.

Figure 3.3: Growth of the exchange rate and the price of temporary sale and purchase of foreign currency



Source: Central Banking Operations

Figure 3.4: Intervention and sterilisation by the Bank of Slovenia

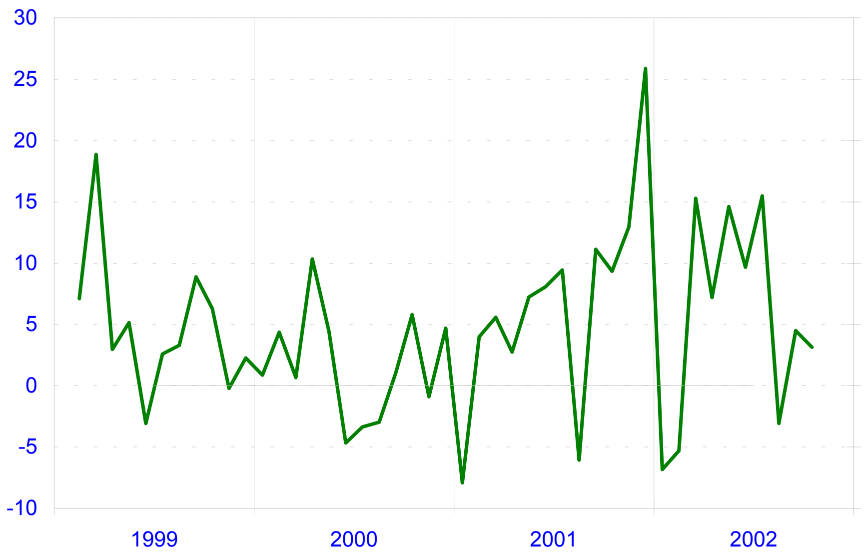


Source: Analysis and Research Department

The Bank of Slovenia conducted its exchange rate policy through temporary purchases of foreign currency from banks, while restricting the supply of base money as appropriate by means of extensive sterilisation operations involving the issuance of tolar-denominated central bank bills. Although heavy inflows of foreign capital onto the foreign exchange market caused a rapid increase in the quantity of temporarily purchased foreign currency held by the Bank of Slovenia, the Bank successfully maintained a high rate of sterilisation. This was facilitated by modest private sector demand for credit, which restricted banks' options for alternative investments. With the exception of government borrowing, demand for credit was slack and lending activity by banks was subdued.

In the absence of measures by the Bank of Slovenia to sterilise excess liquidity in the banking system, base money supply would have grown by roughly twice as much as it in fact did. Over eight months the Bank of Slovenia issued SIT 79.7 billion net through temporary purchases of foreign currency while withdrawing SIT 80.1 billion through the issuance of tolar-denominated central bank bills, with the result that base money grew by only 0.6% over the period. In spite of the restrained growth in the base money aggregate, its volatility has risen since foreign currency intervention began, a fact which indicates that it is a challenge for the Bank of Slovenia to control the money supply at times of heavy capital inflow.

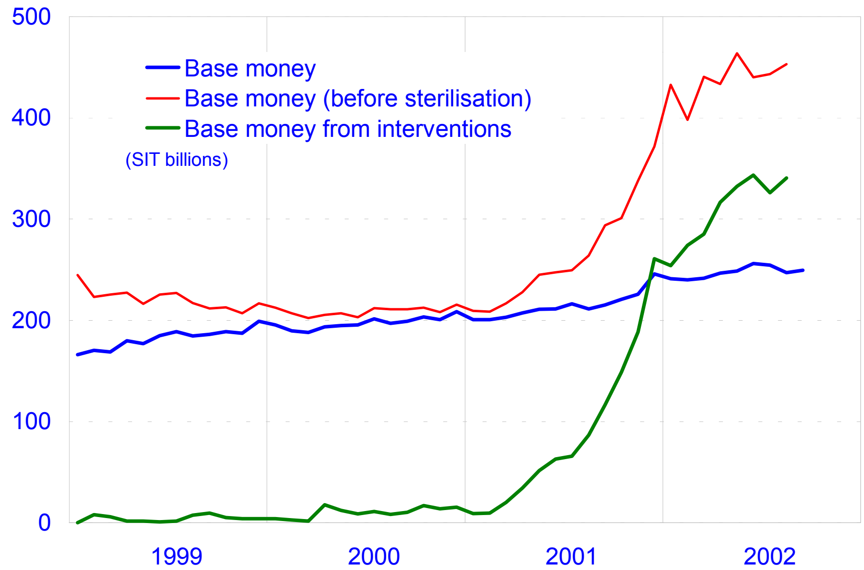
Figure 3.5: Monthly change in base money issued through market operations by the Bank of Slovenia (foreign exchange swaps and issuance of tolar-denominated central bank bills, in SIT billions)



Source: Analysis and Research Department

Maintaining a high rate of sterilisation, which is currently running at 60%, is an increasing challenge for the Bank of Slovenia. In response, and notwithstanding the principle of uncovered interest parity, the Bank of Slovenia has been increasing interest rates on sterilisation instruments in a series of small steps. By gradually raising interest rates and slowing the depreciation of the tolar the Bank of Slovenia has widened the gap between domestic and foreign interest rates, but not by so much as to trigger additional financial inflows from the rest of the world. Interest rates on 60-day tolar-denominated central bank bills (TCBBs) were gradually raised from 7.5% to 8.75% by the end of May. The interest rate on 270-day TCBBs stood at 9% between January and March but rose to 10% thereafter. The Bank of Slovenia adjusted the frequency and quota of auctions of 270-day TCBBs to the needs of decreasing the supply of base money. The costs of monetary policy are increasing but do not present a constraint as yet. The main constraint on the conduct of monetary policy going forward will be maintaining a high rate of sterilisation.

Figure 3.6: Issuance of base money



Source: Analysis and Research Department

* * *

Monetary policy in 2002 has been driven by two main factors: high inflation, due mainly to supply shocks, and heavy capital inflows from foreign direct investment. While the pursuit of monetary policy goals in the face of heavy capital inflows is a challenge, the Bank of Slovenia has this year been confronted with further shocks to inflation emanating from the supply side. The Bank has intervened on the foreign exchange markets all year in order to mitigate the adverse impact of these shocks on the economy. Maintaining a high rate of sterilisation in the face of strong capital inflows will continue to be the main challenge to the conduct of monetary policy, since the Bank of Slovenia is constrained in its ability to raise interest rates by the principle of uncovered interest parity and the danger of triggering further, interest rate-sensitive capital inflows.

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 on 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 planks 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[1]. 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. 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 (seven 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 from 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 risk 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 the swap instrument noted above (7-day maturity and liquidity ladder, and active pricing) allow the Bank of Slovenia to successfully absorb excess liquidity in the banking system by issuing tolar-denominated central bank bills with a term of up to one year (60 and 270 day TCBBs), since these maturities do not cause major misalignments in maturity transformation.

[1] The agreement was signed in 2000 and an annex to it was signed in 2001.

Box 3.2.

Chronology of monetary actions by the Bank of Slovenia during 2002

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 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 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 non-tradable sector and rises in excise duty and VAT 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 Agency for Payments to the banks, 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. ECONOMIC PROJECTIONS TO THE END OF 2004

Economic growth in 2002 will be around one percentage point below its long-run equilibrium rate for a second consecutive year. The main reason for the slow growth of real GDP has been the flagging international economy and the slower-than-expected recovery of Slovenia's largest trading partners. Slovenian economic growth has nevertheless been buoyed up to some extent by an increase in exports to the countries of former Yugoslavia and Russia and by much improved terms of trade. With the global economic recovery, Slovenian GDP growth is expected to climb back towards its long-run rate, which it is projected to reach by 2004. On present assumptions about domestic demand and administered price policy, forecast trends in the international environment and the monetary and exchange rate policy stance, a gradual easing of inflationary pressure is predicted.

The projections of endogenous macroeconomic factors, including inflation, rest on assumptions about the movement of international economic variables over which Slovenia has no control, and about certain domestic factors that may be the object of economic policy. Factors that can be influenced by domestic macroeconomic policy are determined separately from the forecasting exercise and are therefore liable to vary from past or expected economic trends. The forecasts presented here can therefore be treated as a central scenario that may be subject to change depending on the outturn of these exogenous influences.[6] Domestic factors of this nature include the exchange rate of the domestic currency, government spending and investment, public sector wages, administered price inflation and fiscal measures.

The first section of the projections presents assumed movements in relevant variables from the international environment. This is followed by an account of the projections for economic activity, employment and wages. The third section shows trends in domestic demand broken down by expenditure components. The external balance and conditions of financing are analysed in section four. The final section presents forecast movements in the various price aggregates. A summary of the projections and a comparison with the May forecasts are given in Table 4.8 at the end of the section.

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[6] The assumptions regarding exogenous factors were approved at the 253rd session of the Governing Board of the Bank of Slovenia on 3 September 2002.

4. 1. The international environment

Economic growth in the United States and subsequently in most EU countries slowed significantly in 2001. Analysts were nevertheless predicting only a short-lived downturn and an improvement this year. Forecasts of an international recovery do not appear to have been toned down appreciably in the second half of the year. Such revisions can probably be expected only in mid-autumn. Nevertheless, we believe that the signs concerning future economic activity in the international environment remain fairly upbeat. There is evidence to suggest that the world economy is free of major demand-side inflationary pressures, as both the United States and European economies are only slowly picking up. Equally, however, uncertainty exists about inflationary pressures on the supply side. A considerable source of uncertainty in this respect are oil price fluctuations caused by uncertainty in international political affairs.

The accompanying table gives the values of the most important exogenous factors used as inputs to the forecast. Where foreign institutions have not yet published projections for 2004 the corresponding values for 2003 have been taken. The values of the exogenous variables used for the May 2002 forecast are included for comparison.

Table 4.1: Exogenous factors from the international environment

				2002			2003			2004
	1999	2000	2001	Maj 02	Okt 02	Δ nap 02	Maj 02	Okt 02	Δ nap 02	Okt 02
Foreign demand	6.9	9.8	2.0	3.2	3.0	-0.2	7.2	7.7	0.5	7.7
Exchange rate (USD/EUR)	1.067	0.924	0.895	0.894	0.947	-0.053	0.939	1.010	0.071	1.020
Oil price (USD per barrel)	17.9	28.5	24.4	23.8	24.5	0.7	25.0	25.0	0.0	23.3
Commodities prices	-9.5	3.2	-6.5	-2.2	-2.2	0.0	2.8	2.8	0.0	2.8
Consumer prices, EU	1.1	2.3	2.6	1.8	2.2	0.4	1.5	1.8	0.3	1.8
Producer prices, Germany	-0.3	3.3	1.3	0.1	0.1	0.0	1.4	1.3	-0.1	1.3
3 month Euro LIBOR (%)	4.0	4.4	4.1	3.3	3.4	0.1	3.9	4.1	0.2	4.1

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

The outlook for a recovery of demand in Slovenia's main partners remains fairly positive, despite the uncovering of accounting irregularities in the United States, the fall in the stock market and lower-than-forecast economic activity in the first half of the year. All the same, survey results suggest that the recovery in 2002 may not be as robust as seemed likely in the spring. Most analysts believe that the forecasts published at the end of October (IMF) or in November (OECD) will be further revised downwards. The speed and scope of the turnaround in foreign demand are therefore subject to major uncertainty. Following the negative corrections to the outlook for this year, the forecasts assume a strong boost in imports in the main trading partners in 2003 and 2004.

The significant rise in the value of the euro in June and July necessitated a large revision to the assumed exchange rate of the euro against the US dollar. In view of the slow pace of recovery in the European economy, we have taken the lowest of the various forecasts. The forecast upswing in economic activity is likely to increase demand for oil, with the result that analysts are predicting that OPEC will increase the oil production quota in the autumn. Even if this moderates the steep rise in oil prices, the situation in the Middle East will remain a fundamental source of uncertainty. This situation existed at the time of the spring forecasts, as did the so-called war premium, and we have therefore amended our assumption only with respect to the observed evolution in the price in 2002. Increased economic activity may also bid up commodities prices, although this effect should be restrained by the high level of inventories and rather low rate of utilisation of capacity for commodities production.

The assumption of higher energy prices was a factor in the upward revision in the ECB’s inflation forecast for EU countries. On the other hand, the ECB’s June forecast was too early to take account of the appreciation of the euro, with the result that our assumptions about inflation in the euro zone are lower than those of the ECB. German producer price forecasts by foreign institutions have not altered significantly since the spring and consequently our own assumptions are little changed from May. Anticipated interest rate movements in the euro zone are also relatively unaltered. Any upward revisions due to potential inflationary pressures are unlikely to be very substantial, mainly on account of the rather slower pace of economic recovery. We therefore assume that interest rates will only rise in 2003.

4. 2. Activity, employment and wages

Indicators and forecasts of macroeconomic activity have become less positive. Forecast gross domestic product most strongly reflects stalling growth in the world economy, particularly among Slovenia’s main EU trading partners, and uncertainty in international affairs going forward.

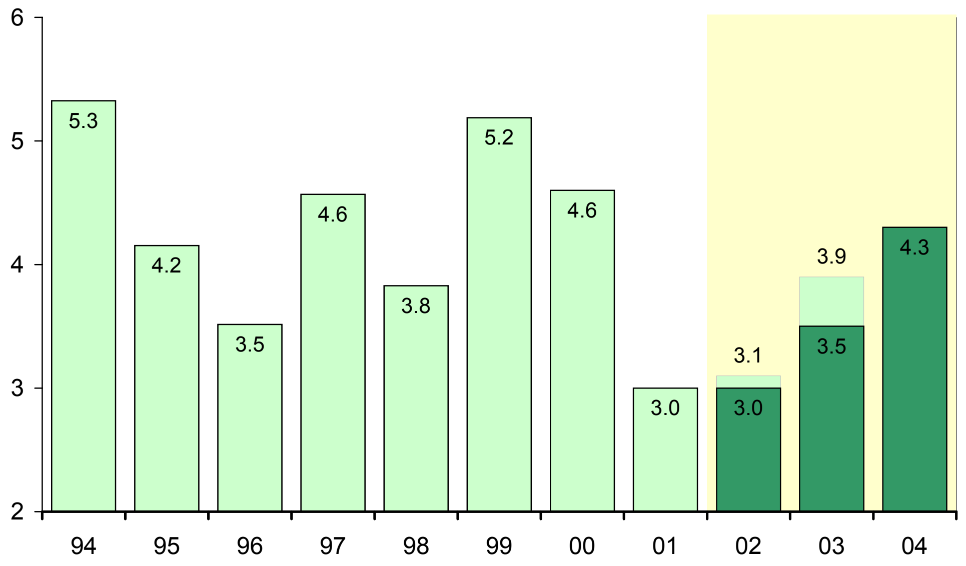
In view of present macroeconomic conditions we were already forecasting fairly modest economic growth this year in our spring inflation report. As a result of the worsened current situation the forecast has been further revised slightly downwards. The downward correction to the real GDP growth forecast for 2003 is of a larger magnitude of half of a percentage point. Economic growth might only reach its long-run equilibrium rate and exceed 4% in 2004. The results of our simulations can be taken to imply that the effect of strengthened foreign demand on domestic output is only felt with a lag of several quarters. Thus, most of the improvement in 2003 is due to domestic environment factors being more favourable.

Table 4.2: Economic growth, activity, employment and wages

				2002			2003			2004
	1999	2000	2001	May 02	Oct 02	Δ Change 02	May 02	Oct 02	Δ Change 02	Oct 02
	annual percentage changes in real terms unless indicated									
GDP	5.2	4.6	3.0	3.1	3.0	-0.1	3.9	3.5	-0.4	4.3
B GDP per capita (USD)	9,994	9,017	9,366	9,994	10,575	581	11,195	11,859	664	12,722
Employment	1.2	1.1	1.0	0.5	0.0	-0.5	0.5	0.5	0.0	0.8
Net wages	3.2	1.4	3.1	2.8	2.5	-0.3	3.1	2.2	-0.9	2.2
Productivity	4.0	3.5	2.0	2.7	3	0.3	3.4	3	-0.4	3.5

Source: Analysis and Research Department

Figure 4.1: Economic activity (real annual % growth of GDP)



Source: Analysis and Research Department

Projected growth in value added by sector shows the highest output growth in construction, financial intermediation and hotels and restaurants. Construction will benefit particularly from public sector investment in roads and housing. On the other hand, projected growth in manufacturing is rather weak due to the slow transmission of the impetus of foreign demand. Recovery in manufacturing, which accounts for more than a quarter of GDP, will be slow right up to 2004.

The two-year dip in output growth below trend has had a bigger impact on the labour market this year than we originally anticipated. Looking at the available figures, we consider that the number of people in employment as measured by the annual average will not increase relative to last year. Employment growth should resume next year,[7] and may be accelerated by improved economic conditions from 2004 onwards, which should help bring down the unemployment rate.

Real net wage growth is expected to rise more gently relative to the last medium-term projection. This accords with the sharp deterioration in labour market conditions. Real growth in average wages over the next two years is assumed to be more than one percentage point behind forecast productivity growth. A shallow increase in employment can therefore be expected next year amid continued rather weak conditions. Slow wage growth is also in line with announcements by the Government, which intends to curb public sector wages as part of savings measures in the budget.

