CNB CZECH NATIONAL BANK

INFLATION REPORT

OCTOBER 1998

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I. INTRODUCTION

The disinflationary process accelerated during 1998 Q3 because of an ongoing easing of inflationary pressures on both the demand and supply side. Price indices in September were at their lowest since the beginning of the year. The year-on-year net inflation index dropped from 6.5% in June to 4.3% in September. Seasonal developments on the food market were much more favourable than in 1997 and contributed significantly to the decline in the rate of growth of net inflation. CPI inflation slowed mainly because of the lower net inflation and the less extensive regulated price increases in July compared with a year ago. Year-on-year CPI inflation fell from 12% in June to 8.8% in September.

Conditional CNB price development forecasts show that at the end of 1998 net inflation will be substantially below the lower limit of the inflation target. In 1998 Q3, disinflation was stronger than indicated by the CNB projection in the July Inflation Report. This was attributable both to extraordinarily positive developments in external factors with an intensively anti-inflationary effect and to strong pressure from fiscal and monetary policy. One of the most important external factors was the movement of prices on world markets, which along with the appreciation of the koruna in Q3 led to a decline in import prices. Without this unforeseen influence, the resulting net inflation rate would have moved at the lower limit of the target interval, or slightly below it. A considerable downturn in domestic demand significantly restricted the room for cost pressures. Also, inflationary expectations, monetary development, unemployment growth and the majority of cost factors all helped to drive inflation downwards.

The drop in domestic demand was the strongest anti-inflationary factor of endogenous character. This started in 1997 Q3 and continued into 1998 Q2. It resulted from restrictive policies directed at restoring external balance, introducing sustainable macroeconomic proportions and achieving the CNB's disinflationary targets. The fall in final domestic demand (excluding the influence of stocks) accelerated from -2.1% in Q1 to -4.6% in Q2, mainly because of a slump in domestic consumption of 7%. Although a high comparison base from the same period in 1997 had an influence in this decline, the continuing reduction in disposable household incomes and changing consumer behaviour in past quarters were of great significance. This also fed through into growth in the savings ratio. Since the fall in gross fixed capital formation also accelerated (from -2.5% in 1998 Q1 to -4.1% in 1998 Q2), the modest rise of 0.6% in state spending and relatively favourable net exports only partly offset the overall decline in economic activity. As a result, gross domestic product fell by 2.4% in Q2, according to Czech Statistical Office (CSO) estimates.

Monetary development in 1998 Q3 also reflected the restrictive macroeconomic policies. Monetary aggregates in July and August, as in preceding months, saw low growth in both nominal and real terms. The average nominal growth in aggregate L fluctuated broadly at the level of nominal GDP growth, while M2 grew more slowly. The considerable decrease in nominal interest rates, which has been continuing throughout 1998, did not result in a marked revival of credit supply. This was prevented by the banks' very prudent approach towards extending new credits. As inflation dropped more rapidly than nominal interest rates in Q3, real interest rates in general increased.

In 1998 Q3, the accelerating decline in CPI and net inflation created favourable conditions for an improvement in inflationary expectations. Evidence for the ongoing weakening of inflationary expectations was provided by the yield curve, which during 1998 has changed from a positive to a negative shape with a tendency towards an acceleration of the decline at its longer end in recent months.

Considerable changes are taking place on the labour market. The pick-up in unemployment growth in 1998 Q3 provides evidence of accelerating restructuring. This, together with a cyclical decline, is leading to a growing overhang of demand for work over supply, a worsening of the position of job applicants in wage negotiations, and to a weakening of cost pressures from the wages side.

In Q3, the disinflationary process was accelerated by extraordinarily positive developments in most cost inflationary factors. The above-mentioned appreciation of the koruna in Q3 and the persisting positive inflationary differential were reflected in a strengthening of the koruna's real exchange rate and in a lowering of import prices. Although in the last period there was a reduction in the lead of the GDP deflator growth rate over unit wage cost growth, the CNB does not expect a substantial strengthening of wage-led inflationary pressures. In general, developments in the manufacturing sphere were reflected in a further slowdown in the growth of producer prices, which are an aggregate indicator of cost pressures. The year-on-year producer price index growth rate slid from 5.6% in June to 3.7% in September. A longer-term downward inflation trend is also being seen for prices of construction work and agricultural producer prices.

As for the setting of monetary policy, the CNB in Q3 abandoned the short-term target set for the end of 1998 and focused on inflation in 1999. The positive development in net inflation factors in Q2 and Q3, and in particular the conditional inflation projections for the second half of 1998 and for 1999, indicated the existence of a certain degree of room for interest rate cuts. As mentioned in the July Inflation Report, the CNB did not start cutting interest rates until the beginning of July. The rates were cut in three phases - in July, August and September - each time by 0.5 of a percentage point, giving a total reduction of 1.5 percentage points from 15% in July to 13.5% in September. In addition to these changes, the CNB lowered the discount rate from 13% to 11.5% and the Lombard rate from 19% to 16%, effective August 14. The minimum reserve requirement for primary deposits was also lowered, from 9.5% to 7.5%, effective July 30.

The conditional inflation projection for the end of 1998 assumes a continuing positive trend for most cost and demand factors. On the basis of an evaluation of these influences and the relevant lags of the influence of specific economic factors on prices, the CNB expects net inflation of below 4% at the end of 1998. Net inflation will fall below the target interval mainly as a result of the unexpectedly strong action of exogenous factors and the dampening of domestic demand. Given the importance of exogenous factors, the CNB does not consider the lower-than-targeted inflation outcome at the end of 1998 to be a significant deviation from the medium-term trajectory of the disinflationary process. The slowdown in net inflation is being reflected in the CPI index, which should be fluctuating slightly above 8% at the end of 1998. The average annual inflation rate will be below 11%.

On the basis of the conditional inflation projection for the end of 1999, the CNB expects a stabilisation, or possibly just a very modest revival, of net inflation. This corresponds to the predicted slight strengthening of cost pressures and stagnation in demand. The net inflation projection for 1999 shows that the medium-term target set for the end of 2000 - namely the interval of 3.5%-5.5% - can be realistically achieved. As a result of the government-planned slowdown in regulated price rises in 1999, the CNB is expecting a fall in CPI inflation. In 1999, the year-on-year CPI increase should be approximately 6.5% and CPI inflation and net inflation should converge.

II. INFLATION DEVELOPMENT

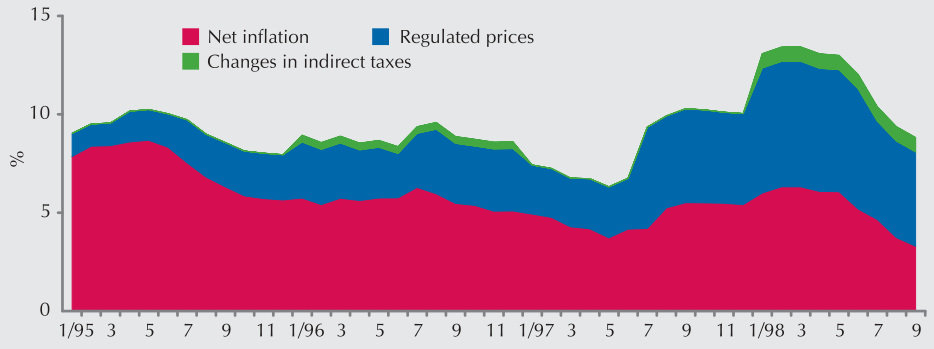
1998 Q3 saw a continuation of the disinflationary process that started in Q2 following a temporary acceleration in inflation at the beginning of 1998. Year-on-year CPI inflation peaked in March (13.4%). From April onwards it fell back, reaching 12% in June and continuing down to 8.8% in September. This positive trend resulted from a considerable decrease in year-on-year net inflation and lower year-on-year growth in regulated prices (Tab. II 1).