4. 3. Domestic components of GDP expenditure

Although the revised forecast for real growth in domestic demand is lower than in May, it is still expected to grow at a similar or slightly faster rate than GDP. The main contributor to this rate of growth will be an acceleration in investment spending, while household spending is expected to respond more slowly than GDP growth. General government consumption has been reforecast based on new Government figures and the savings measures announced by it.

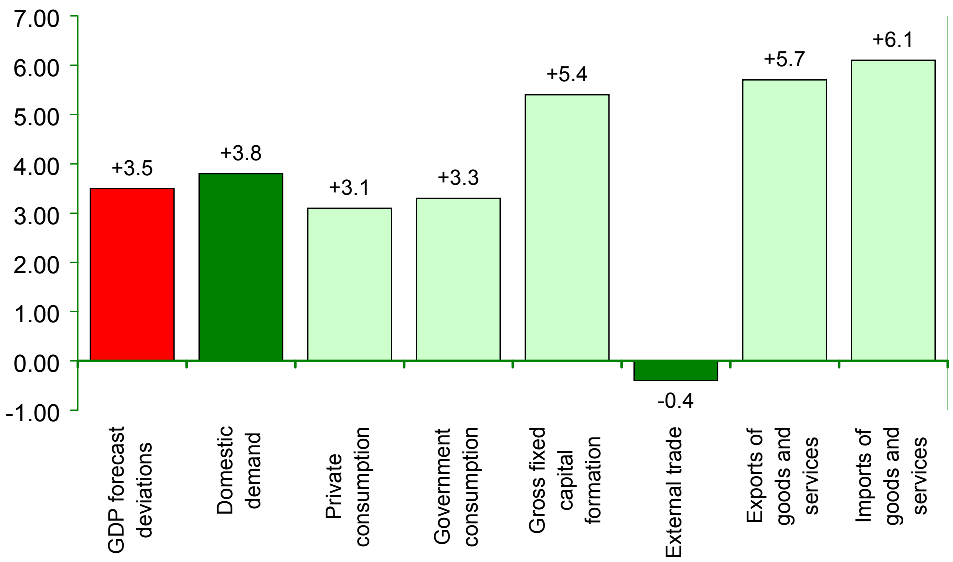
Table 4.3: Domestic demand

				2002			2003			2004
	1999	2000	2001	May 02	Oct 02	Δ Change 02	May 02	Oct 02	Δ Change 02	Oct 02
	real annual percentage changes									
Domestic demand	9.1	1.1	0.5	3.2	3.0	-0.2	4.4	3.8	-0.6	4.7
Private consumption	6.0	0.8	1.7	3.3	2.2	-1.1	3.7	3.1	-0.6	3.6
Government consumption	4.6	3.1	3.2	2.9	2.9	0.0	3.9	3.3	-0.6	3.1
Gross fixed capital formation	18.9	0.5	-3.7	3.3	4.6	1.3	6.1	5.4	-0.7	8.0

Source: Analysis and Research Department

Gross capital formation in Slovenia surged by almost one-fifth over the previous year in the run-up to the adoption of value added tax. This was primarily a case of intertemporal substitution, as economic agents, anticipating higher costs of investing as a result of the tax reform, brought forward investment activity to 1999 from the following year. Consequently, growth in gross capital formation in 2000 and 2001 was negligible and negative respectively. We believe that the effect of the introduction of VAT has now worked itself out and therefore that gross capital formation should start growing again at a rate that is more in line with its long-run average share of GDP, while simultaneously reflecting expected economic trends. All of this suggests a faster rate of real investment growth in the future, which we expect to start seeing this year. The forecast growth is between 4% and 5%, rising to 8% by 2004. At this rate, the share of gross capital formation in GDP in 2004 should once again be running at somewhat over 29% (as it did, for example, in 2000).[8] It should be noted that the substantial volatility in the rate of investment growth and its dependence on business expectations can cause this item to fluctuate rapidly. The point prediction is therefore subject to a wide margin of error. The upward adjustment of the forecast for 2002 due to stronger export demand, and the slight downward adjustment in 2003 due to the slower recovery of the GDP growth, are in line with empirically observed movements in this variable.

Figure 4.2: Real growth in GDP expenditure components (%)



Source: Analysis and Research Department

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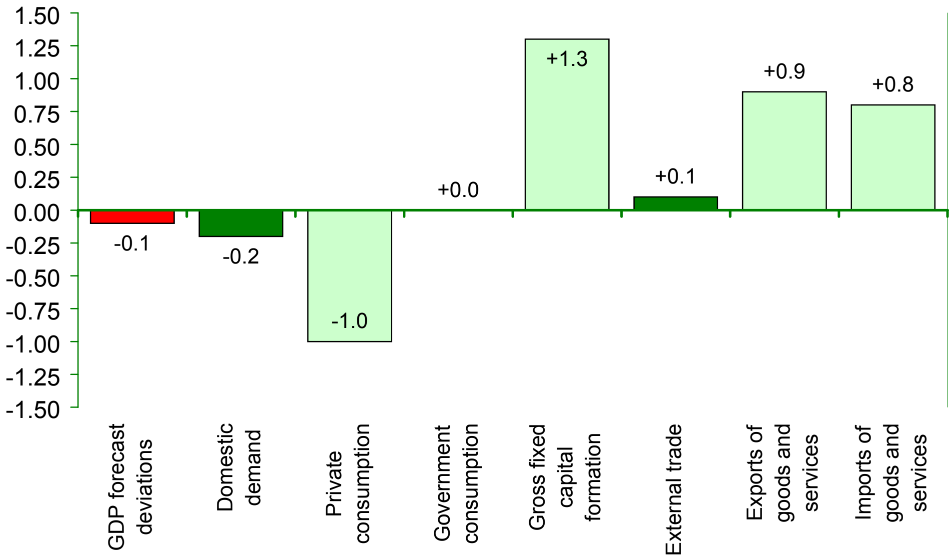
[7] Public sector eomplyment alone is expected to grow by around 2% due mainly to the professionalisation of the Slovenian army.
[8] In constant 1995 prices.

In view of the lower growth in real wages and the deteriorated labour market conditions, we expect consumers to continue to restrain spending in favour of precautionary saving. The forecasts are mainly down for this year, with the autumn forecast for real spending growth a third lower than that of the spring. A revision towards more moderate growth of a little over three per cent is envisaged for next year for the same reasons. Not until 2004, when Slovenian economic activity is expected to converge to its long-run trend rate, can expenditure growth closer to 4% be expected. Even if growth in private consumption starts to recover after 2002, it is still likely to lag behind GDP growth in the medium term, and its share of GDP will consequently fall. This should free up resources for the forecast accelerated growth of gross capital formation.

The forecasts for general government consumption take account of Government projections. These projections are based on spending restrictions set out in budget legislation and on projections for future years. On these figures, government consumption will lag slightly behind GDP growth, reflecting the Government's determination to restrain, and eventually reduce, the fiscal deficit to sustainable levels. Compared with the May forecasts, public spending is expected to be 0.6 percentage points lower in 2003. If these assumptions are born out, general government consumption will decline slightly as a proportion of GDP.

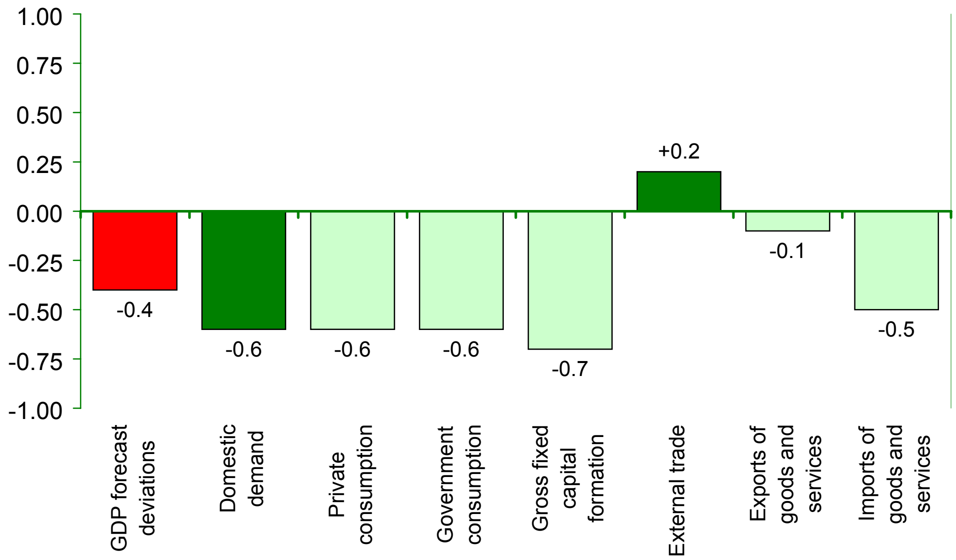
Figure 4.3: Forecast deviations for 2002 by GDP expenditure components (percentage points)



Source: Analysis and Research Department

Figures 4.3 and 4.4 summarise the deviation in the October forecast relative to that of May according to components of GDP expenditure. In 2002 the forecast for domestic demand has worsened slightly, as the anticipated higher growth in investment fails to outweigh the revision to the forecast real growth of household consumption because of its smaller share of GDP. Growth in domestic demand continues to lag behind the earlier forecasts in 2003, as the newly available data have caused negative adjustments in all components. At the same time, the contribution of foreign trade to real GDP growth is more positive in both forecasts. A more detailed presentation of the projected external balance and conditions of financing is provided in the next section.

Figure 4.4: Forecast deviations for 2003 by GDP expenditure components (percentage points)



Source: Analysis and Research Department

4. 4. External balance and conditions of financing

Balance of payments:

Slovenia's balance of payments will improve this year and the next compared with both 2001 and the forecasts from the second quarter of 2002. The surplus in current transactions will grow from USD 31 million in 2001 (rather than the deficit of USD 67 million estimated from provisional figures in the first half of the year) to around USD 300 million in 2002, or 1.4% of GDP. In the next two years the surplus is expected to grow to about 2% of GDP. The main cause of the improved balance of payments has been greatly improved terms of foreign trade. Another finding is that a major contributor to the balance of payments surplus is substitution within the regional structure of exports, and specifically the offsetting of declining exports to depressed western markets by increased exports to the countries of former Yugoslavia, Russia and the CEFTA countries. The actual volume of trade, however, will continue to move in favour of the rest of the world. Part of the reason for this is the continued tight exchange rate policy with which the Bank of Slovenia is seeking to combat inflation.

The most important external factor affecting the improved balance of payments this year and the next is the improvement in the terms of trade with the rest of the world. The terms of trade are expected to improve by 2.8% this year and 1.2% in 2003 because of the anticipated reduction in the value of the US dollar against the euro. This is because dollar export prices will grow faster than import prices, due to the smaller share of the US dollar in the composition of Slovenian exports than in imports. Terms of trade are therefore assumed to improve by 0.4% in 2004.

Table 4.4: Balance of payments

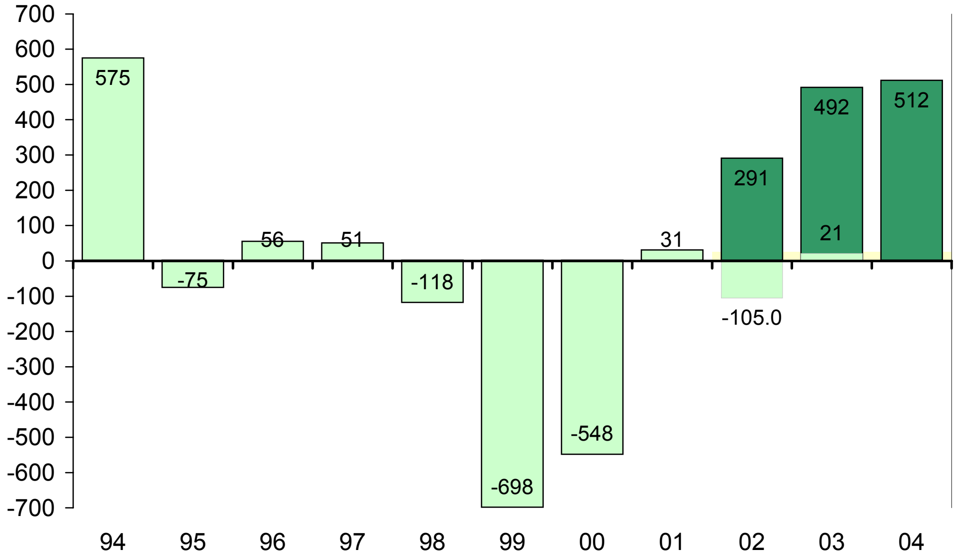
					2002			2003		2004
	1999	2000	2001	May 02	Oct 02	Δ Change 02	May 02	Oct 02	Δ Change 02	Oct 02
	r real annual percentage changes									
Exports of goods and services	1.7	12.7	6.2	4.2	4.9	0.7	5.8	5.6	-0.2	6.4
Imports of goods and services	8.2	6.1	2.1	4.4	4.5	0.1	6.5	6.1	-0.4	7.0
Current account: USD millions	-783	-612	-67	-230	291	521	-396	492	888	512
- as a % of GDP	-3.9	-3.4	-0.4	-1.2	1.4	2.6	-1.8	2.1	3.9	2.0
Terms of trade	-0.4	-5.2	0.9	0.5	2.8	2.3	0.5	1.2	0.7	0.4

Source: Analysis and Research Department

Real export volumes may grow slightly more slowly than originally forecast, by between 0.2 and 0.4 percentage points. The main reason for the slower growth is the slower-than-forecast pace of recovery in the international economy and foreign trade. Thus, import demand, measured in terms of a weighted sum of demand from the eight main trading partners, will grow by only 0.6% this year. Faster recovery and a return of foreign trade to its trend rate of past years is not expected until 2003.

Export growth may also be impacted by a real appreciation of the domestic currency due to faster growth of domestic than foreign prices, given the projected movement in the exchange rate of the tolar. The impact on competitiveness of this real appreciation is perceptible in slower growth in exports than in imports. Import volumes are expected to grow from 4.5% to 7% over the forecast period, while export volumes are predicted to grow from 4.9% to around 6.4%. On the other hand, some of the countries in transition have experienced a much higher real appreciation of their currencies, which may give Slovenian goods a significant competitive advantage in markets where they compete.

Figure 4.5: Current account of the balance of payments



Source: Analysis and Research Department

Export growth may also be impacted by a real appreciation of the domestic currency due to faster growth of domestic than foreign prices, given the projected movement in the exchange rate of the tolar. The impact on competitiveness of this real appreciation is perceptible in slower growth in exports than in imports. Import volumes are expected to grow from 4.5% to 7% over the forecast period, while export volumes are predicted to grow from 4.9% to around 6.4%. On the other hand, some of the countries in transition have experienced a much higher real appreciation of their currencies, which may give Slovenian goods a significant competitive advantage in markets where they compete.

On the positive side, the fall in export demand from the European developed economies will continue to be offset in part by an expansion of trade with the Federal Republic of Yugoslavia, which overtook trade with the Russian Federation in the first seven months of the year. An increase in trade with the latter is also expected, particularly since oil revenues, which are the major source of Russian import finance, have been boosted by increasing prices, which are expected to remain at relatively high levels in the next two years. Exports to CEFTA countries, where economic growth has turned out to be more robust than some analysts were predicting in view of the state of the global economy, will also be healthy.

This year's improved external trade results will be aided most by developments on the imports side. Growth in the volume of exports will outpace that of imports. Imports of intermediate goods are expected to grow somewhat faster than was forecast in May, due partly to higher prices of refined petroleum products in the second half of 2002, while growth in imports of capital goods and consumer goods are expected to fall by 1.2 and 2.7 percentage points respectively. Growth in these imports is not expected to pick up until the second half of next year.

The services account, after growing this year by over USD 90 million, will level off at somewhat in excess of USD 600 million, partly under the influence of exchange rates. Projected imports and exports of transport services are in line with the growth in imports and exports of goods. The balance of trade in travel in the next few years is expected to grow more slowly than hitherto, partly because the growth in imports of travel is predicted to outstrip that of exports due to the boost in the purchasing power of domestic consumers from the real appreciation of the tolar. Other services are expected to grow somewhat faster against a background of growing foreign investment in Slovenia.

No major change is expected in the next couple of years to either labour income or the balance of current transfers. In the balance of capital income, a reduction in net outgoings is expected in the next few years because of faster growth of foreign currency reserves compared with the external debt. The main source of this growth will be foreign direct investment on one hand, specifically sales of domestic property to foreigners, and growth in foreign interest rates on the other. If the predicted level of foreign direct investment in Slovenia is realised, foreign exchange reserves will exceed the level of external debt from 2003 onwards.

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 national economy. In 2003 and 2004 we expect moderate financial inflows from the rest of the world which will gradually abate. Net financial inflows are thus expected to fall from almost 6% of GDP this year to under 2% of GDP in 2004. Foreign direct investments, although expected to be significantly down on this year, when they amounted to 8% of GDP, are expected to remain the main source of financial inflows. In creating these forecasts we have only been able to incorporate Government projections on privatisation and some additional foreign direct investments in enterprises.

Table 4.5: Capital flows

				2002				2003		2004
				May	Oct	Δ Change	May	Oct	Δ Change	Oct
	1999	2000	2001	02	02	02	02	02	02	02
	real annual percentage changes									
Net financial inflows (% of GDP)	3.2	5.8	8.7	5.6	5.7	0.1	4.7	3.9	-0.8	1.6
of which: foreign direct investments	0.7	0.7	3.0	4.4	8.1	8.1	3.2	3.1	-0.1	1.9
	at year-end									
Foreign exchange reserves (USD millions)	4,115	4,376	5,738	6,813	7,873	1,060	7,635	9,304	1,669	10,231
- as % of GDP	20.6	24.3	30.6	34.1	37.2	3.1	34.1	39.2	5.1	40.2
External debt (USD millions)	5,400	6,217	6,717	7,596	8,073	504	8,533	8,852	319	9,508
- as % of GDP	27.0	34.5	35.9	37.9	38.2	0.3	38.0	37.3	-0.7	37.4

Source: Analysis and Research Department

Commercial credits were greater in the first half of the year than in the whole of 2001 and are expected to continue to form a large fraction of outflows. On one hand this is due to the reorientation of exports to markets with less 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 weak economic situation of Slovenia's major trading partners. We have assumed continued moderate growth in this type of financing of foreign trading partners for the next two years. Likewise, financing of foreign partners through loans, investment in foreign securities and foreign direct investment is also expected to increase. These outflows amounted to over USD 150 million in the first half of the year. The strong outflows of foreign currency from the household sector, which has renewed half of its foreign currency holdings that flowed into the banking system at the time of the changeover to the euro, are likely to cease in the second half of this year.

Foreign exchange reserves will grow because of both the anticipated surplus in the current account of the balance of payments and the growth of debt-creating financial inflows from abroad. The external debt is predicted to grow at a slower rate, with the result that by mid-2003 the level of foreign currency reserves should surpass the outstanding external debt.

Total domestic and foreign financing of enterprises in 2003 and 2004 will be similar to this year and will bolster the anticipated growth in economic activity and investment against a background of falling inflation. As the process of convergence with the EU progresses, the options for sourcing finance abroad will widen, although at the same time the opening-up of the Slovenian financial system may increase its competitiveness, forcing a reduction in domestic interest rates. On the whole, therefore, the share of foreign financing is not expected to change much in the next two years.

Household credit has continued to decline this year. Consumer spending will not grow very much over the next two years and will lag behind GDP growth. An increase in household borrowing is therefore not expected until 2004.

Domestic borrowing has increased this year as a result of the widening deficit and the shift from foreign to domestic sources of finance. The Government has undertaken a major restructuring of the debt. As a result, domestic borrowing requirements will be substantially lower next year, so that year-on-year growth in domestic debt contracting will fall from more than 30% in the second quarter of this year to less than 8% at the end of 2004.

The shift from short-term to long-term borrowing is expected to continue in 2003 and 2004. This movement may also be stimulated by increased investment and an expected lengthening of the maturity of deposits. Foreign currency borrowing is expected to remain strong in the context of rather heavy foreign currency inflows and a gentle and cautious depreciation of the tolar.

Fairly heavy inflows in the balance of payments will continue to be the main force driving the growth of broad money. The projections suggest foreign and domestic credits will have a roughly equal contribution to M3 growth towards the end of 2004. The next section describes forecast movements in the monetary sector liabilities.

4. 5. Projections of monetary aggregates

A sharper slowdown in the growth of the monetary aggregates is expected over the next two years. At the end of the current year, the broad M2 and M3 aggregates will still show rather higher twelve-month growth, probably in the region of 20%. M1 growth at the end of the year is expected to be about 15%, and to hover around 11% per annum in the next two years.

Table 4.6: Monetary system

	1999	2000	2001	May 02	2002 Oct 02	Δ Change 02	May 02	2003 Oct 02	Δ Change 02	2004 Oct 02
	real annual percentage changes (last quarter)									
M1	21.3	7.0	12.8	15.4	15.7	0.3	15.9	11.5	-4.4	11.3
M3	16.0	16.5	23.9	19.8	20.3	0.5	14.6	11.4	-3.2	10.9
Domestic credit	20.7	17.8	19.1	18.5	17.0	-1.5	16.9	8.7	-8.2	8.3

Source: Analysis and Research Department

In terms of the currency composition of broad money, foreign exchange deposits will grow more slowly than tolar deposits. Total foreign exchange deposits of households and firms in the last quarter of this year are expected to have grown by 14.6% compared with the same period last year, as against 23.8% for tolar deposits. The slower growth of foreign currency compared with tolar deposits is mainly due to a steep rise in retail foreign currency deposits in the last three months of 2001 in reaction to the changeover of national currencies to the euro. Set against slow growth in foreign currency deposits, the main component of M3 growth in the next two years will be growth in tolar deposits, which are predicted to grow by 16.5% in 2003 and 14.4% in 2004. Current trends in the term structure are expected to continue, with long-term tolar time deposits growing around twice as quickly as short-term ones. The depreciation of the nominal tolar exchange rate at a slower rate than inflation can also be expected to encourage more rapid growth of tolar deposits compared with foreign currency deposits.

The most significant factor affecting growth in the money supply this year was the one-off impact of the conversion of EU national currencies to the euro. This change has principally affected year-on-year monetary growth in 2002, but will also influence money supply in succeeding years to some extent. Changes in the ownership structure of assets have also had a significant impact in cases where domestic interests have been sold to foreign corporations. Such deals, in significant volume, mainly affect transactions demand for money and, following completion of the transaction, the growth of broader money aggregates. These shocks, being by nature shocks to the demand for money rather than its supply since what is involved is a means of saving, cannot be classed as inflationary. Past experience indicates that they take a long time to die down, i.e. monetary aggregates adjust towards their long-run equilibrium very slowly. In this particular case it is linked with the gradual reestablishment of an optimal portfolio structure on the part of savers.

The composition of the monetary aggregates is also likely to be affected by movements in the relative price of the various components. Tolar interest rates are expected to come down in line with forecast inflation. This forecast is based on the assumption that inflation-linked indexation of long-term interest rates on tolar time deposits of over one year will be retained.

4. 6. Inflation

Price growth in 2002 is estimated to have exceeded our May forecast. The chief causes were high price rises in monopolised industries and rising oil prices in the second half of the year. World petroleum prices were pushed up by the worsening crisis in the Middle East, and most recently by the likelihood of war with Iraq. The world oil price is currently fluctuating around USD 29 per barrel, USD 4 more than envisaged in our May forecast.

Table 4.7: Projected inflation

				2002			2003			2004
	1999	2000	2001	May 02	Oct 02	Δ Change 02	May 02	Oct 02	Δ Change 02	Oct 02
	real annual percentage changes (last quarter)									
Consumer prices	8.0	9.2	7.3	7.0	7.5	0.5	4.1	5.3	1.2	3.4
Free prices	7.1	6.8	7.9	6.9	7.0	0.1	3.7	5.1	1.4	3.0
Administered prices	12.0	21.7	5.0	7.6	9.8	2.2	5.7	5.7	0.0	5.0

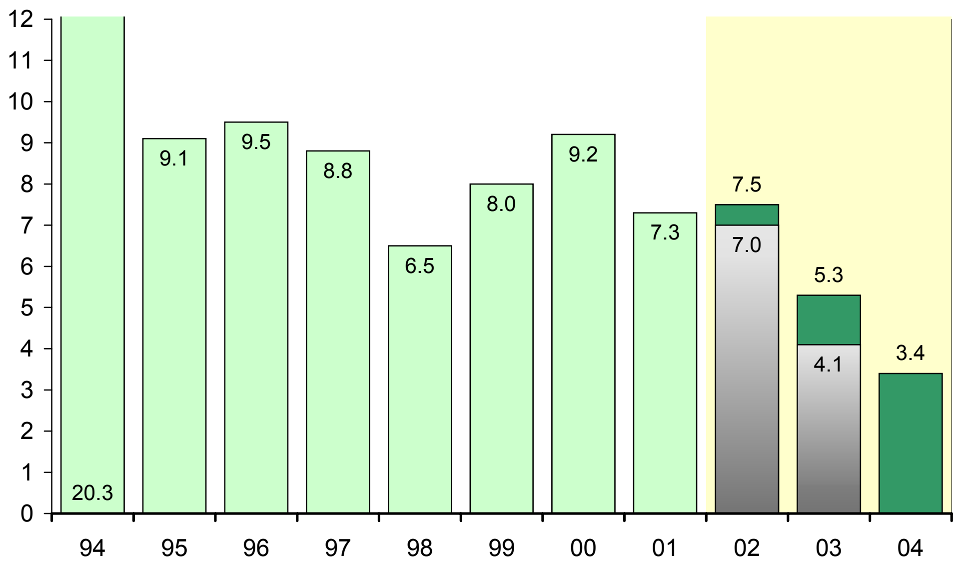
Source: Analysis and Research Department

Prices policy, with a further increase in tobacco excise duty in July and price rises in the public part of the non-tradable sector, pushed inflation and inflation expectations up further. Exchange rate movements, and specifically the depreciation of the tolar against the euro at a slower rate than inflation and the significant strengthening of the euro against the US dollar, exerted a restraining effect on inflation through reduced import prices.

Inflation is expected to be around 7.5% at the end of 2002, provided the Government sticks to its administered price policy programme and prices of refined petroleum products on international markets do not change significantly. The possibility of war in the Middle East and the crisis in the region continue to be the biggest source of uncertainty with regard to external inflationary pressures because of the rapid potential repercussions for domestic oil prices.

The rate of price growth is expected to slow down next year to reach around 5.3% at the end of 2003 in the base case. The forecast is of course premised on the assumed values of the factors affecting inflation and the assumption that there will be no major exogenous price pressures from either the international or the domestic environment. Among the key assumptions about factors directly affecting inflation, average year-on-year growth in administered prices is assumed to be 6.7% at the end of this year and 5.7% at the end of 2003. In the base case, real annual wage growth in 2003 is assumed to be 2.2%, the average price per barrel of oil around USD 25, and the US dollar/euro exchange rate 1.01. It should be noted that economic policy, along with government policy, are exogenous variables. The assumed strengthening of the euro against the dollar is expected to remain an important factor in moderating domestic inflation.

Figure 4.6: Annual inflation (year-on-year as at last quarter of 2001, per cent)

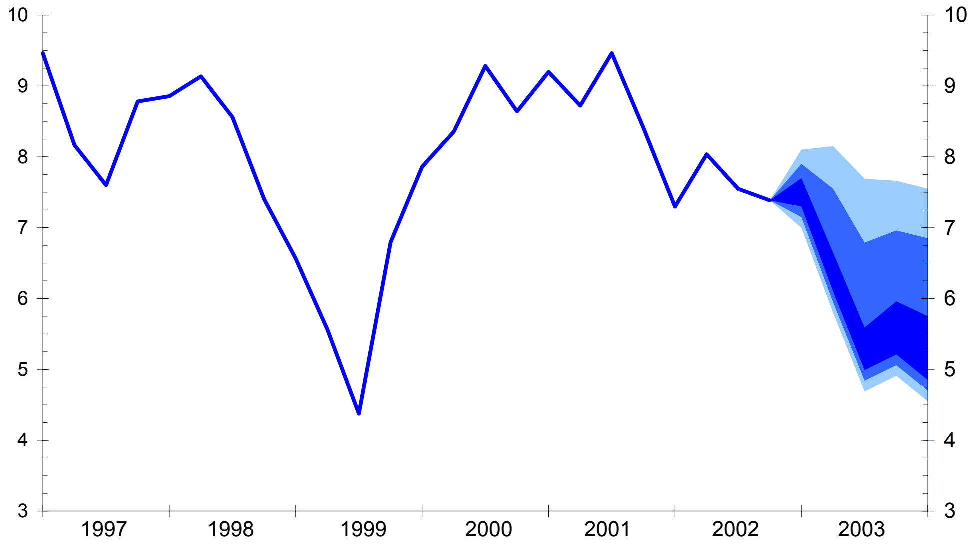


Source: Analysis and Research Department

It must be emphasised that inflation is an endogenous phenomenon whose level depends on fluctuations in its determinants and hence on assumptions regarding them. Table 4.7 gives projected price trends for the base case only. Our baseline inflation projection excludes the inflationary impact of the announced rise in tobacco excise duty next year. Initial estimates suggest that this will contribute a further 0.5 percentage points to the inflation rate. Figure 4.7 depicts other, more or less likely scenarios. In the most optimistic scenario, which envisages very favourable movements in all variables influencing price growth, inflation is around 4.5% at the end of 2003. This would require a sizeable fall in the international oil price, a further strengthening of the euro against the dollar and a deferment of the rise in tobacco excise duty already announced. It is most likely, however, that twelve-month growth in consumer prices at the end of 2003 will lie between 4.9% and 5.8%. We have not simulated the effect of tighter government and monetary policy resulting from improved coordination of economic policy-making.

The point prediction for inflation is considered to be biased downwards and true inflation at the end of 2003 is more likely to be above 5.3% than below. This in turn reflects the fact that the determinants of inflation are more likely to move in an adverse direction. Any further tax pressures on inflation arising from the adaptation of Slovenian legislation and standards to those of the EU would entail a further upward revision of the forecast. Under the most pessimistic scenario, in which all variables influencing inflation move adversely, inflation at the end of 2003 could even exceed 7%. This would be the case given a high world oil price, an appreciation of the US dollar against the euro, further rises in excise duty on tobacco, alcohol and petrol, and higher taxes on environmental discharges, water taxes and charges for use of the public drinking water supply system.

Figure 4.7: Quarterly inflation and inflation forecast



Source: Analysis and Research Department

A gradual reduction in inflation is predicted for 2004. Few data were available on which to base the estimates of trends in factors affecting inflation, and the uncertainty surrounding the projection for that year is consequently greater. The projection does not envisage any major shocks, be they domestic or foreign. Administered prices in 2004 are assumed to grow faster than the overall price index but on average by no more than a percentage point or so. The oil price is expected to be in the region of USD 23.3 per barrel in 2004. In the base case, inflation is predicted to be around 3.5% at the end of that year. No further tax impacts on inflation are assumed.

Table 4.8: Selected main indicators and comparison of forecasts*

				2002			2003			2004
				May	Oct	Δ change	May	Oct	Δ change	Oct
	1999	2000	2001	02	02	02	02	02	02	02
Activity, employment and wages	*real annual percentage changes unless indicated*									
GDP	5.2	4.6	3.0	3.1	3.0	-0.1	3.9	3.5	-0.4	4.3
GDP per capita (USD)	9,994	9,017	9,366	9,994	10,575	581	11,195	11,859	664	12,722
Employment	1.2	1.1	1.0	0.5	0.0	-0.5	0.5	0.5	0.0	0.8
Net wages	3.2	1.4	3.1	2.8	2.5	-0.3	3.1	2.2	-0.9	2.2
Productivity	4.0	3.5	2.0	2.7	3	0.3	3.4	3	-0.4	3.5
Domestic demand	*real annual percentage changes*									
Domestic demand	9.1	1.1	0.5	3.2	3.0	-0.2	4.4	3.8	-0.6	4.7
Private consumption	6.0	0.8	1.7	3.3	2.2	-1.1	3.7	3.1	-0.6	3.6
Government consumption	4.6	3.1	3.2	2.9	2.9	0.0	3.9	3.3	-0.6	3.1
Gross fixed capital formation	18.9	0.5	-3.7	3.3	4.6	1.3	6.1	5.4	-0.7	8.0
Balance of payments	*real annual percentage changes unless indicated*									
Imports of goods and services	1.7	12.7	6.2	4.2	4.9	0.7	5.8	5.6	-0.2	6.4
Exports of goods and services	8.2	6.1	2.1	4.4	4.5	0.1	6.5	6.1	-0.4	7.0
Current account: USD millions	-783	-612	-67	-230	291	521	-396	492	888	512
- as a % of GDP	-3.9	-3.4	-0.4	-1.2	1.4	2.6	-1.8	2.1	3.9	2.0
Terms of trade	-0.4	-5.2	0.9	0.5	2.8	2.3	0.5	1.2	0.7	0.4
Net financial inflows (% of GDP)	3.2	5.8	8.7	5.6	5.7	0.1	4.7	3.9	-0.8	1.6
of which: foreign direct investments	0.7	0.7	3.0	4.4	8.1	8.1	3.2	3.1	-0.1	1.9
	4,115	4,376	5,738	6,813	7,873	1,060	7,635	9,304	1,669	10,231
International reserves (USD millions)	20.6	24.3	30.6	34.1	37.2	3.1	34.1	39.2	5.1	40.2
as % of GDP	5,400	6,217	6,717	7,596	8,073	504	8,533	8,852	319	9,508
External debt (USD millions)	27.0	34.5	35.9	37.9	38.2	0.3	38.0	37.3	-0.7	37.4
as % of GDP										
Monetary system	*real annual percentage changes (last quarter)*									
M1	21.3	7.0	12.8	15.4	15.7	0.3	15.9	11.5	-4.4	11.3
M3	16.0	16.5	23.9	19.8	20.3	0.5	14.6	11.4	-3.2	10.9
Domestic credit	20.7	17.8	19.1	18.5	17.0	-1.5	16.9	8.7	-8.2	8.3
Prices	*real annual percentage changes (last quarter)*									
Consumer prices	8.0	9.2	7.3	7.0	7.5	0.5	4.1	5.3	1.2	3.4
Free prices	7.1	6.8	7.9	6.9	7.0	0.1	3.7	5.1	1.4	3.0
Administered prices	12.0	21.7	5.0	7.6	9.8	2.2	5.7	5.7	0.0	5.0
Predicted exogenous factors	*annual percentage changes unless indicated*									
Foreign demand	6.9	9.8	2.0	3.2	3.0	-0.2	7.2	7.7	0.5	7.7
Exchange rate (USD/EUR)	1.067	0.924	0.895	0.894	0.947	0.053	0.939	1.010	0.071	1.020
Oil price (USD per barrel)	17.9	28.5	24.4	23.8	24.5	0.7	25.0	25.0	0.0	23.3
Commodities prices	-9.5	3.2	-6.5	-2.2	-2.2	0.0	2.8	2.8	0.0	2.8
Consumer prices, EU	1.1	2.3	2.6	1.8	2.2	0.4	1.5	1.8	0.3	1.8
Producer prices, Germany	-0.3	3.3	1.3	0.1	0.1	0.0	1.4	1.3	-0.1	1.3
3 month Euro LIBOR (%)	4.0	4.4	4.1	3.3	3.4	0.1	3.9	4.1	0.2	4.1

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

* Series are annual averages unless otherwise indicated.