The surge in CPI inflation at the beginning of 1998 (by as much as 3.4 percentage points in February and March against the end of 1997) was mainly due to increases in regulated prices and indirect taxation rates in January this year, and partly to net inflation. The increase in year-on-year net inflation in January and February was influenced by three factors: an unwinding of the effect of the koruna's depreciation from the end of 1997; higher costs related to adjustments in regulated prices and, in particular, consumer taxes as of 1 January 1998; and unfavourable expectations of subsequent price development. The halt in inflation in March and the gradual decline from April onwards signalled a calming of price development. This was also confirmed (with the exception of July) by a subsequent gradual fall in month-on-month price increases and year-on-year CPI inflation. The adjustment of regulated prices in July was not as extensive as in 1997 and so did not interfere with the gradual fall in CPI inflation.

Tab. II. 1 Basic Data on Consumer Prices

INDICATOR	1/98		2/98		3/98		4/98		5/98		6/98		7/98		8/98		9/98	
CPI INFLATION (y-o-y)	13.1		13.4		13.4		13.1		13.0		12.0		10.4		9.4		8.8	
of which:		share		share		share		share		share		share		share		share		share
Regulated prices	30.7	6.36	30.8	6.38	30.8	6.38	30.1	6.26	29.8	6.20	29.7	6.11	21.1	5.00	20.9	4.91	20.4	4.78
Influence of indirect taxes on unregulated prices		0.73		0.73		0.73		0.73		0.73		0.73		0.73		0.73		0.73
Net inflation	7.5	6.00	7.9	6.31	7.9	6.32	7.6	6.08	7.6	6.07	6.5	5.19	6.1	4.66	4.9	3.73	4.3	3.31
of which:																		
- food prices	6.0	1.97	6.8	2.22	7.2	2.40	7.2	2.44	7.5	2.88	5.8	1.96	5.4	1.75	3.8	1.21	3.1	1.01
- adjusted inflation	8.5	4.03	8.6	4.09	8.4	3.92	7.9	3.64	7.7	3.19	6.9	3.22	6.6	2.91	5.6	2.53	5.1	2.29
INFLATION RATE (annual moving average)	8.9		9.5		10.0		10.5		11.1		11.5		11.6		11.5		11.4	

Chart II.1 Structure of CPI Inflation (y-o-y)



The favourable consumer price trend in Q3 and in particular the positive influence of net inflation is illustrated by the month-on-month CPI increases in particular months: the higher CPI increase in July (of 1.9%) was a consequence of regulated price increase only, and net inflation shifted into negative values. In August, consumer prices fell by 0.2% month-on-month as a result of negative net inflation and stagnation of regulated prices. In September, consumer prices rose by 0.1%.

Net inflation [1/]

During 1998 Q3, year-on-year net inflation declined more considerably than in Q2, dropping from 6.5% in July to 4.3% in September. This decline was caused by favourable development in both food and non-food prices (ie adjusted inflation). Year-on-year food price inflation[2/] dipped from 5.8% in March to 3.1% in September, while adjusted inflation[2/] fell from 6.9% to 5.1% in the same period.

The more marked year-on-year decline in net inflation in Q3 resulted from negative month-on-month net inflation in the first two months of the quarter: month-on-month net inflation stood at -0.2% in July and -0.3% in August, while in September it rose slightly, by 0.1%. Seasonal influences also had a significant effect. Seasonally adjusted month-on-month net inflation was 0.23% in July and 0.24% in August. In September, the seasonal influence acted in the opposite direction and seasonally adjusted net inflation was 0.09% (CNB calculation).

Chart II.2 Structure of Net Inflation (y-o-y)

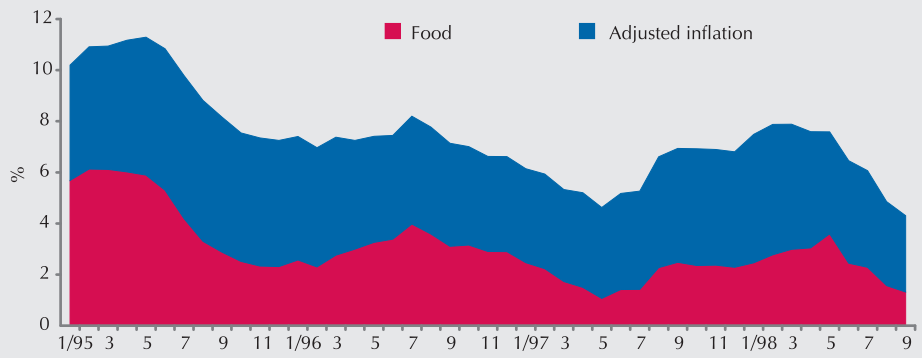
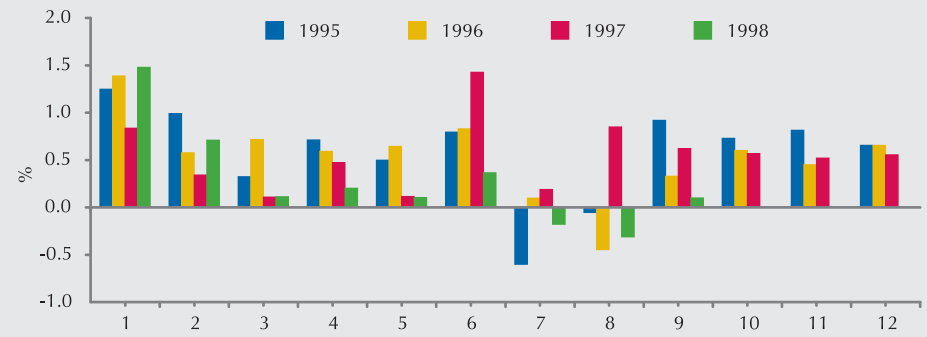


Chart II.3 Net Inflation in 1995 - 1998 (m-o-m)



1/ Net inflation represents movement of unregulated prices, ie the CPI adjusted for regulated prices and further adjusted for the effect of indirect taxes and subsidy elimination. Within the net inflation index, there are two important sub-indices whose trends are separately monitored and analysed: the food price index and the adjusted inflation index (ie the net inflation index adjusted for the food price index)

2/ After adjustment for administrative influences

The ongoing decline in year-on-year net inflation resulted from the parallel effects of several factors of both demand and cost character. Besides the contracting domestic demand, the influence of exogenous factors (especially the fall in world prices of raw materials) was particularly apparent, as was the favourable koruna exchange rate.

The decline in all components of domestic demand, resulting from restrictive monetary, fiscal and income policies and other influences stemming from the change in behaviour of businesses, households and banks, was one of the strongest endogenous factors. Especially significant was the ongoing fall in household consumption, which strengthened in 1998 Q2 in particular. This resulted from a decrease in real incomes and a growing propensity to save. Domestic demand was also dampened by developments in government consumption (including public sector wage restriction) and the generally prudent fiscal policy aimed at achieving a slightly surplus state budget. Demand for investment also continued to fall, largely because of inadequate financial coverage of investment from business, credit and public sources. Domestic demand moved in harmony with money supply.

In recent months, cost-push factors have contributed to year-on-year net inflation. Exogenous factors acting independently of central bank measures have played a dominant role here. In particular, there has been positive development in prices for raw materials and food on world markets, especially crude oil. The subsequent fall in fuel prices has contributed directly to a decline of about 0.5 percentage points in year-on-year net inflation. Also, it can be expected to have an indirect influence on inflation through transport prices and through lower fuel costs in businesses. In some cases, food prices on world markets have been below the price level in the CR, which has prevented our food producers and sellers from increasing their prices (especially for grain).

The nominal exchange rate, which in 1998 Q1 gradually appreciated and in subsequent months was broadly flat, also helped to subdue cost-push inflationary factors. Wage developments have in recent months affected cost-push inflation positively too. In contrast to previous years, nominal unit wage costs grew more slowly than the GDP deflator in the first half of 1998, easing wage pressures on price growth.