5. SHORT-TERM MONETARY POLICY ORIENTATION

5. 1. Introduction

Current inflation trends are markedly at variance with the target set in *"The Medium-term Monetary Policy Framework of the Bank of Slovenia*" in autumn 2001. At that time, the Bank of Slovenia in its medium-term orientation set itself the fundamental task of bringing inflation down to a target level of 4% by the end of 2003. According to the latest projections, which are based on new assumptions about developments in international and domestic determinants of inflation, economic policy assumptions and the trends in inflation already observed this year, the inflation target at the end of 2003 will be exceeded.

Despite the persistence of inflation at a relatively high level compared with the countries Slovenia is set to join, we consider the level of price stability to be sufficient for there to be no threat to long-term economic development and growth. Price stability can be considered adequate when firms' business decisions are not distorted by uncertainty concerning the level and volatility of inflation, and when they can rely on sufficiently stable and predictable conditions of financing.

However, without appropriate economic policy adjustments, neither the current level nor the predicted movement in inflation yet comply with the conditions for a soft transition to the ERM2 system and subsequent adoption of the euro as the common currency. Once a central exchange rate with the euro was adopted, the overly high current level of inflation would be apt to cause significant costs of adjustment to the real economy and therefore, at least temporarily, jeopardise real convergence. Although price stability is within the remit of the Bank of Slovenia, it is our view that a rapid reduction involving the fewest side effects cannot be accomplished without concerted action across all areas of macroeconomic policy.

5. 2. The environment for the operation of monetary policy in 2003

The Bank of Slovenia's policies hitherto have been tailored towards the gradual stabilisation of prices with a view to a soft transition to the common currency that minimises the costs to the Slovenian economy. In autumn 2001 the Governing Board of the Bank of Slovenia, as required by the process of joining European monetary structures, set an inflation target committing the Bank of Slovenia to gear its monetary and exchange rate policy to cutting inflation in the shortest possible time. One of the chief medium-term priorities of the Bank of Slovenia is to prepare the way for Slovenia to join EMU as early as possible.

Carrying out the policy of soft transition is proving increasingly hard. The main reason is the shrinking time span separating Slovenia from its scheduled integration with the EU. The Bank of Slovenia views the situation with some concern, since new findings, detailed in this report, are hampering effective counterinflationary measures.

One finding is that this year's rise in inflation is mainly the product of cost-push factors. Weak domestic demand, limited growth in consumer spending power and subdued private sector demand for credit demonstrate that the pressure on prices is not coming from the demand side. Nor is domestic demand projected to increase in future by enough to fuel inflationary pressure.

We conclude, further, that these supply-side inflationary pressures are no longer one-off and temporary in nature. There are more and more indications that they are becoming systemic. In many cases, they involve fiscal shocks and excessive growth of prices under the direct or indirect control of the Government, largely prompted by difficulties in raising funds to finance public sector measures and spending programmes. Frequently, too, they stem from structural reforms associated with the process of gaining entry to the European Union and will persist for several more years. In our opinion, many of the price pressures described are not linked to necessary structural reforms and are for the most part excessive relative to any real cost structure that might justify them. From the perspective of their impact on inflation, their timing should be better managed. Just the first-order effects of these factors will significantly raise the level of inflation this year, which will thus be above the projected level. And there are signs that next year, too, these factors will play a major part in the stubborn persistence of inflation. It is also necessary to take into account their second-order effects on price growth. These arise via transmission to prices elsewhere in the economy and are viewed as a signal for additional price rises in sectors where competition is limited. For these reasons, the ultimate inflationary effect is much greater than the direct effect.

5. 3. Joint measures by the Bank of Slovenia and the Government of the Republic of Slovenia

In view of the above findings on the source of current inflationary pressures, the scope for the Bank of Slovenia to take powerful and fast-acting counterinflationary measures is limited. Monetary authorities can affect the macroeconomic cycle and inflation mainly by influencing the components of aggregate demand. In circumstances where inflation is generated on the supply side, restrictive measures can only further dampen down already subdued private consumption and investment. This could significantly slow down the recovery of the Slovenian economy and cause major harm to the real economy and the labour market, while taking some time to feed through to inflation itself.

The Bank of Slovenia will use interest rate and exchange rate measures to continue the monetary policy it has pursued hitherto and which is set down in *"The Medium-term Monetary Policy Framework of the Bank of Slovenia* ". In the given economic conditions, the Bank will also pursue a restrictive stance by means of exchange rate policy. Retarding the depreciation of the domestic currency restrains the effect of cost-push factors emanating from abroad (import prices) on the domestic price level. However, a more aggressive lowering of inflation based on halting the rise in the exchange rate entails added risks and potential adverse side effects. Specifically:

- There is a danger that economic sectors in which prices are not influenced by the exchange rate of the tolar will simply fill the gap created by further pressure on the exchange sector. Under a tightening of exchange rate policy, the burden of reducing inflation falls mainly upon the tradable sector, where the rate of inflation is near to its lowest, a phenomenon chiefly reflecting effective cost control. Restraining the growth of the exchange rate is an inappropriate instrument with which to give incentives for greater efficiency in the non-tradable and public sectors, where the bulk of inflation is being generated.
- There is a danger that monetary policy might push the economy into a state of increased domestic demand which, if taken too far, could have the reverse effect on inflation. The Bank of Slovenia must adjust, and in this case lower, interest rates in line with the exchange rate, since the central bank cannot separately control the interest rate and the exchange rate[9] in circumstances of free flow of capital.

[9] A more detailed discussion of the scope for monetary policy in terms of the alignment of movements in the nominal tolar exchange rate with interest rates can be found in the May 2002 publication Short-term Implementation of the Monetary Policy Orientation of the Bank of Slovenia.

Its obligation to reduce inflation notwithstanding, the Bank of Slovenia cannot by itself bring the inflation rate down effectively in a very short space of time, especially if it is to avoid the significant costs for the economy that such a policy potentially implies. Swift and effective counterinflationary action therefore entails suppressing underlying inflationary pressures. The objective set cannot be achieved within the envisaged timetable unless appropriate changes are made to other aspects of economic policy. Economic policy-making in the areas for which the Slovenian Government has responsibility has a major role to play in curbing inflationary pressure over the next two years.

The Slovenian Government will have to adjust economic policies within its domain so that inflation can be reduced to its target level and so that undesirable and unnecessary costs associated with reducing inflation can be avoided. The Bank of Slovenia is relying on the Slovenian Government to implement measures in support of its monetary policy:

- Carrying-through of the envisaged policy of tight public spending and rational use of public resources, not only by the Slovenian Government but by all users of public funds.
- Moderate public sector wage growth.
- Restraints on the growth of all prices under direct or indirect government control to a rate within that of the general price level, and hence no more than the target rate of between 4% and 5% in 2003. Deferment of all non-essential tax measures with the aim of avoiding additional inflationary pressure caused by fiscal shocks.

Unless these measures are effected, a further year of counterinflationary action may be lost, which could cause Slovenia's admission to European Economic and Monetary Union to be postponed.

* * *

Coordinated action by the Bank of Slovenia and the Slovenian Government is urgently required for the sake of bringing inflation down to the European level on a sustainable basis, as reflected in the conditions for successful participation in ERM2 and subsequent adoption of the euro. The need for a faster sustainable reduction in inflation follows from the shared preference of the Slovenian Government and the Bank of Slovenia for the earliest possible admission to ERM2 and EMU. A prerequisite for entry to ERM2 without serious repercussions for the Slovenian economy, and for successful participation thereafter, is a reduction of the inflation rate to around 4% by the end of 2003.

At several places in this document it has been remarked that unforeseen fiscal measures and price increases under the control of the Slovenian Government have been a major contributing factor in this year's inflation rate failing to meet the goal set for it last autumn. The Bank of Slovenia therefore expects the Slovenian Government in 2003 to adopt all measures necessary for the successful coordination of fiscal and monetary policy, with the objective of bringing about a substantial drop in inflation. In our view, the factor most seriously jeopardising this objective is the risk that monetary policy may not be backed up by appropriate economic policy measures within the domain of the Government.

Given successful coordination among all macroeconomic policy-makers, we believe that bringing inflation close to its 4% target by the end of 2003 remains feasible in the current circumstances.

APPENDICES

* * *

1. **Graphs of movements in inflation and money**

2. **Graphs of developments in transition countries**

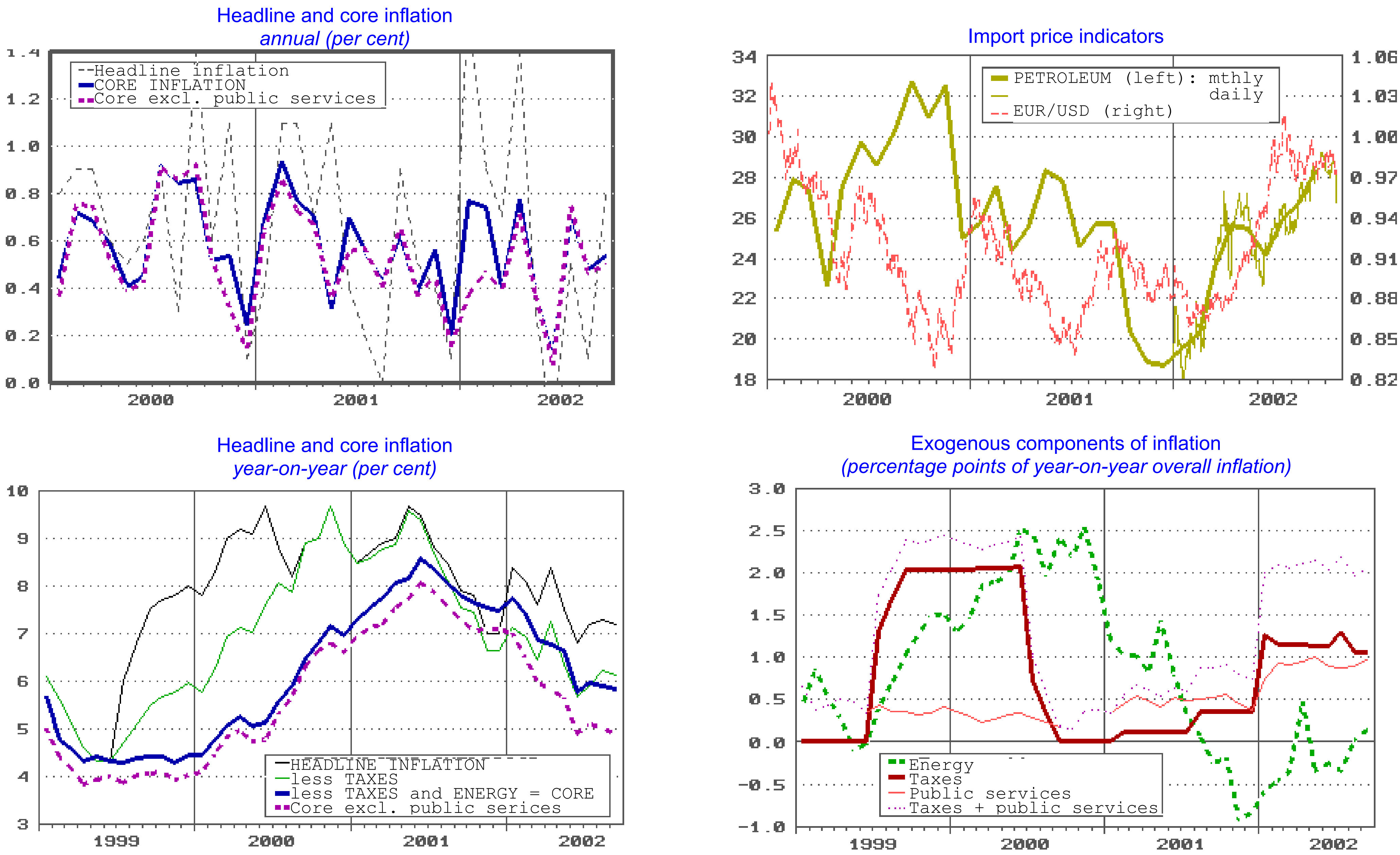
BANKA SLOVENIJE

BANK OF SLOVENIA

MONETARY POLICY IMPLEMENTATION REPORT

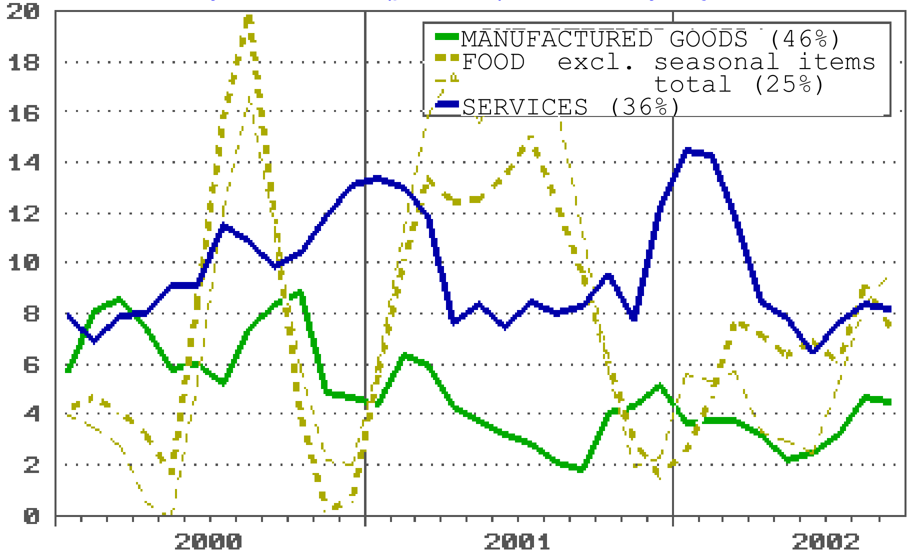
APPENDIX:

GRAPHS OF MOVEMENTS IN INFLATION AND MONEY

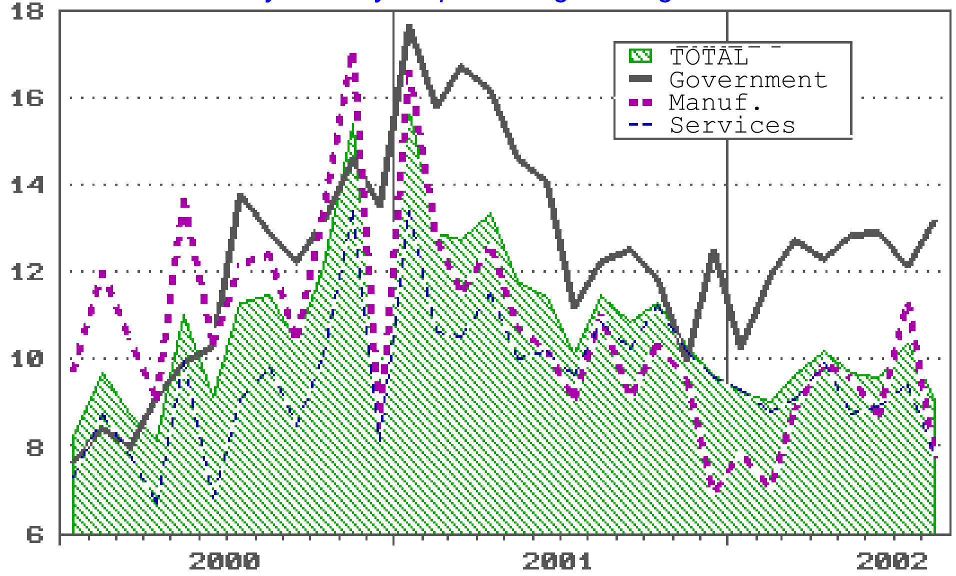

Headline and core inflation
annual (per cent)
--Headline inflation
CORE INFLATION
Core excl. public services
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2000
2001
2002
Import price indicators
PETROLEUM (left): mthly
daily
EUR/USD (right)
34
32
30
28
26
24
22
20
18
1.06
1.03
1.00
0.97
0.94
0.91
0.88
0.85
0.82
2000
2001
2002
Headline and core inflation
year-on-year (per cent)
HEADLINE INFLATION
less TAXES
less TAXES and ENERGY = CORE
Core excl. public serices
10
9
8
7
6
5
4
3
1999
2000
2001
2002
Exogenous components of inflation
(percentage points of year-on-year overall inflation)
Energy
Taxes
Public services
Taxes + public services
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
1999
2000
2001
2002

Figures 2

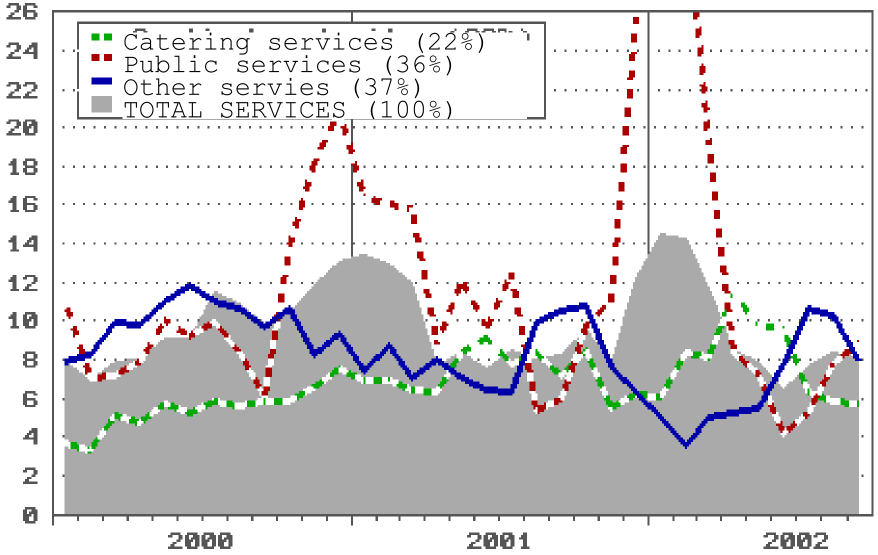
Breakdown of core inflation
monthly annualised (per cent), seasonally adjusted



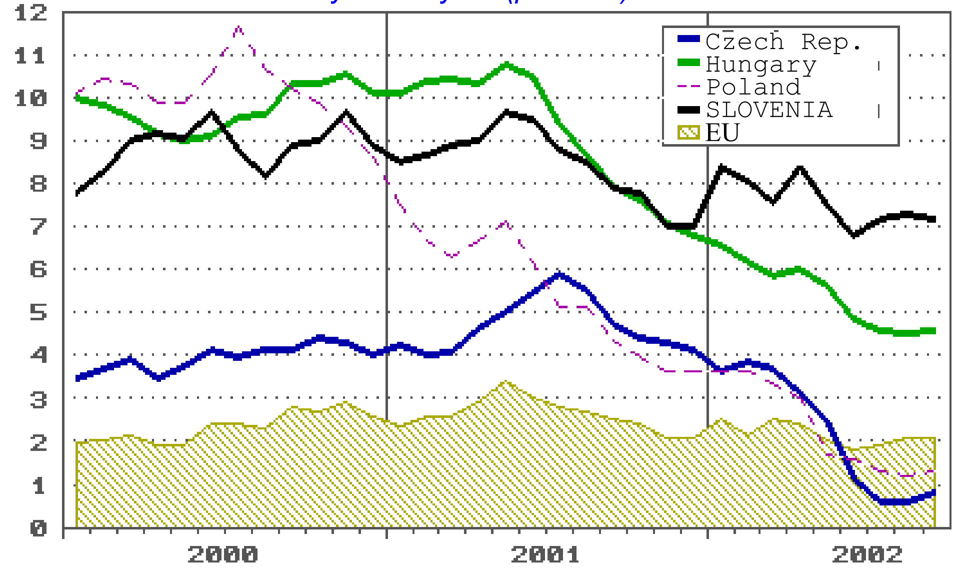
Average wages: major aggregates
year-on-year percentage changes



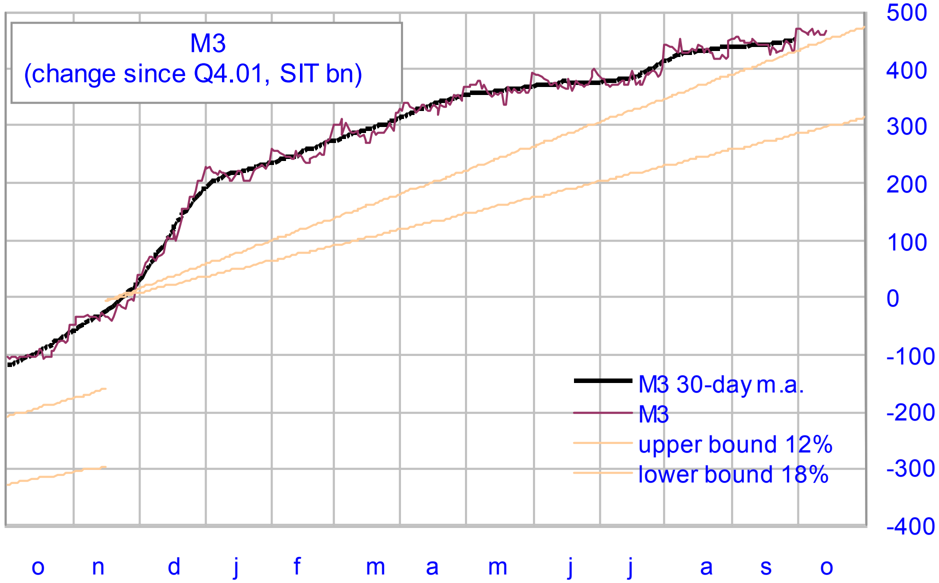
Prices of services
monthly annualised percentage changes, seasonally adjusted

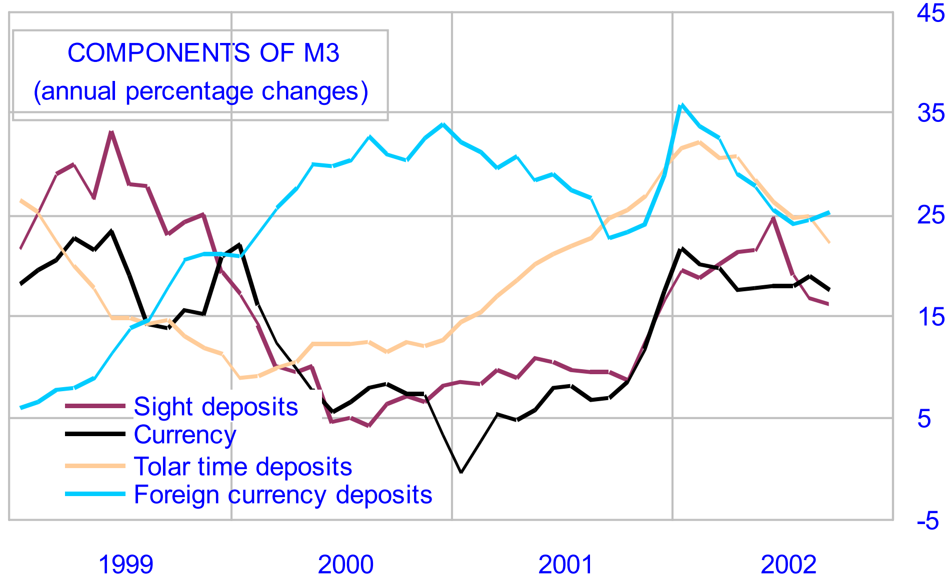


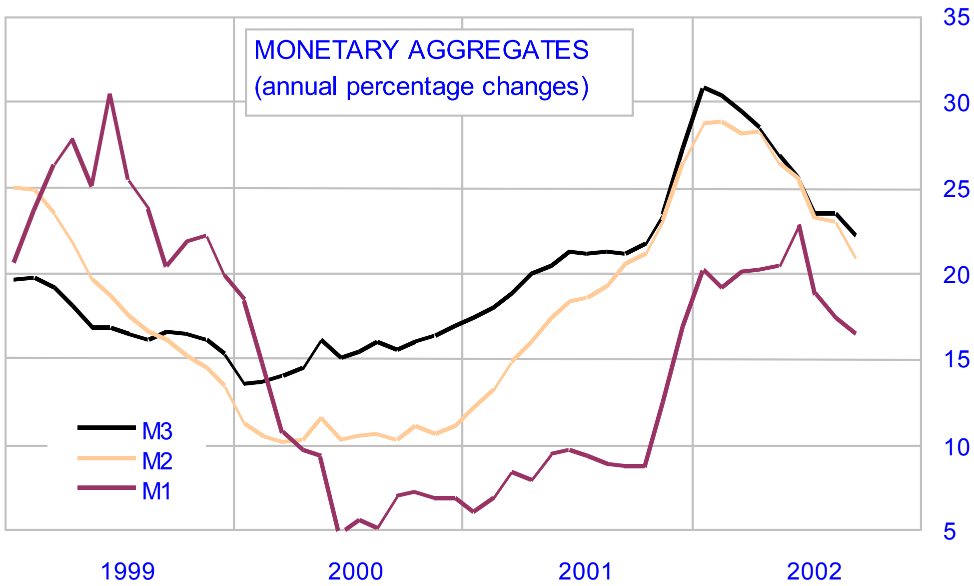
International inflation comparison
year-on-year (per cent)

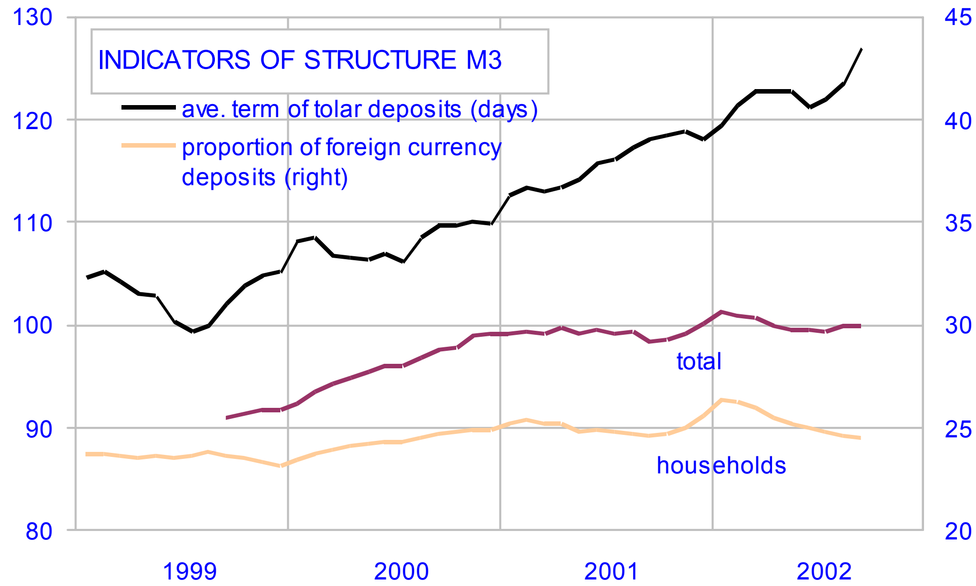


Figures 3

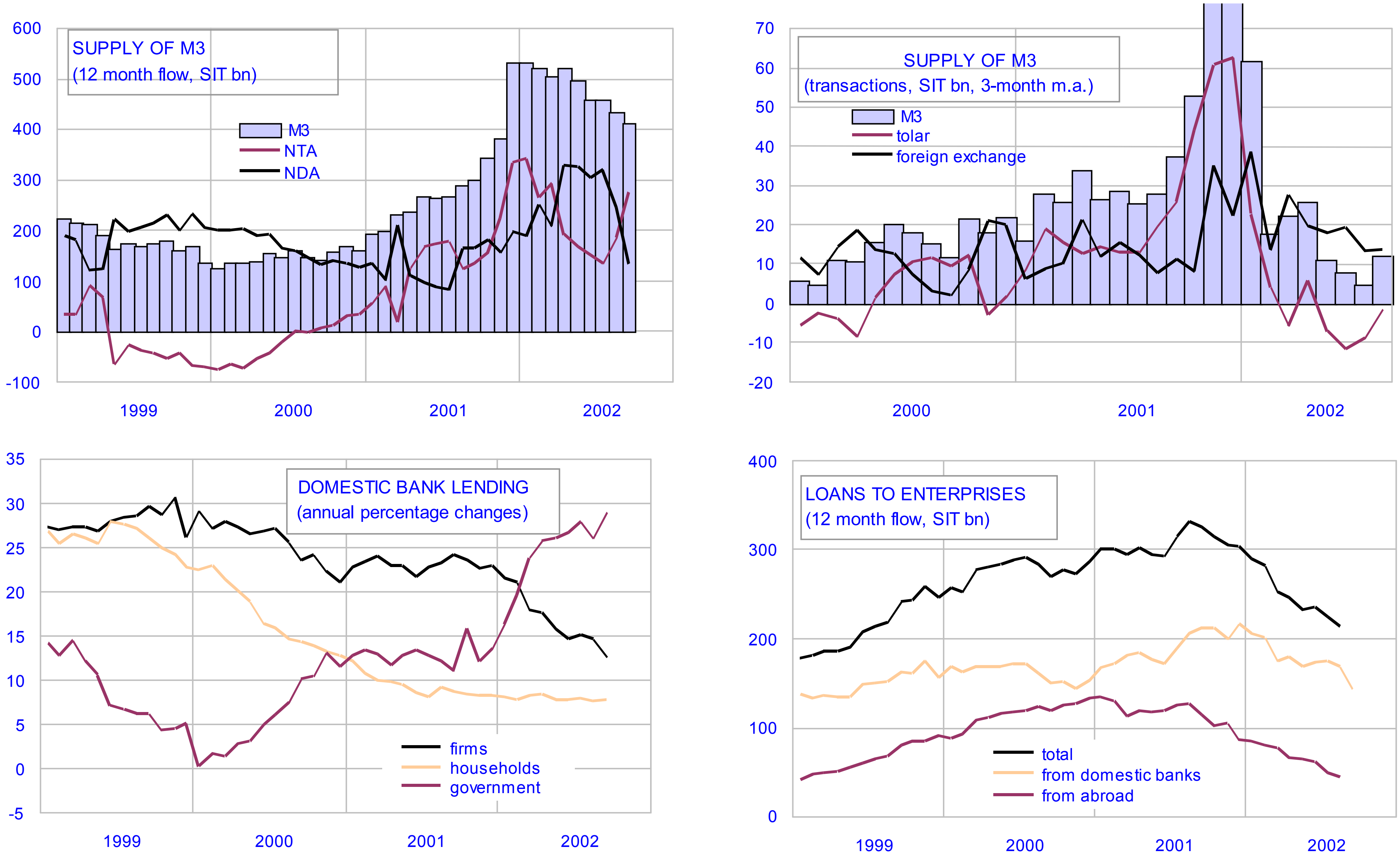

M3
(change since Q4.01, SIT bn)
M3 30-day m.a.
M3
upper bound 12%
lower bound 18%
500
400
300
200
100
0
-100
-200
-300
-400
o n d j f m a m j j a s o


COMPONENTS OF M3
(annual percentage changes)
Sight deposits
Currency
Tolar time deposits
Foreign currency deposits
45
35
25
15
5
-5
1999 2000 2001 2002


MONETARY AGGREGATES
(annual percentage changes)
M3
M2
M1
35
30
25
20
15
10
5
1999 2000 2001 2002


INDICATORS OF STRUCTURE M3
ave. term of tolar deposits (days)
proportion of foreign currency deposits (right)
total
households
130
120
110
100
90
80
45
40
35
30
25
20
1999 2000 2001 2002

Figures 4


SUPPLY OF M3
(12 month flow, SIT bn)
M3
NTA
NDA
600
500
400
300
200
100
0
-100
1999
2000
2001
2002
SUPPLY OF M3
(transactions, SIT bn, 3-month m.a.)
M3
tolar
foreign exchange
70
60
50
40
30
20
10
0
-10
-20
2000
2001
2002
DOMESTIC BANK LENDING
(annual percentage changes)
firms
households
government
35
30
25
20
15
10
5
0
-5
1999
2000
2001
2002
LOANS TO ENTERPRISES
(12 month flow, SIT bn)
total
from domestic banks
from abroad
400
300
200
100
0
1999
2000
2001
2002

Figures 5

BANK OF SLOVENIA

MONETARY POLICY IMPLEMENTATION REPORT

APPENDIX:

GRAPHS OF DEVELOPMENTS IN TRANSITION COUNTRIES

MAASTRICHT CRITERIA	Inflation (%) last 12 month. (1)	LT interest rate (%) last 12 month. (1)	Deficit (% GDP) 2001	Debt (% GDP) 2001
Belgium	1.8	5.04	0.4	107.6
Denmark	2.3	5.08	3.1	44.7
Germany	1.4	4.81	-2.8	59.5
Greece	3.5	5.18	0.1	105.1
Spain	2.9	5.02	-0.1	57.1
France	1.8	4.90	-1.4	57.3
Ireland	4.6	5.05	1.5	36.4
Italy	2.4	5.08	-2.2	109.8
Luxembourg	2.1	4.76	6.1	5.6
Netherlands	3.7	4.94	0.1	52.8
Austria	1.8	5.01	0.2	63.2
Portugal	3.6	5.05	-4.1	55.5
Finland	1.8	5.03	4.9	43.4
Sweden	2.2	5.33	4.8	56.6
United Kingdom	1.2	4.96	0.8	39.1
Euro area	2.2	4.98	-1.4	69.2
Convergence criteria	**3.0**	**7.06**	**-3.0**	**60.0**
Czech Republic	(2) 2,4	(4) 4,90	-5.5	23.7
Hungary	(2) 5,6	6.98	-4.1	53.1
Poland	(2) 2,4	(4) 7,60	-3.9	39.3
Slovenia	(2) 7,5	(3) 11,95	-2.5	27.5

Notes:
(1) Last 12 months refers to average of data till October 2002.
(2) Non-harmonised CPI.
(3) RS34 bond used as proxy for long-term interest rates.
Rate used is coupon rate rather than yield to maturity, as required by Maastricht criteria.
Yield to maturity of 3-year RS42 with nominal interest rate was 9.30% at issue.
(4) Average for 2000.
Sources: Statistical Office of the Republic of Slovenia, Ministry of Finance, EUROSTAT,
Bond Markets and Long-term Interest Rates in EU Accession Countries (ECB, June 2002).