The demand and cost influences mentioned above also contributed to favourable development in industrial producer prices, which in turn affected consumer prices. The influence of these factors was depressed partly by the continuing buoyant growth in prices of non-tradable unregulated commodities, especially services.

Regulated prices and administrative changes

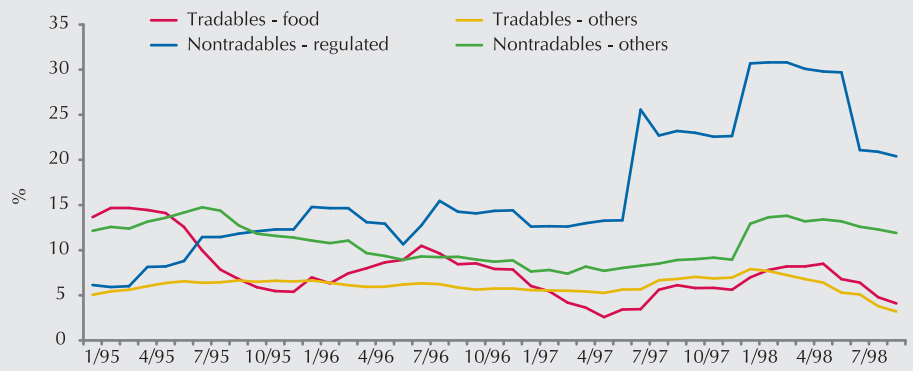
Year-on-year growth in regulated prices dropped from 29.7% in June to 20.4% in September. This slowdown occurred despite further adjustments being made to the prices of several major items (electricity up 24.1%, gas 22.7%, rents in rented flats 24.5%) with effect from 1 July 1998, and was due to the higher rate of growth of regulated prices in July 1997; whereas in July 1997 regulated prices rose by 16% month-on-month, in July 1998 they saw month-on-month growth of only 8.4%.

Prices of tradables and nontradables[3/]

During 1998 Q3, the role of growth of both nontradables and tradables prices went down. However, their growth rates did not converge substantially. Nontradables prices continued to grow significantly faster than tradables prices.

3/ CPI = food prices + other tradables prices + nontradable regulated commodities prices + nontradable other commodities prices

Chart II.4 Prices of Tradables and Nontradables (y-o-y)



In 1998 Q3, tradables price inflation slowed by 2.4 percentage points year-on-year compared with the previous quarter (July 5.7%, August 4.3%, September 3.7%). Month-on-month, the growth was negative in all months of 1998 Q3 (July -0.5%, August -0.4%, September -0.2%). The contribution of tradables to overall year-on-year CPI growth between June and September 1998 dropped by 1.6 points to 2.3 percentage points at the end of September.

These prices were affected by international competition. The favourable development was also boosted by the appreciation of the koruna and the decline in domestic demand. In Q3, food price inflation fell by 2.7 percentage points compared with Q2 to 4.1%. Given the stagnation of food purchases in retail trade, the decline in these prices indicates the possible influence of lower prices in the growing number of shops belonging to business chains. Growth in other tradables prices dipped by 2.1 percentage points to 3.2% in the same period.

Year-on-year nontradables inflation saw a stronger decline than tradables inflation (by 5.5 percentage points in 1998 Q3 against Q2), although the growth in prices remained relatively high (18% in July, 17.7% in August, 17.2% in September year-on-year). For this reason their contribution to overall inflation was relatively high (6.5 percentage points at the end of September). The fall in nontradables price inflation resulted from the above-mentioned smaller extent of regulated price adjustment in 1998 in comparison with the same period in 1997. The slower year-on-year decline in nontradables price inflation was mainly due to an increase in the prices of some commodities included in this group (cultural services, sports activities) while other commodity prices remained flat or fell.

Tab.II.2 Tradables and Nontradables Prices

INDICATOR	12/97		1/98		2/98		3/98		4/98		5/98		6/98		7/98		8/98		9/98	
MONTH-ON-MONTH INCREASES		share		share		share		share		share		share		share		share		share		share
Tradables	0.6	0.37	1.9	1.20	0.5	0.29	0.0	0.02	0.2	0.11	0.0	0.03	0.3	0.20	-0.5	-0.28	-0.4	-0.26	-0.2	-0.09
Nontradables	0.2	0.09	7.4	2.79	0.9	0.34	0.3	0.11	0.5	0.18	0.1	0.06	0.3	0.10	5.6	2.22	0.1	0.00	0.4	0.18
YEAR-ON-YEAR INCREASES		share		share		share		share		share		share		share		share		share		share
Tradables	6.3	4.05	7.4	4.77	7.7	4.96	7.7	4.95	7.5	4.79	7.4	4.70	6.1	3.90	5.7	3.60	4.3	2.70	3.7	2.30
Nontradables	16.8	5.99	23.2	8.31	23.5	8.45	23.6	8.48	22.9	8.28	22.9	8.30	22.7	8.10	18.0	6.80	17.7	6.70	17.2	6.50

III. INFLATION FACTORS

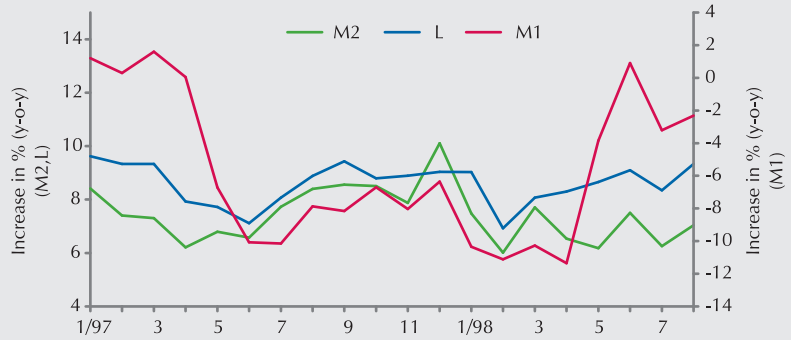
III.1 Money, interest rates and exchange rates

III.1.1 Monetary aggregates

In July and August 1998, monetary aggregates continued to see low growth in both nominal and real terms (despite a slight pick-up in August). Average nominal year-on-year M2 increases fluctuated below the level of nominal GDP growth and those of L roughly at the same level of nominal GDP growth. M2 development, which is associated with aggregate expenditure in the economy, can be evaluated as restrictive and directed towards ensuring a disinflationary process.

The restrictive monetary policy was bolstered by fiscal tightening. This showed up in the state budget running a surplus because of a reduction in budget spending. Monetary and economic developments were also affected by wage restraint. A stagnation in credit supply also played a role in the generally low money supply growth. However, because of the banks' increased prudence, the fall in nominal interest rates did not feed through into lending.

Chart III.1 Monetary Aggregates M1, M2 and L



Definition of monetary aggregates:
M1 = currency in circulation + demand deposits
M2 = M1 + CZK time deposits + foreign currency deposits
L = M2 + T-bills + CNB bills + National Property Fund bills in portfolios of domestic non-banking entities

Monetary aggregate M2

In July and August 1998, the M2 growth rate picked up slightly. The seasonally adjusted and annualised monetary aggregate for the last three and six months in particular experienced higher growth (Tab. III.1). However, M2 growth in relation to nominal GDP continues to be low. This is borne out by the year-on-year increases, which dipped by 0.5 percentage points compared with the end of 1998 Q2.