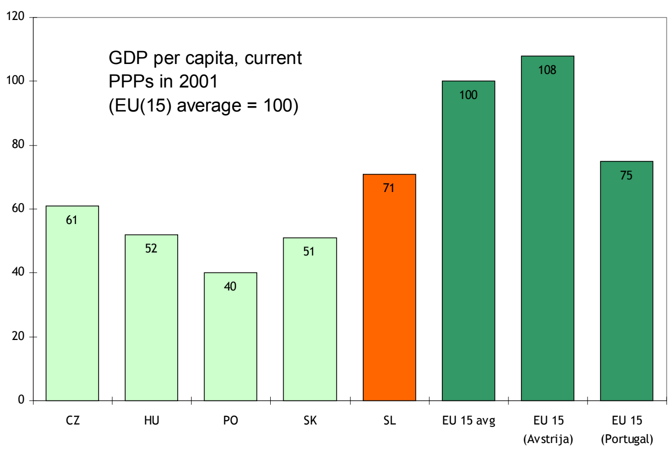
MACROECONOMIC INDICATORS	GDP 1999	GDP 2000	GDP 2001	IMF 2002	Inflation 1999	Inflation 2000	Inflation 2001	Inflation 2002	Unemployment 1999	Unemployment 2000	Unemployment 2001	Unemployment 2002
EU(12)	2,7	3,4	1,4	(0,9)	1,7	2,6	2,0	2,3 (10)	9,5	8,5	8,0	(8,2)
Czech Republic	0,5	3,3	3,3	(2,7)	2,6	3,9	4,1	0,6 (10)	8,8	8,9	8,2	(8,6)
Hungary	4,2	5,2	3,8	(3,5)	11,1	10,1	6,8	4,9 (10)	7,1	6,5	5,7	(5,8)
Poland	4,0	4,0	1,1	(1,0)	9,8	8,5	3,6	1,1 (10)	13,9	16,1	18,2	(19,6)
Slovakia	1,9	2,2	3,3	(4,0)	14,2	8,4	6,5	2,9 (10)	16,4	18,8	19,3	(19,1)
Slovenia	5,2	4,6	3,0	(2,5)	8.0	8,9	7,0	7,2 (10)	7,6	7.0	6,4	(6,1)

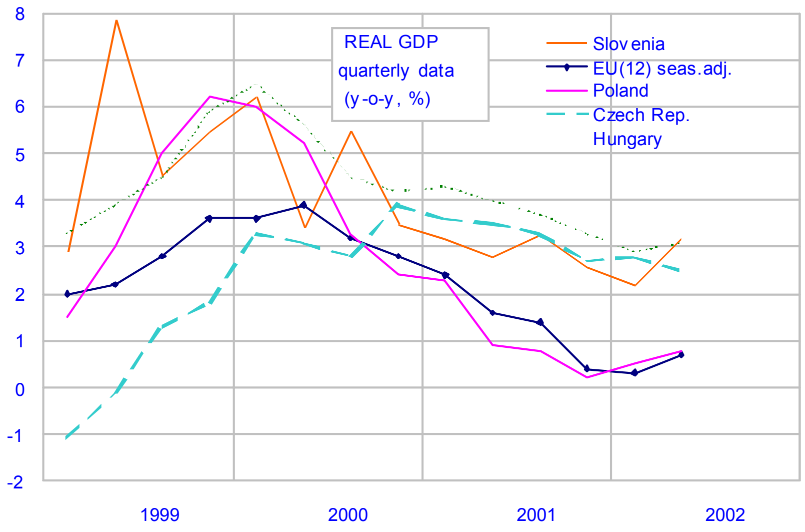
	Current account (% GDP) 1999	Current account (% GDP) 2000	Current account (% GDP) 2001	Current account (% GDP) 2002	Government balance (% GDP) 1999	Government balance (% GDP) 2000	Government balance (% GDP) 2001	Government balance (% GDP) 2002
EU(12)	0.4	-0.3	0.4	(0,9)	-1.3	0.2	-1.3	(-1,5)
Czech Republic	-2.9	-5.6	-4.7	(-4,7)	-7.6	-5.5	-4.6	(-8,7)
Hungary	-4.4	-2.9	-2.1	(-3,5)	-5.2	-3.0	-5.2	(-5,5)
Poland	-8.1	-6.3	-4.3	(-4,8)	-2.0	-2.1	-5.0	(-5,4)
Slovakia	-5.0	-3.8	-8.8	(-7,9)	-6.6	-6.1	-6.4	(-6,3)
Slovenia	-3.9	-3.4	-0.4	(-1,2)	-0.6	-1.4	-1.4	(-3,0)

Note: Figures in parentheses are projections for the whole year except in the case of inflation, where they refer to the month for which the year-on-year rate is quoted.
Sources: OECD Econ. Outlook (April 2002), IMF WEO Sept. 2002 (GDP), ECB, Ministry of Finance, Bank of Slovenia, national statistics offices.

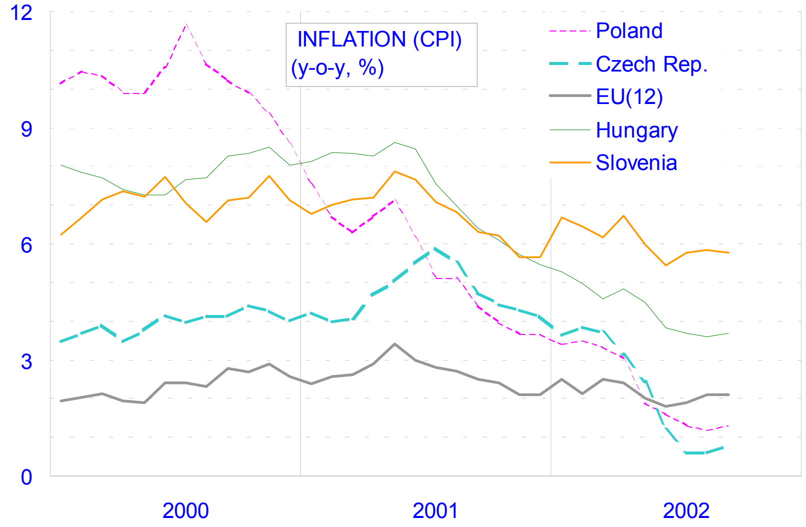
FOREX AND INTER. RATES	Exchange rate regime
Czech Republic	floating*
Hungary	pegged against euro +/-15%
Poland	floating
Slovakia	managed floating*
Slovenia	managed floating*
Central bank instrument	interest rate (last change)
Czech Republic	
2-week repo**	2,75% (01.11.2002)
Overnight deposit	1,75% (01.11.2002)
Emergency loan	3,75% (01.11.2002)
Hungary	
2-week deposit**	9,00% (19.11.2002)
Overnight deposit	8,00% (19.11.2002)
Overnight secured loan	10,00% (19.11.2002)
Poland	
28-day Treasury bill**	7,00% (24.10.2002)
lombard loan	9,00% (24.10.2002)

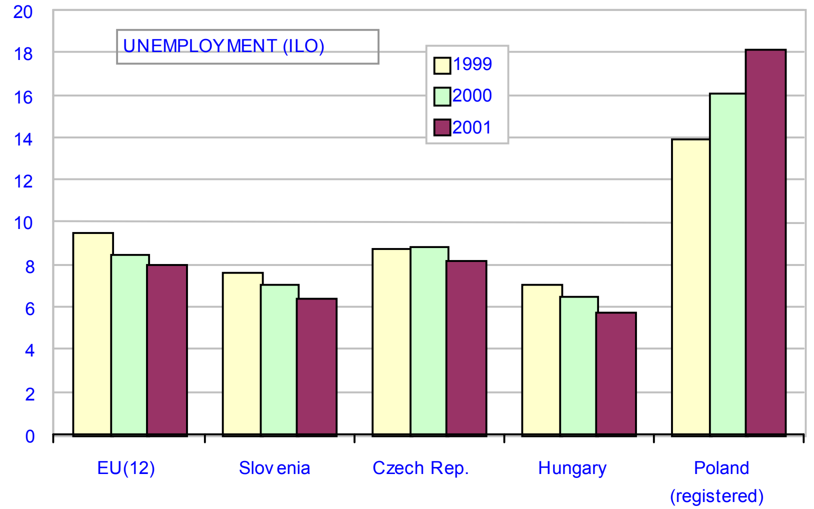
Sources: JPMorgan, national central banks.
*euro is informal reference currency
**instrument with leading central bank interest rate

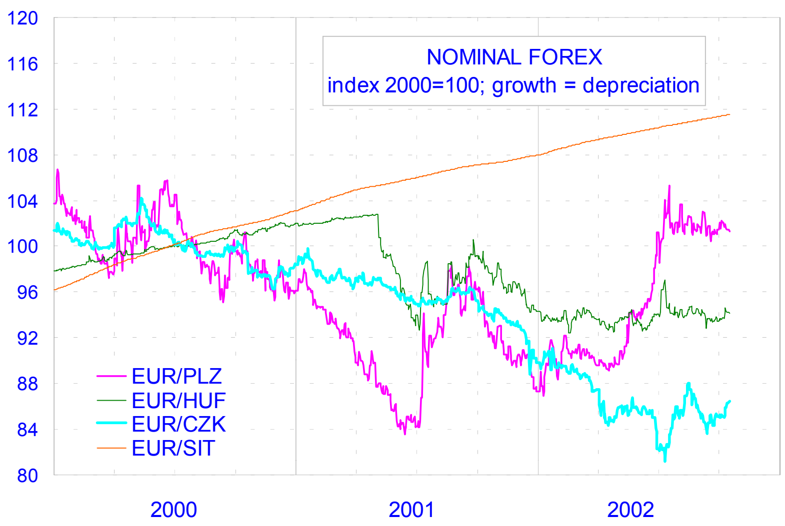


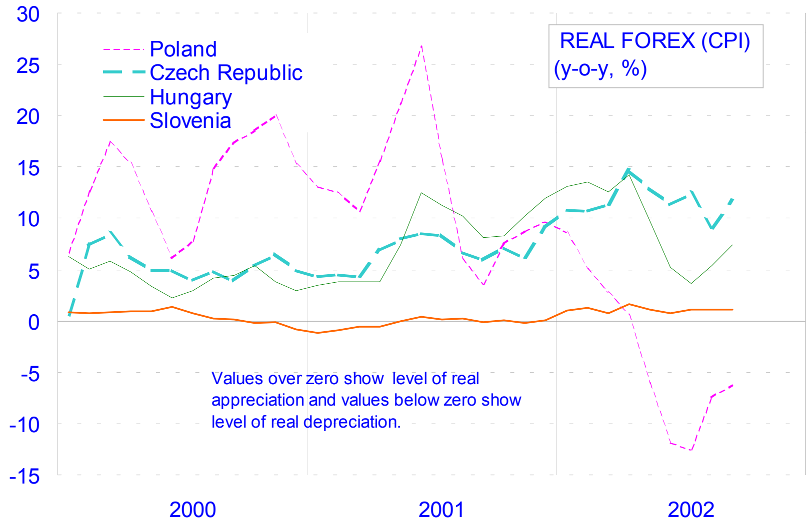

REAL GDP
quarterly data
(y-o-y, %)
Slovenia
EU(12) seas.adj.
Poland
Czech Rep.
Hungary
8
7
6
5
4
3
2
1
0
-1
-2
1999
2000
2001
2002

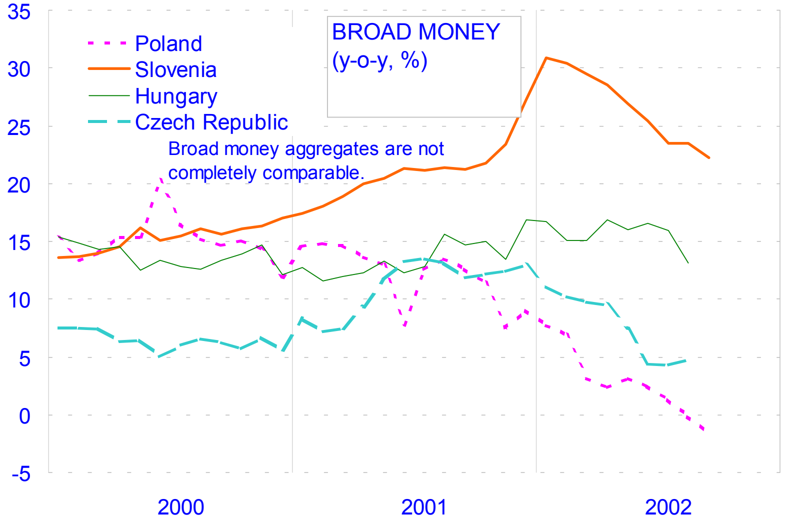

REAL GDP
annual data
(y-o-y, %)
1999
2000
2001
6
5
4
3
2
1
0
-1
EU(12)
Slovenia
Czech Rep.
Hungary
Poland

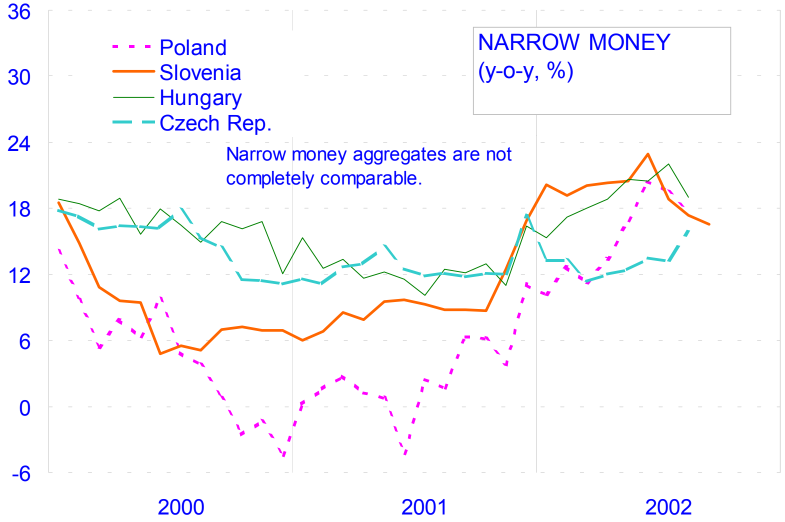

INFLATION (CPI)
(y-o-y, %)
Poland
Czech Rep.
EU(12)
Hungary
Slovenia
12
9
6
3
0
2000
2001
2002

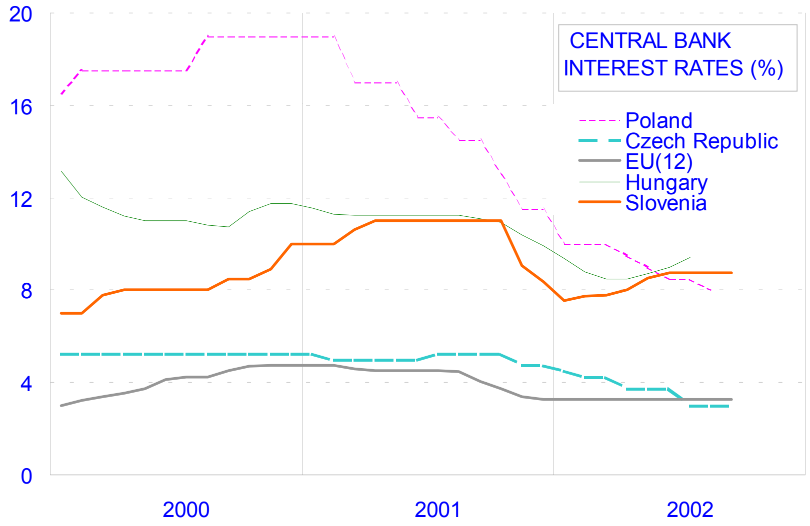

UNEMPLOYMENT (ILO)
1999
2000
2001
20
18
16
14
12
10
8
6
4
2
0
EU(12)
Slovenia
Czech Rep.
Hungary
Poland
(registered)