Tab. III.1 Increases in Seasonally Adjusted M2 (%)

	Annualised for last			
	1 month	3 months	6 months	1 year
May 98	1.3	13.5	3.5	6.2
June 98	2.1	11.3	3.4	7.5
July 98	0.1	14.5	9.1	6.3
August 98	2.1	18.6	16.0	7.0

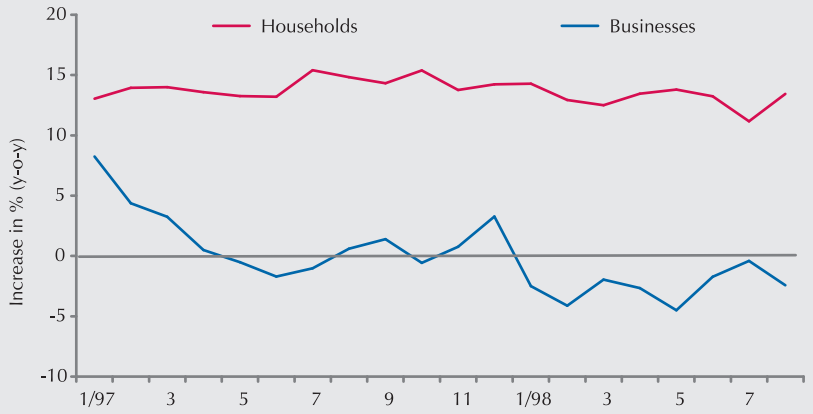
Note: Seasonally adjusted according to deviations from the series smoothed by the centred moving average method (length 13)

Structure of deposits

As regards money supply sector structure, the fall in the year-on-year growth rate of deposits in the business sector continued, while deposits in the household sector kept on rising. The money supply increases were thus recorded mainly in the household sector. The low deposit increases for businesses reflect above all a stagnation of bank lending. The year-on-year decline in deposits and currency in circulation in the business sector (financial assets) reached 2.4% at the end of August, compared with 1.7% in June this year.

In July and August 1998, the household sector saw a year-on-year rise in deposits and currency in circulation (financial assets) of 0.2 percentage points to 13.4% at the end of August. Households keep on preferring saving to consumption, a tendency that has been continuing since Q1. According to the latest available data the savings ratio of households[4/] reached 15% in Q2, an increase of 3.4 percentage points against Q1 and 2 percentage points against the whole of 1997. The drop in household real incomes is leading to a stronger tendency towards saving rather than consumption. The growth in household deposits has been concentrated primarily into one- and three-month deposits and construction savings.

Chart III.2 M2 by Sector



Monetary aggregate L

At the end of August, year-on-year L growth remained roughly at the end-Q2 level. There was an acceleration of growth on the basis of the last month, three months and six months in particular. The growth in L is associated with a preference for short-term financial investments for the purpose of higher returns. Non-banking financial institutions account for approximately 80% of L.

Tab. III.2 Increases in Seasonally Adjusted L (%)

	Annualised for last			
	1 month	3 months	6 months	1 year
May 98	1.5	18.7	7.6	8.7
June 98	0.8	12.3	7.5	9.1
July 98	0.7	12.4	10.6	8.3
August 98	2.0	14.6	16.6	9.3

Note: Seasonally adjusted according to deviations from the series smoothed by the centred moving average method (length 13)

4/ The savings ratio according to CSO data

Monetary aggregate M1

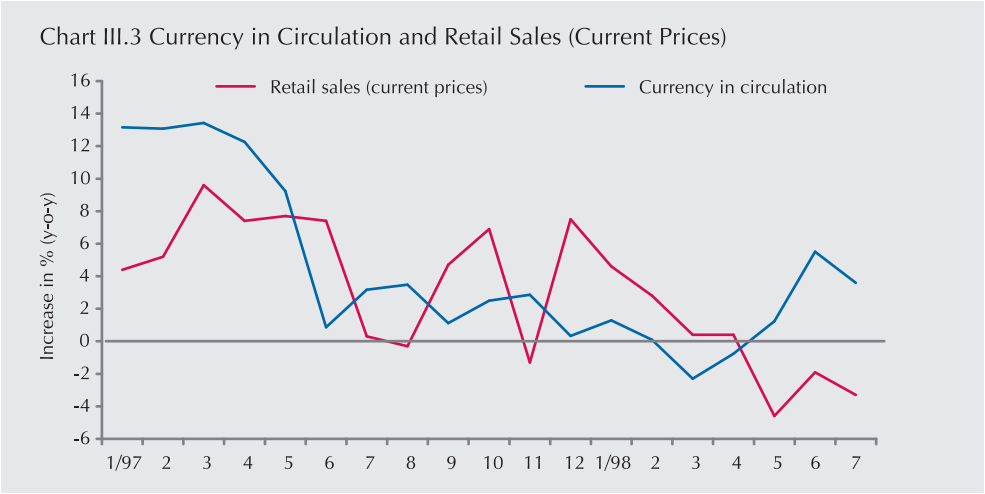
During July and August, M1 shrank by 3.2% and 2.3% respectively year-on-year. The development of the most liquid monetary aggregate is in line with business investment demand. In August itself, month-on-month M1 growth accelerated for both businesses and households. For businesses, highly liquid money increased because of returns of income tax from the state budget. In the case of households, M1 development was associated with higher savings, which fed through into an overall decline in retail sales.

Tab. III.3 Increases in M1 (%)

	Annualised for last			
	1 month	3 months	6 months	1 year
May 98	3.1	2.3	-6.1	-3.8
June 98	0.7	3.4	-9.9	0.9
July 98	-2.0	1.6	0.1	-3.2
August 98	4.0	2.5	4.9	-2.3

Note: Seasonally unadjusted because of the low significance of seasonal factors

Currency in circulation, which is part of M1, mirrored the decline in year-on-year retail sales growth in current prices. The year-on-year rise in currency in circulation dipped by approximately 2 percentage points in July and August.



III.1.2 Credits

Lending to businesses and households was broadly flat in July and August. The credit increase described in the July Inflation Report was only temporary. In July and August, the year-on-year increase in credits adjusted for write-offs, capitalisation of interest, exchange rate influences and credits of banks with licences revoked rose by approximately 1 percentage point to 7.2%. This increase was felt mainly in August because of a technical accounting operation of CZK 10.9 bn (transfer of funds from securities to credits). Adjusted for this influence, the year-on-year increase would have remained at the end-Q2 level.

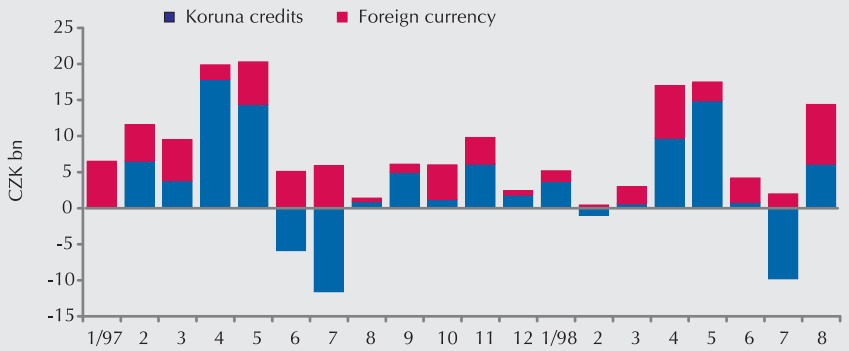
Tab. III.4 Increases in Adjusted Total Credits (%)

	Increase in credits during last			
	1 month	3 months	6 months	1 year
May 98	1.1	2.3	3.6	5.7
June 98	0.7	3.0	4.1	6.1
July 98	-0.6	1.2	2.4	6.0
August 98	1.5	1.6	4.0	7.2

Note: Adjusted for exchange rate influences, write-offs, interest capitalisation, banks with licences revoked

As to the money structure of credits, foreign currency credits showed particularly buoyant growth, rising in absolute terms by CZK 10.3 bn after adjustment for exchange rate influences. Koruna credits adjusted for write-offs, interest capitalisation and credits of banks with licences revoked dropped by CZK 3.8 bn.

Chart III.4 Increases in Koruna and Foreign Currency Credits (m-o-m)



Note: Adjusted for exchange rate differences, write-offs, interest capitalisation and banks without licences

In July and August 1998, credit supply was not significantly influenced by the decline in nominal interest rates resulting from CNB interest rate cuts. While the transmission mechanism from CNB repo rate to reference rates and subsequently to client rates is functioning in principle according to the generally acknowledged scheme, the relation between client interest rates and credit volume seems more complicated. The low sensitivity of credit volume and client interest rates is being influenced significantly by non-interest factors, among which the banks' prudence and associated terms for collateral, client soundness, etc. are most active. The low sensitivity of credit volume to client interest rates is also due to the low profitability of many businesses.

III.1.3 Interest rates

Several factors acted on interest rates in Q3. In approximately mid-June the effect of the crisis on the Russian financial market and the uncertainties associated with the early elections in the CR dropped out. This was supported by other factors that helped to calm the situation on the market and cause a relatively sharp fall in interest rates on virtually all maturities. These included favourable data on consumer prices and the balance of trade, an increased rating for state bonds and a lowering of the minimum reserve requirements. Interest rates continued falling until the beginning of August, when another Russian crisis hit financial markets all over the world. The influence of Russian events was so strong that it drowned out other factors acting in favour of a fall in interest rates. Foreign investors exited developing markets as a whole, and medium and long-term assets started to be sold off. This had an impact on the Czech equity and bond markets. The money market was not hit so hard, although interest rates did rise for a short time. However, in general the interest rate level fell in all financial

market segments in comparison with the first half. The money market yield curve regained a negative slope for the first time since August 1997 - evidence of the positive disinflationary expectations of market participants. This development fed through into interest rates on newly granted credits, which dropped moderately.

III.1.3.1 Short-term interest rates

Short-term PRIBOR rates went through several phases. From mid-June, interest rates started to fall relatively dynamically, particularly on longer maturities. This was caused mainly by an inflow of foreign capital resulting from a shift of investment from Russia to other markets, including the CR, and an improved opinion of developing markets linked with the IMF's promise to help Russia. The stabilised post-election situation in the CR, positive data on inflation and the balance of trade, and the announcement of a reduction of the MRR by 2 points to 7.5% (effective 30 July), which meant an inflow of further free liquidity to the market, were secondary factors. All this, together with the considerable strengthening of the exchange rate, contributed to foreign investor expectations that the CNB would lower interest rates. The biggest movement was recorded at the yield curve's longer end, which made its form markedly inverse. Short-term interest rates did not drop until mid-July, when the CNB cut the 2W repo rate by 0.5 percentage points. This confirms that the 2W repo rate is the most important for the yield curve's short end.

Chart III. 5 Key Rates Development

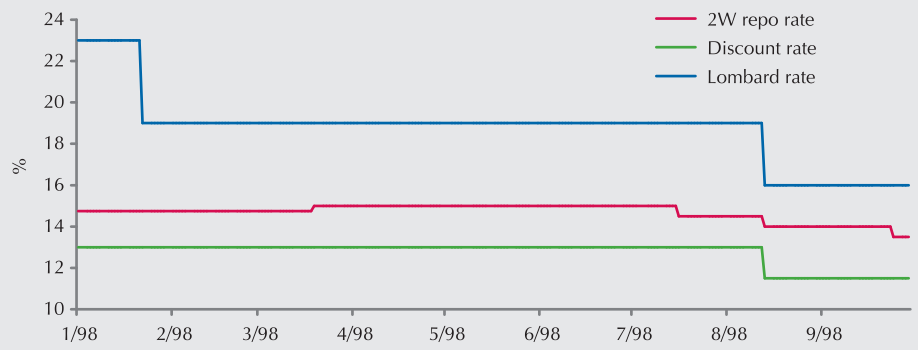
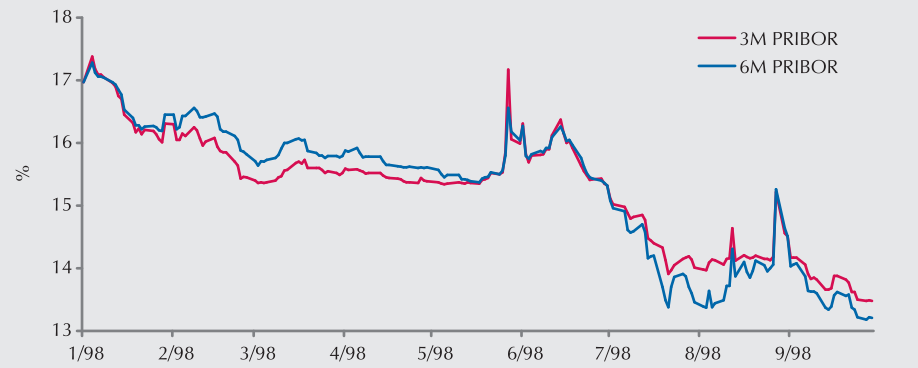


Chart III. 6 3M a 6M PRIBOR Rates



At the beginning of August, the favourable developments were still wearing off. As a result of the Russian financial crisis, however, interest rates stopped falling and started rising, to begin with only at the yield curve's longer end and then, at the end of August, partly also at its short end. Despite the ongoing liquidity crisis on the Russian financial market, the CNB lowered its key rates with effect from 14 August. The discount rate was lowered by 1.5 percentage points to 11.5%, the Lombard rate by 3 percentage points to 16% and the 2W repo rate by 0.5 percentage points to 14%. This had a calming effect on the Czech market, and short-term rates responded by declining. The yield curve attained a temporary positive slope while bid-offer spreads widened slightly as an expression of the temporary instability on the money market. From the beginning of September onwards the situation on the Czech market calmed down as the impact of the Russian financial crisis unwound. At the yield curve's short end, the 1W and 2W PRIBOR interest rates again converged towards the repo rate. Interest rates on longer maturities were at their lowest since the beginning of the year. The negative slope of the yield curve continued to steepen. Bid-offer spreads returned to their usual values of 0.2 - 0.3 percentage points. At the end of September, the CNB cut the 2W repo rate by a further 0.5 percentage points to 13.5%.

Chart III. 7 Yield Curve for PRIBOR Rates

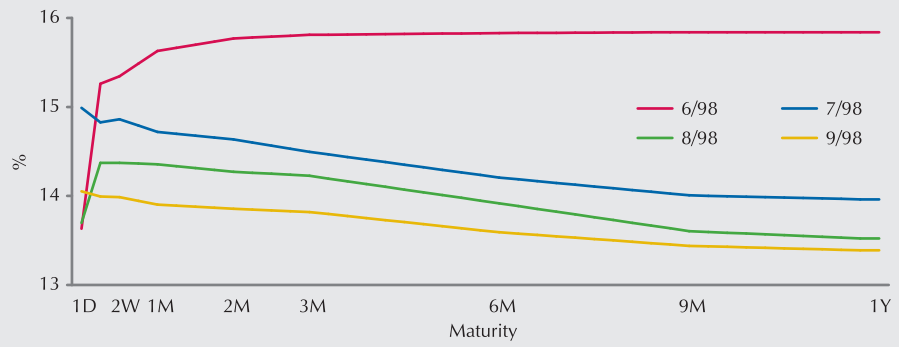
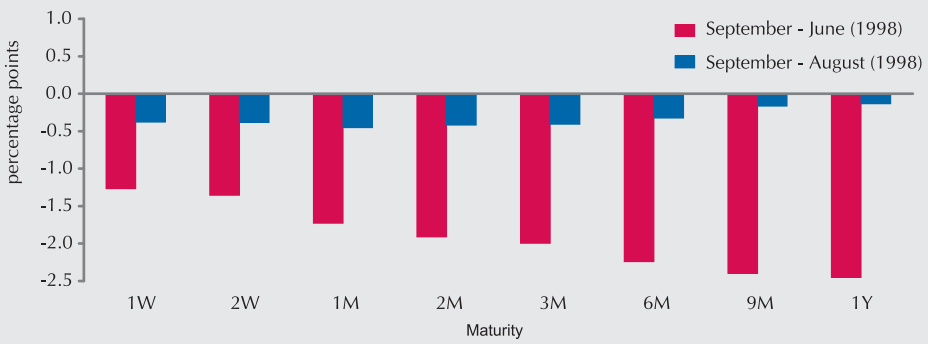
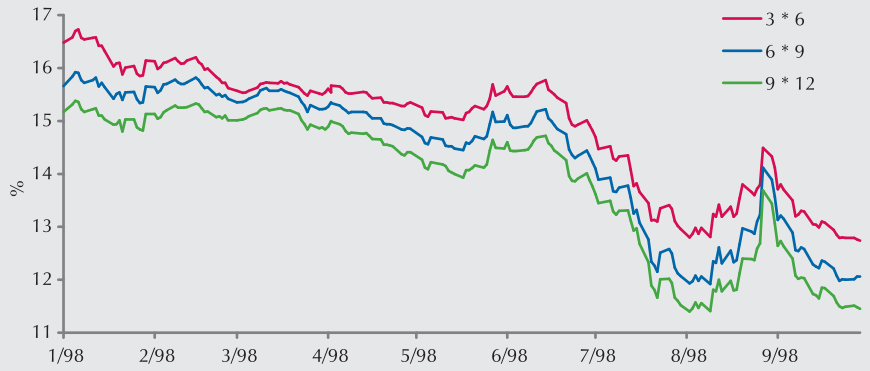