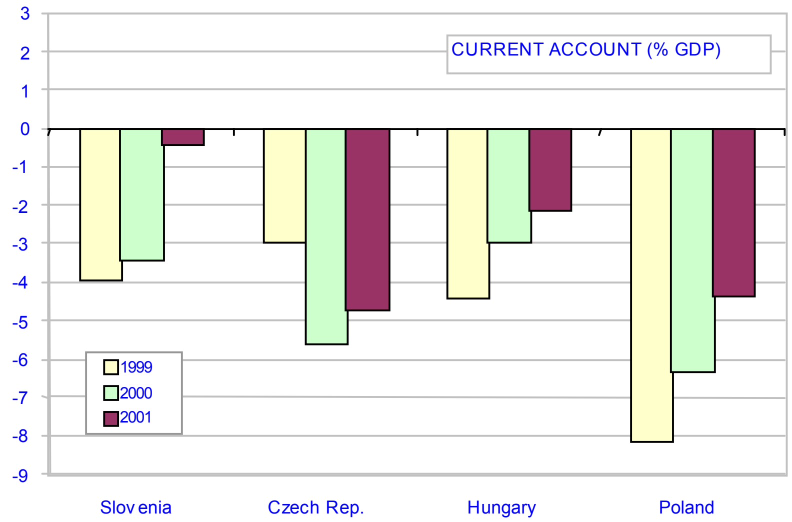

NOMINAL FOREX
index 2000=100; growth = depreciation
120
116
112
108
104
100
96
92
88
84
80
EUR/PLZ
EUR/HUF
EUR/CZK
EUR/SIT
2000
2001
2002

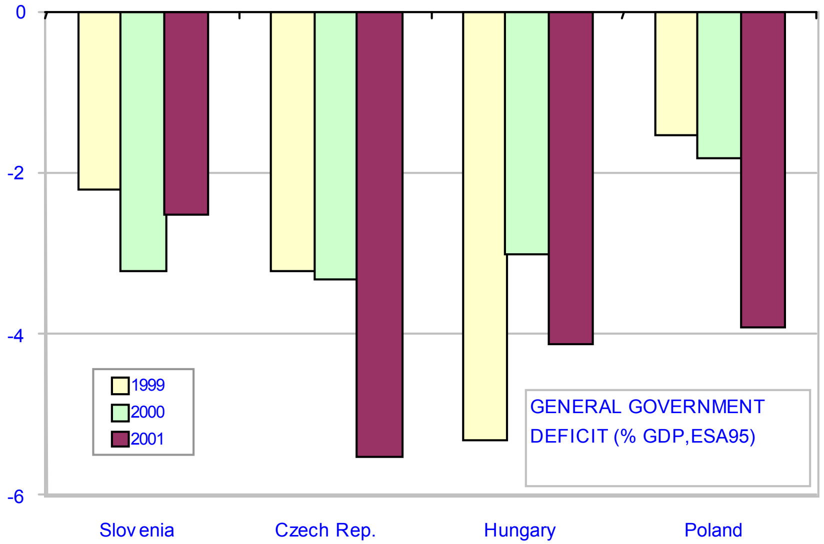

REAL FOREX (CPI)
(y-o-y, %)
30
25
20
15
10
5
0
-5
-10
-15
Poland
Czech Republic
Hungary
Slovenia
Values over zero show level of real appreciation and values below zero show level of real depreciation.
2000
2001
2002

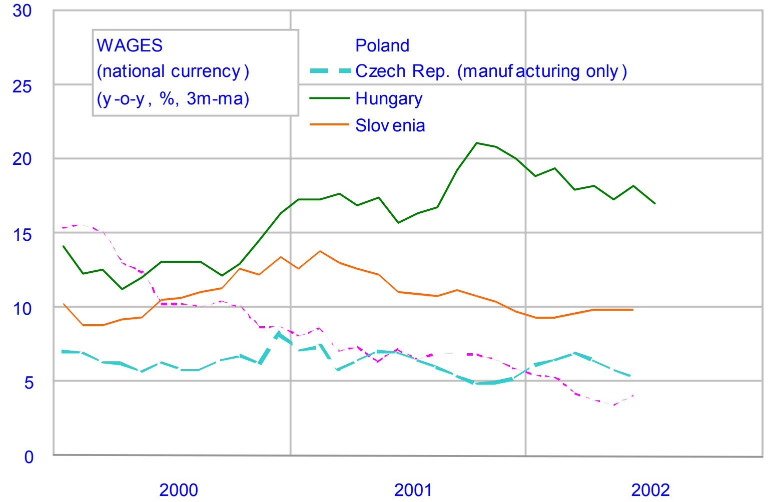

BROAD MONEY
(y-o-y, %)
35
30
25
20
15
10
5
0
-5
Poland
Slovenia
Hungary
Czech Republic
Broad money aggregates are not completely comparable.
2000
2001
2002

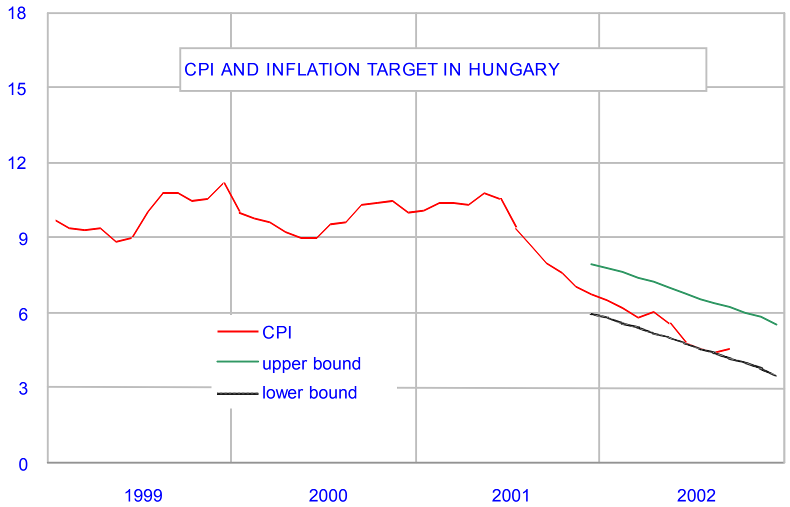

NARROW MONEY
(y-o-y, %)
36
30
24
18
12
6
0
-6
Poland
Slovenia
Hungary
Czech Rep.
Narrow money aggregates are not completely comparable.
2000
2001
2002

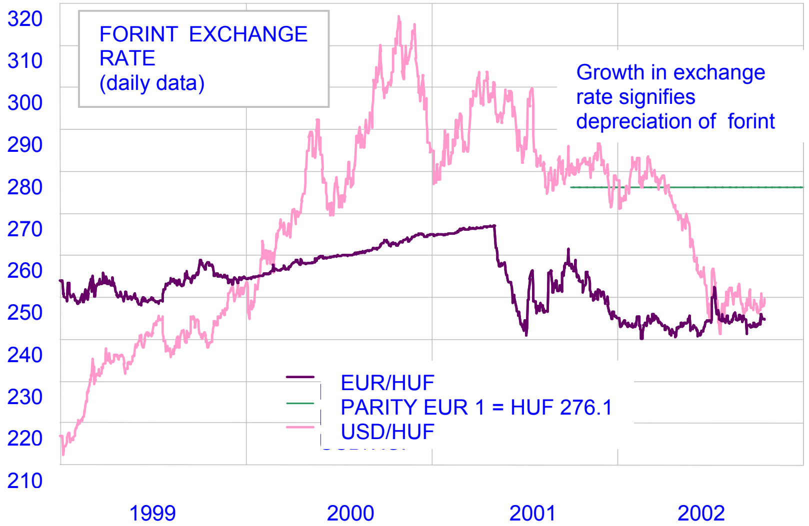

CENTRAL BANK
INTEREST RATES (%)
Poland
Czech Republic
EU(12)
Hungary
Slovenia
20
16
12
8
4
0
2000
2001
2002

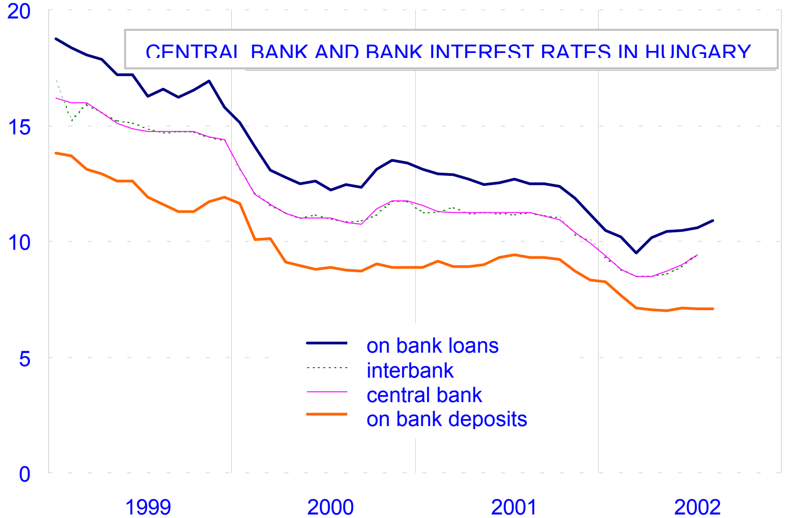

CURRENT ACCOUNT (% GDP)
1999
2000
2001
3
2
1
0
-1
-2
-3
-4
-5
-6
-7
-8
-9
Slovenia
Czech Rep.
Hungary
Poland

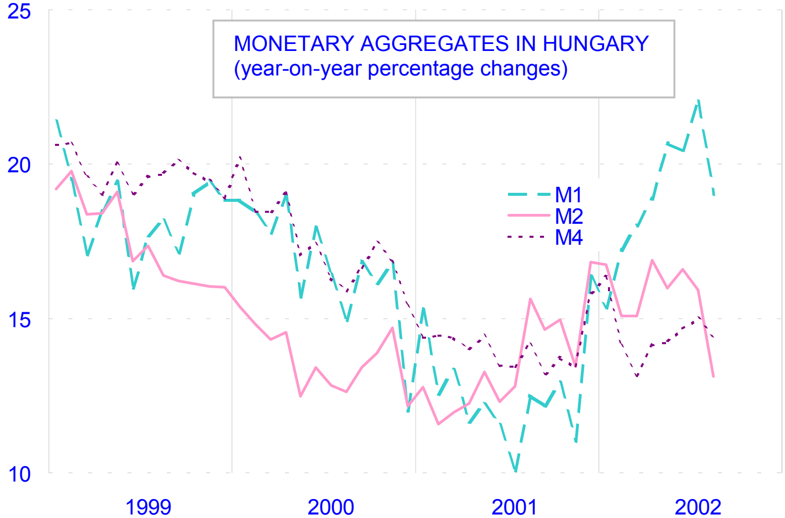

GENERAL GOVERNMENT
DEFICIT (% GDP,ESA95)
1999
2000
2001
0
-2
-4
-6
Slovenia
Czech Rep.
Hungary
Poland

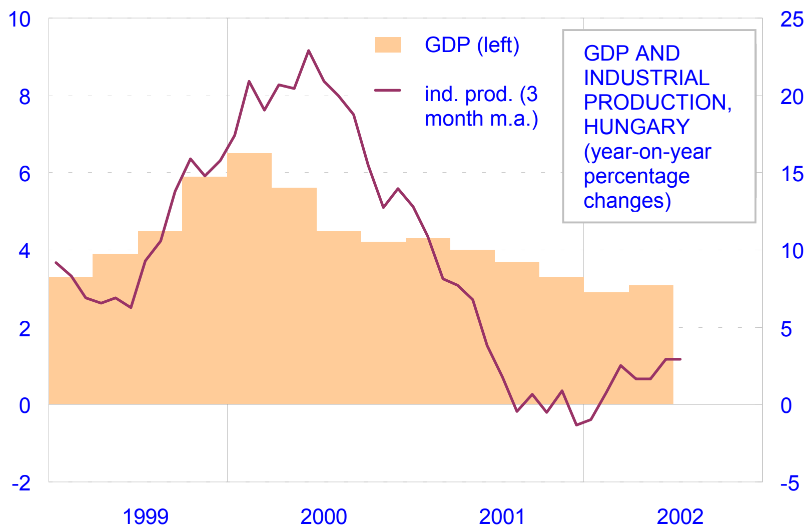

WAGES
(national currency)
(y-o-y, %, 3m-ma)
Poland
Czech Rep. (manufacturing only)
Hungary
Slovenia
30
25
20
15
10
5
0
2000
2001
2002

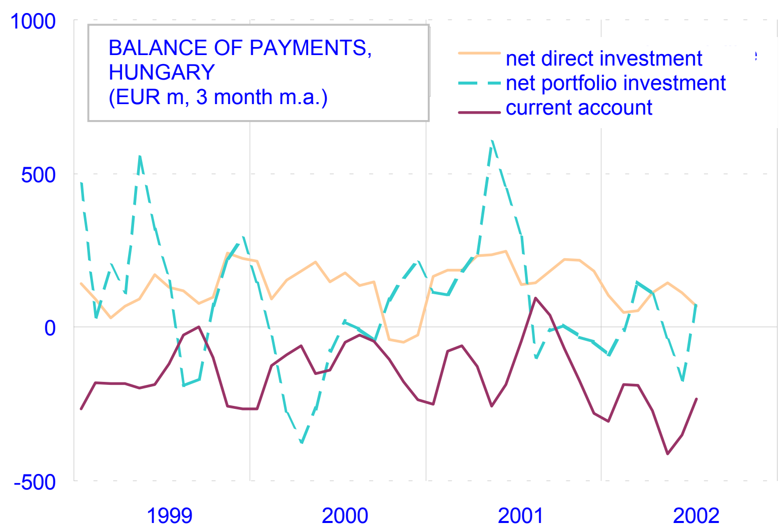

CPI AND INFLATION TARGET IN HUNGARY
CPI
upper bound
lower bound
18
15
12
9
6
3
0
1999
2000
2001
2002

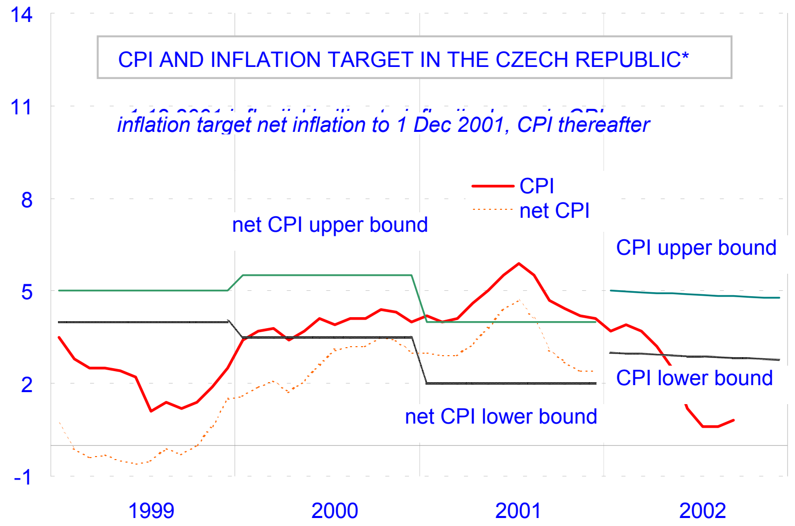

FORINT EXCHANGE RATE (daily data)
Growth in exchange rate signifies depreciation of forint
EUR/HUF
PARITY EUR 1 = HUF 276.1
USD/HUF
320
310
300
290
280
270
260
250
240
230
220
210
1999
2000
2001
2002

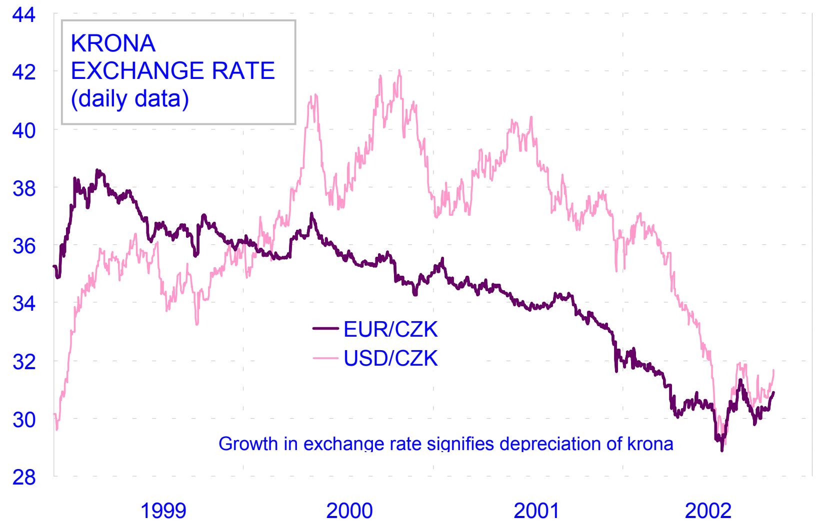

CENTRAL BANK AND BANK INTEREST RATES IN HUNGARY
on bank loans
interbank
central bank
on bank deposits
20
15
10
5
0
1999
2000
2001
2002

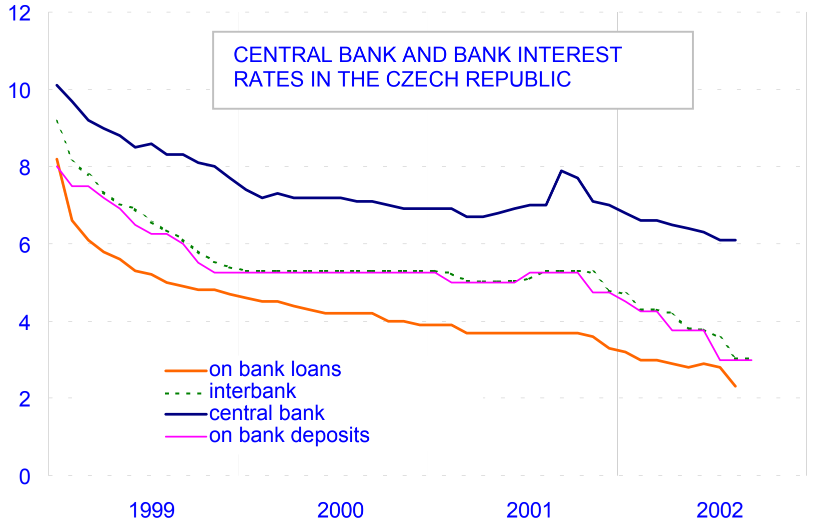

MONETARY AGGREGATES IN HUNGARY
(year-on-year percentage changes)
M1
M2
M4
25
20
15
10
1999
2000
2001
2002

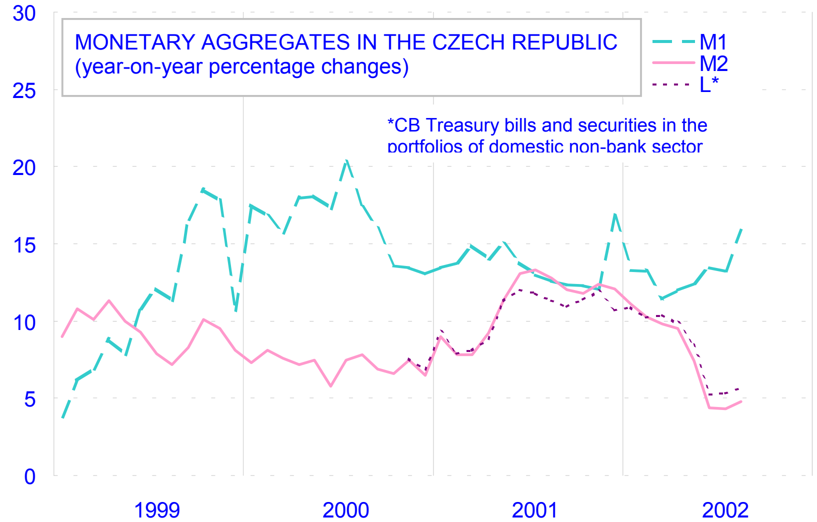

GDP AND INDUSTRIAL PRODUCTION, HUNGARY (year-on-year percentage changes)
GDP (left)
ind. prod. (3 month m.a.)
10
8
6
4
2
0
-2
25
20
15
10
5
0
-5
1999
2000
2001
2002

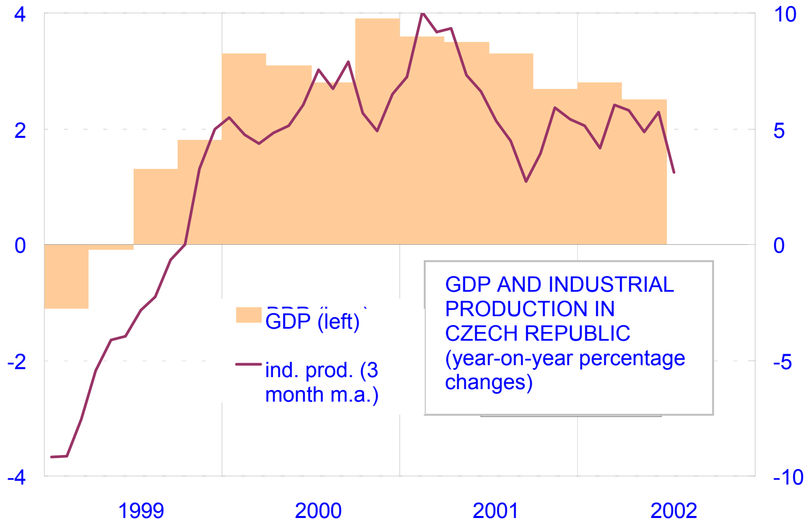

BALANCE OF PAYMENTS, HUNGARY (EUR m, 3 month m.a.)
net direct investment
net portfolio investment
current account
1000
500
0
-500
1999
2000
2001
2002

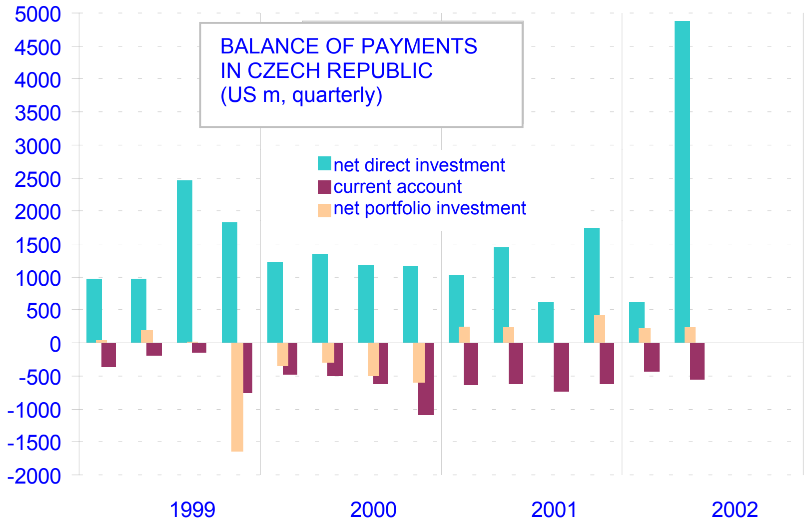

CPI AND INFLATION TARGET IN THE CZECH REPUBLIC*
inflation target net inflation to 1 Dec 2001, CPI thereafter
CPI
net CPI
net CPI upper bound
CPI upper bound
CPI lower bound
net CPI lower bound
14
11
8
5
2
-1
1999
2000
2001
2002

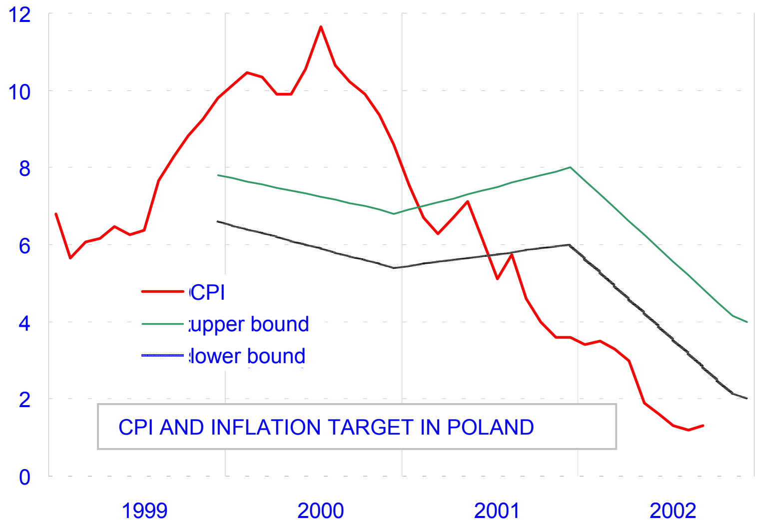

KRONA
EXCHANGE RATE
(daily data)
EUR/CZK
USD/CZK
Growth in exchange rate signifies depreciation of krona
44
42
40
38
36
34
32
30
28
1999
2000
2001
2002

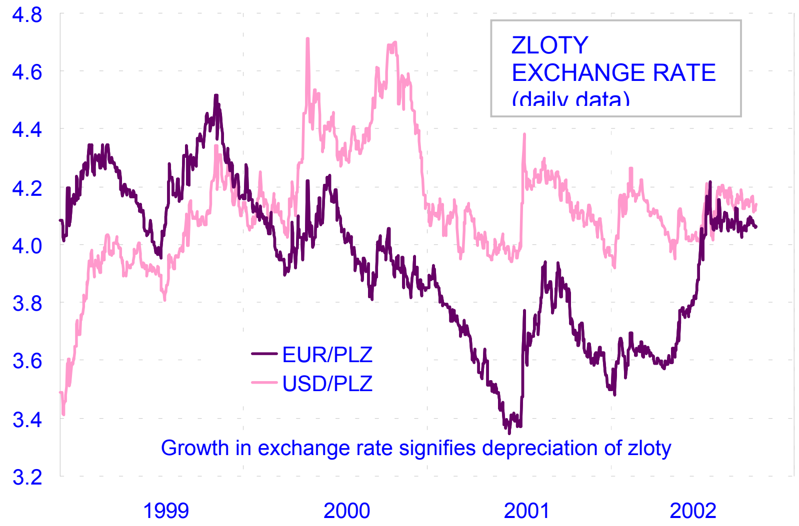

CENTRAL BANK AND BANK INTEREST
RATES IN THE CZECH REPUBLIC
on bank loans
interbank
central bank
on bank deposits
12
10
8
6
4
2
0
1999
2000
2001
2002

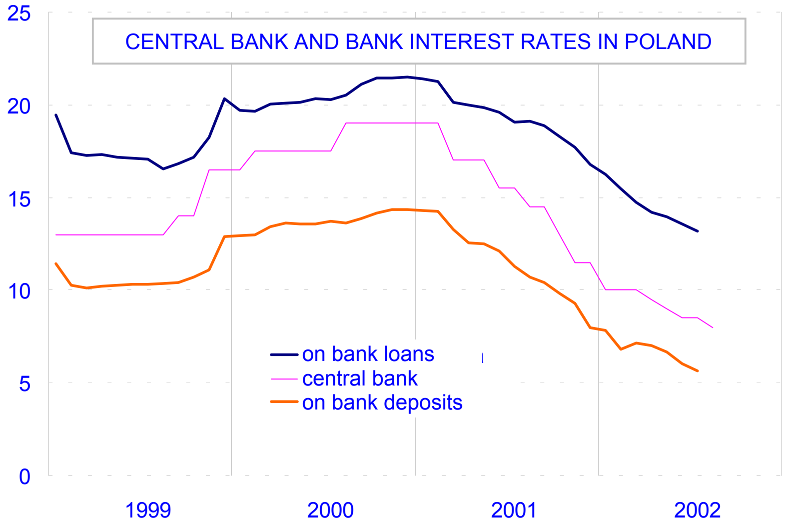

MONETARY AGGREGATES IN THE CZECH REPUBLIC
(year-on-year percentage changes)
M1
M2
L*
*CB Treasury bills and securities in the
portfolios of domestic non-bank sector
30
25
20
15
10
5
0
1999
2000
2001
2002

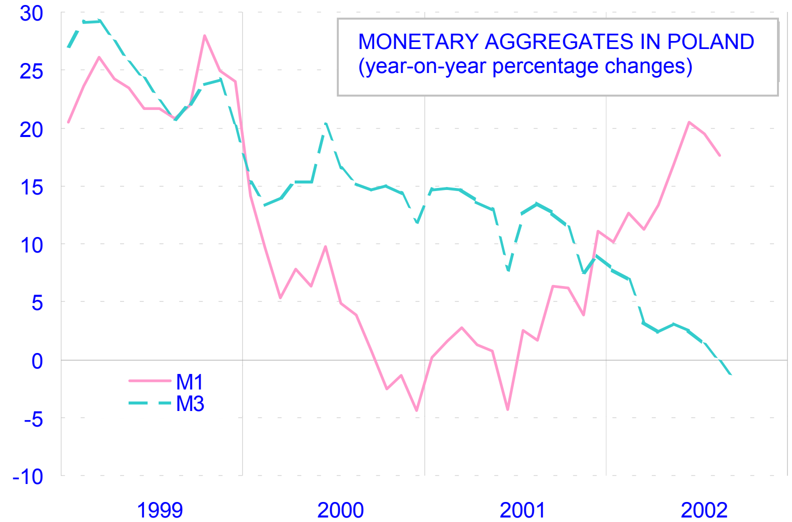

4
2
0
-2
-4
10
5
0
-5
-10
GDP (left)
ind. prod. (3 month m.a.)
GDP AND INDUSTRIAL PRODUCTION IN CZECH REPUBLIC (year-on-year percentage changes)
1999
2000
2001
2002

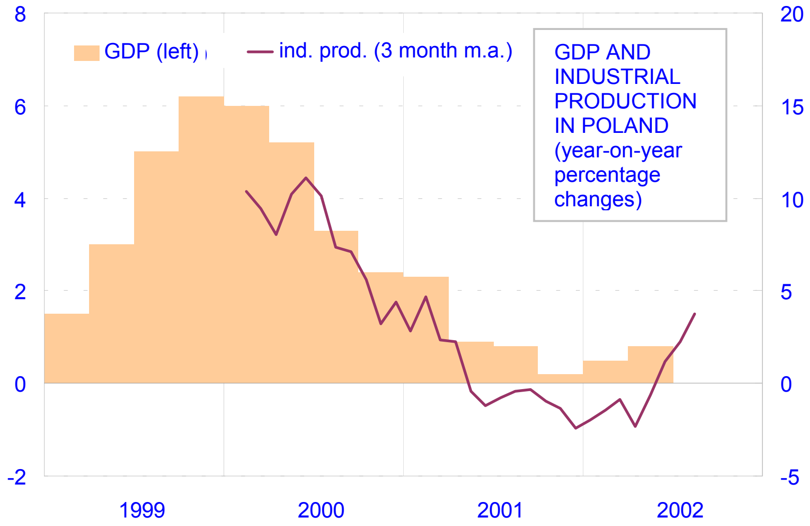

BALANCE OF PAYMENTS IN CZECH REPUBLIC (US m, quarterly)
net direct investment
current account
net portfolio investment
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
-500
-1000
-1500
-2000
1999
2000
2001
2002

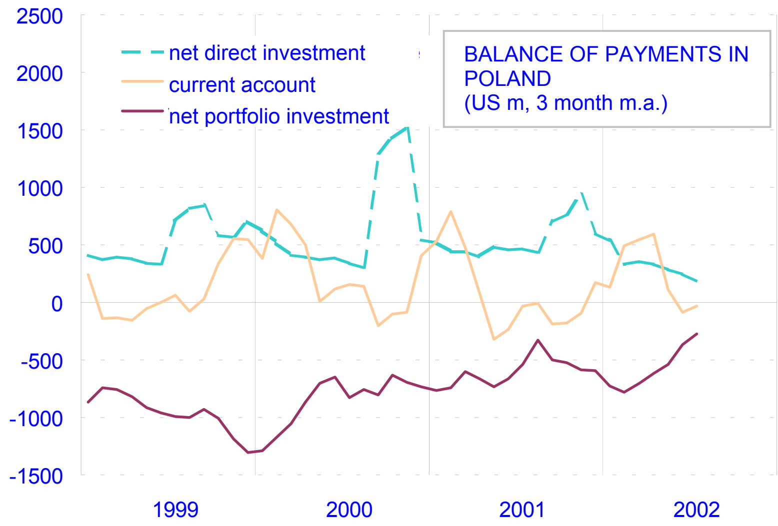

12
10
8
6
4
2
0
CPI
upper bound
lower bound
CPI AND INFLATION TARGET IN POLAND
1999
2000
2001
2002


4.8
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
ZLOTY
EXCHANGE RATE
(daily data)
EUR/PLZ
USD/PLZ
Growth in exchange rate signifies depreciation of zloty
1999
2000
2001
2002


25
20
15
10
5
0
CENTRAL BANK AND BANK INTEREST RATES IN POLAND
on bank loans
central bank
on bank deposits
1999
2000
2001
2002


30
25
20
15
10
5
0
-5
-10
MONETARY AGGREGATES IN POLAND
(year-on-year percentage changes)
M1
M3
1999
2000
2001
2002


GDP (left)
ind. prod. (3 month m.a.)
GDP AND INDUSTRIAL PRODUCTION IN POLAND
(year-on-year percentage changes)
8
6
4
2
0
-2
20
15
10
5
0
-5
1999
2000
2001
2002


net direct investment
current account
net portfolio investment
BALANCE OF PAYMENTS IN POLAND
(US m, 3 month m.a.)
2500
2000
1500
1000
500
0
-500
-1000
-1500
1999
2000
2001
2002