Chart III. 8 Average PRIBOR Rates



FRA (forward rate agreement) interest rates mirrored PRIBOR rates. The downward trend seen since mid-June continued, except for several corrections, until the beginning of August. Derivatives rates, however, are more sensitive to stimuli and are thus more volatile. This volatility was seen during the Russian financial crisis. When this crisis faded away, FRA rates fell to their pre-crisis level. Their level since the end of September testifies to the disinflationary expectations of financial market participants. According to FRA quotations, the 3M PRIBOR is expected to fall by 0.7 percentage points within three months and the 1Y PRIBOR by 2 percentage points within one year.

Chart III. 9 3M FRA Rates - Offer

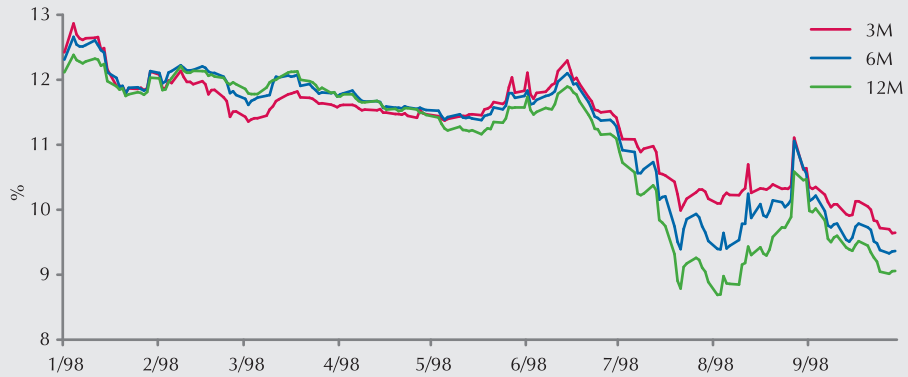


The short-term bond market is a less developed segment of the money market, owing to its smaller number of issues, lower liquidity and lack of transparency. This means the informative nature of its yield curve is limited. Nevertheless, it can be said that T-bill yields moved in accord with other money market rates. Turnovers on the short-term bond market fluctuated around CZK 400 bn a month, with outright trades predominating. Repo trades accounted for about 5%.

During Q3, nine T-bill auctions with 3W - 1Y maturities took place. Because of the demand overhang in all auctions resulting from the attractiveness of these instruments, the resulting gross yields were below the limit yields announced (varying between 12.85% and 14.80%, depending on the maturity and the market situation).

The interest rate differential (PRIBID CZK-LIBOR DEM) primarily reflected interest rates on the domestic interbank deposit market. Foreign interest rates have been flat for a considerable time now. At the end of September, the Federal Reserve System lowered its key overnight rate by 0.25 percentage points, the first change in almost three years, but this did not significantly affect the interest rate differential. The gradual downward trend in the differential seen since the start of the year was disturbed, however, by the situation on the Russian financial market at the turn of May and June. During the subsequent several weeks the interest rate differential plummeted (by 2% - 3% depending on individual maturities). Despite this, foreign investors remained interested in koruna assets. Following another temporary increase in the interest rate differential during the August events in Russia, the downward trend resumed. At the end of September, some maturities were down to their lowest levels in 1998: 9.7% for 3M maturities, 9.4% for 6M maturities and 9.1% for 1Y maturities.

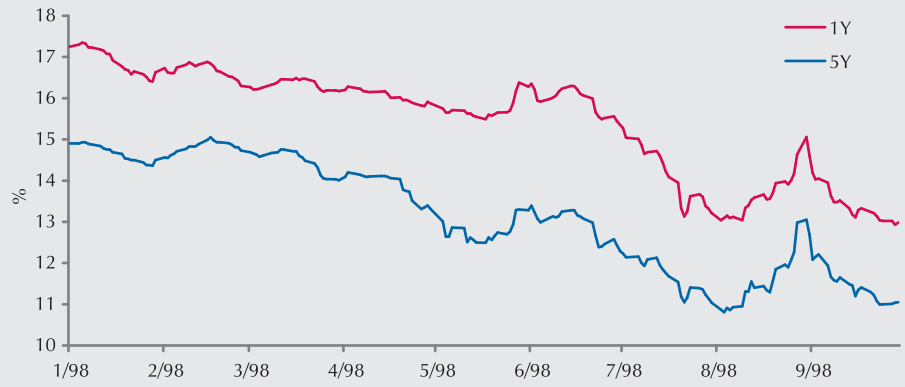
Chart III. 10 Interest Rate Differential between Rates in CZK and DEM



III.1.3.2 Long-term interest rates

The trend in long-term interest rates was similar to that of short-term rates, though with greater volatility. The downward trend in IRS (interest rate swap) rates seen since mid-June (for individual maturities a decline of 1.9 - 3.3 percentage points) was interrupted at the beginning of August. Market sentiment in this period was relatively optimistic thanks to good news on inflation and other economic indicators. The 0.5 percentage point repo rate cut further boosted the optimism on the market and caused a further drop in yields on all products. The subsequent and this time much more severe financial crisis in Russia hit not only the financial markets of other emerging markets, but also markets all over the world. In the CR, this crisis fed through into an increase in IRS rates of about 2 percentage points in August; yields on taxed government bonds rose by 1.5 - 1.9 percentage points. To begin with, the slump in bond prices was caused by the exit of foreign investors from all emerging markets. Later, the decline was exacerbated by domestic investor distrust and a sell-off of their portfolios, leading to a surge in trading volumes. The subsequent fall in interest rates in September confirmed a gradual disengaging of the Czech and neighbouring financial markets from the situation in Russia. At the end of September, interest rates were at their lowest since the beginning of the year. Despite short-term deviations caused by external influences, long-term rates were generally on the decrease. This is borne out by the ongoing disinflationary trend, particularly since mid-1998.

Chart III. 11 IRS Rates



The monthly IRS yield curves in Q3 show a fall in these rates compared with June, despite the deviations caused by external factors. For 1Y maturities the decrease was 2.5 percentage points, for 5Y maturities 1.5 percentage points and for 10Y maturities 1 percentage point. Though the shape of the yield curves is very similar, there were differences in the movement of rates in individual months.

Chart III. 12 Yield Curve for IRS Rates

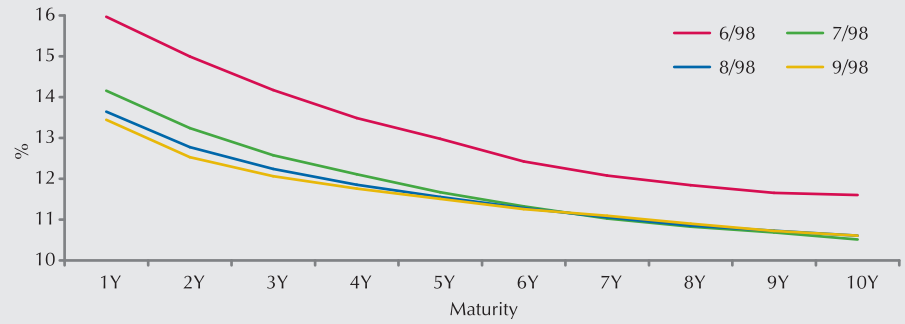


Chart III.13 Average IRS Rates

The position and slope of government and corporate bond yield curves in specific months were similar to those of the IRS curves. There was one issue on the government bond primary market (CZK 5 bn, 5Y maturity). Its gross yield reached 10.9%, substantially lower than in the two issues in the first half (14.8%). This was caused by greater investor interest, especially after the rating agencies Moody's and Standard & Poor's awarded a favourable rating to Czech government bonds. Two issues totalling CZK 2.7 bn were made on the corporate bond market.

III.1.3.3 Client interest rates

Client interest rates in Q3 for the most part moved downwards in line with the tendencies prevailing on the interbank deposit market. At the end of Q3, the reference rates of most major commercial banks were 1.5 - 2 percentage points lower than at end-Q2.

Between June and August 1998, interest rates on newly granted short-term credits fell by 0.8 percentage points to 15.1%, their lowest level since April 1997 (13.4%). Average nominal interest rates on short-term time deposits fell more gradually: from 12.0% in June 1988 to 11.6% in August, their lowest level in 1998.

In Q3, real interest rates[5/] were significantly affected by disinflation. Despite a decline in nominal rates, average real interest rates on newly granted short-term credits gradually picked up, from 4.0% in June 1998 to 5.7% in August in CPI terms and from 10.4% to 10.9% in PPI terms. The disinflationary process fed through strongly into real interest rates on short-term deposits, which in 1998 Q3 reached positive values for the first time. In June 1998, real interest rates on short-term deposits were 0.0%, whereas in August they stood at 2.2% (in CPI terms).

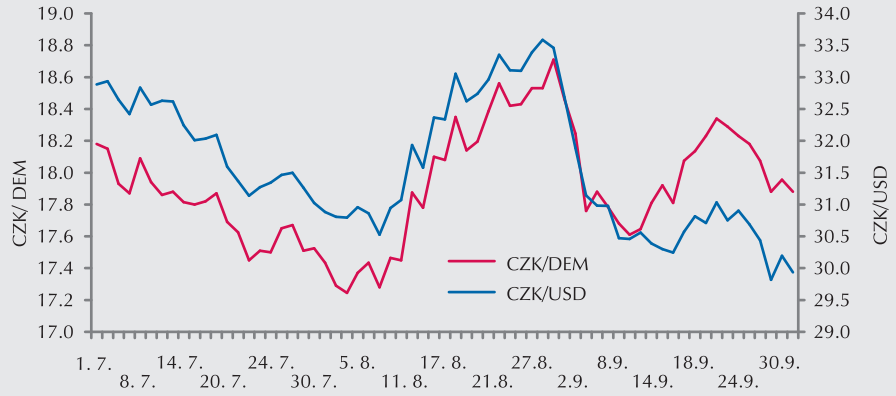
III.1.4 The exchange rate

The average monthly values of the koruna's nominal exchange rate against the Deutsche Mark indicate that following a substantial strengthening of the exchange rate in July (from 18.59 in June to 17.76 CZK/DEM) there was a stabilisation at approximately 18 CZK/DEM. This apparent stabilisation, however, hides several major fluctuations. The following chart shows that the exchange rate appreciation in July was replaced by a sharp depreciation in August. The Russian financial crisis played a key role in this. Once the first reactions of world markets to the easing of the rouble's exchange rate had worn off, the koruna exchange rate again strengthened in the first half of September. This was followed by another weakening of approximately 4% in the second half of September, when the nervousness of international investors, who realised that the situation on the Russian financial market

5/ Real interest rates are calculated by deflating nominal interest rates by the latest CPI and PPI

was a manifestation of longer-term difficulties in the world financial system, carried over into Central European markets, including the CR. The depreciation of the exchange rate demonstrates its sensitivity to the external environment. The rapid disappearance of these deviations indicates a certain shift in foreign investors' approach to the Czech financial markets and an evaluation of them as relatively stable.

Chart III.14 Nominal CZK/DEM and CZK/USD Exchange Rate

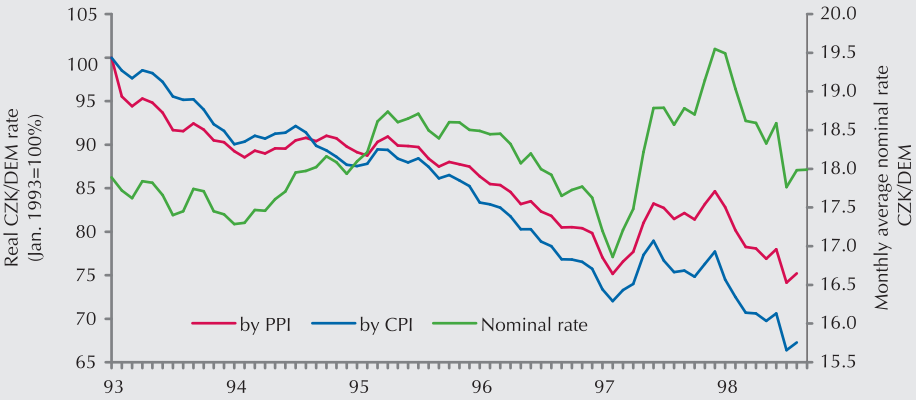


Two distinct phases can be seen in the koruna's exchange rate against the US dollar in the period under review. In the first two months of Q3, the exchange rate against the dollar was very similar to that against the Deutsche Mark. In September, however, it strengthened, mainly because of expectations of interest rate cuts by the Federal Reserve System and concerns about US economic development following the capital market upheavals (shares on the US capital market plummeted).

Disregarding short-term deviations, the average nominal exchange rate has shown a marked tendency towards appreciation since the beginning of this year. This can be included among the fundamental factors in the ongoing disinflationary process in the CR.

In July, the koruna's real exchange rate against the Deutsche Mark was influenced by both the nominal appreciation and buoyant domestic inflation. The stagnation of the real exchange rate in August and September was caused by a stabilisation of the average values of the nominal exchange rate and by almost zero outturns for domestic month-on-month inflation. The real exchange rate has been strengthening since the beginning of this year. This implies a worsening of the price competitiveness of domestic products, resulting in export stagnation. Imports are also slowing down, however, since the more advantageous exchange rate is being partially offset by flat domestic demand and the economic decline.

Chart III.15 CZK/DEM Nominal and Real Rates



III.1.5 Capital flows

In 1998 H1, the financial account ended in a surplus of CZK 38.3 bn (USD 1.13 bn), more than double the figure from the same time a year earlier. Capital inflow slowed in comparison with Q1, though. The inflow structure has been changing quite significantly. Foreign direct investment has risen considerably. Between 1993 and the first half of 1997, this investment fluctuated between CZK 9 and CZK 14 bn. In the first half of this year, however, it reached CZK 20 bn (of which capital flowing into the banking sector accounted for 53.4%). Czech direct investment abroad remained insignificant (CZK 1.1 bn) in the first half of this year.

The trend in foreign portfolio investment provides evidence that foreign investors' interest in this type of investment has been fully restored (CZK 19.6 bn) following its fall in 1996 and the outflow of investment in the first half of last year. In contrast, domestic investors' interest in portfolio investment abroad has been gradually waning for several years. In the first half of 1995, capital outflow in the form of purchase of foreign shares and bonds by residents amounted to more than CZK 7 bn. In the same period of 1996, the balance on this item was in equilibrium. A year later, capital repatriation exceeded CZK 3 bn and in the first half of this year it totalled CZK 7.6 bn.

In the first half of this year, drawing on long-term credits was significantly lower than in previous years. Repayments even exceeded newly drawn credits. Also, credits extended have been falling substantially compared with the first half of last year and are returning towards 1996 values.

The outflow of short-term capital continued to moderate. To a certain extent this reflects the increasing confidence of short-term foreign investors in the CR, despite the opposite tendency in developing countries at the moment. The informative nature of this indicator is limited, though, owing to the widespread use of financial derivatives in the CR.

Tab. III. 5 Financial Account and Foreign Exchange Reserves (CZK bn)

	H1					
	1993	1994	1995	1996	1997	1998
Financial account	59.1	36.5	78.0	24.3	16.8	38.3
Direct investment	11.0	6.1	10.3	11.9	13.3	18.9
- Czech abroad	-0.9	-2.9	-0.5	-0.6	-0.7	-1.1
- Foreign in the CR	11.9	9.0	10.8	12.5	14.0	20.0
Portfolio investment	27.1	16.9	9.8	7.5	-4.3	27.2
- Czech abroad	-6.0	-0.3	-7.4	0.0	3.5	7.6
- Foreign in the CR	33.1	17.2	17.2	7.5	-7.8	19.6
Other investment	21.0	13.5	57.9	4.9	7.8	-7.8
1. Long-term investment	8.9	8.4	28.0	43.5	26.0	-2.8
- Credits granted to foreign countries	3.7	5.7	1.8	-2.2	-5.4	-2.3
- Credits obtained from foreign countries	5.2	2.7	26.2	45.7	31.4	-0.5
2. Short-term investment	12.1	5.1	29.9	-38.6	-18.2	-5.0

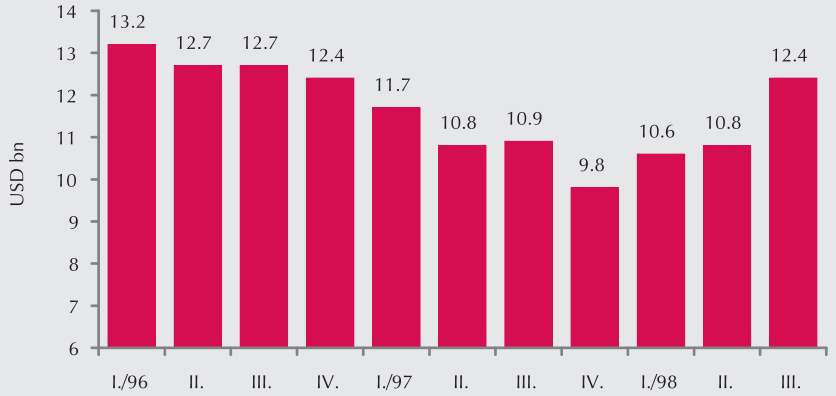
In 1998 H1, foreign exchange reserves rose by CZK 41.4 bn (USD 1.22 bn) to CZK 361.4 bn (USD 10.8 bn). This increase basically corresponds to the extent of non-debt capital inflow (foreign direct investment in the CR totalled CZK 20.0 bn and purchases of domestic shares and other equities totalled CZK 21.7 bn).

Note: According to preliminary data, foreign exchange reserves rose in Q3 by a further CZK 8.4 bn, reaching CZK 369.8 bn (USD 12.4 bn - affected significantly by the weakening of the US dollar) as of 30 September 1998.

Gross foreign indebtedness has been increasing only negligibly since the end of 1996. On 30 June 1998, it stood at USD 21.9 bn, an increase of USD 0.3 bn against end-1997. Short-term commitments account for approximately one third and long-term commitments two thirds of the total. The majority of

indebtedness is concentrated in commercial banks and businesses (short-term commitments 100%, long-term 88%). Government and CNB indebtedness is very low - just USD 1.8 bn. The ratio of foreign indebtedness to gross domestic product is fluctuating between 42% and 43%, slightly above the level of 40% that is generally considered sensitive.

Chart III.16 CNB Foreign Exchange Reserves



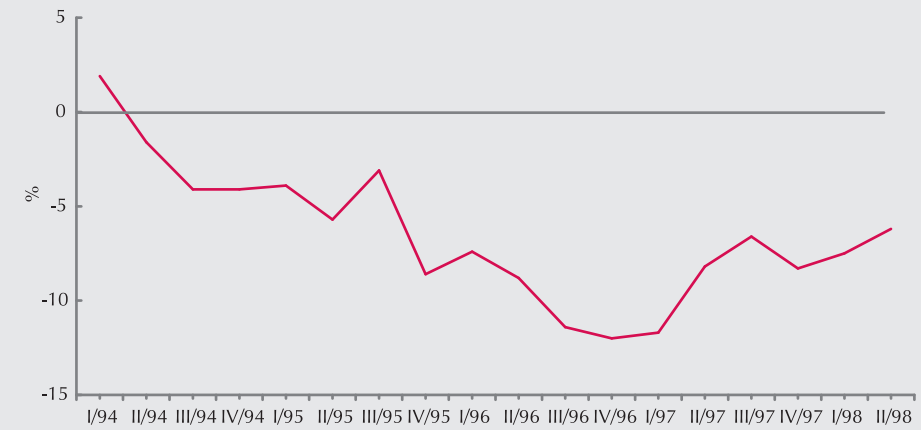
III.2 Demand and output

III.2.1 Introduction

The gradual reduction in the disequilibrium between domestic demand and output, felt since mid-1997, continued into 1998 Q2. The external imbalance, measured in absolute terms by the goods and services trade deficit (ie net exports), further decreased in 1998 Q2 (by CZK 7 bn against 1997 Q2 and by CZK 2.2 bn against 1998 Q1). Its share in GDP was also lower (down by 2 percentage points to 6.2% in 1998 Q2 against the same period of last year).

This reduction in external imbalance was generated mainly by a contraction in overall domestic demand (this has been continuing for five consecutive quarters and is largely due to monetary and fiscal restrictions). The fall in domestic demand led to a slowdown in imports and at the same time helped to increase exports. However, the export growth could not fully offset the effects of the contraction in domestic demand on domestic output. This led to a fall in GDP.

Chart III.17 Share of Net Exports in GDP (constant prices)



Tab. III.6 Real Output and Demand Growth Rate (y-o-y, %)

	1995	1996	1997	I/1997	II/1997	III/1997	IV/1997	I/1998	II/1998
GROSS DOMESTIC PRODUCT	6.4	3.9	1.0	1.2	0.5	-0.1	2.2	-0.9	-2.4
AGGREGATE DEMAND (domestic demand and exports)	11.9	7.4	3.3	3.8	4.1	0.9	4.4	6.8	2.0
DOMESTIC DEMAND (including change in stocks)	9.8	8.5	-0.4	5.2	0.0	-4.4	-1.2	-4.5	-4.3
of which:									
Household consumption	6.9	7.0	1.6	4.0	5.7	-2.2	-0.3	-1.6	-7.0
Government consumption	-1.2	4.3	-1.8	1.1	-3.9	-3.2	-1.1	-2.7	0.6
Fixed capital formation	21.0	8.7	-4.9	-0.6	-8.5	-9.5	-0.9	-2.5	-4.1
EXPORTS OF GOODS AND SERVICES	16.1	5.4	10.2	1.3	11.7	11.3	15.5	27.4	12.3
IMPORTS OF GOODS AND SERVICES	22.0	12.9	6.7	7.5	9.4	2.4	7.7	17.3	7.9

Note: Data are in 1994 constant prices

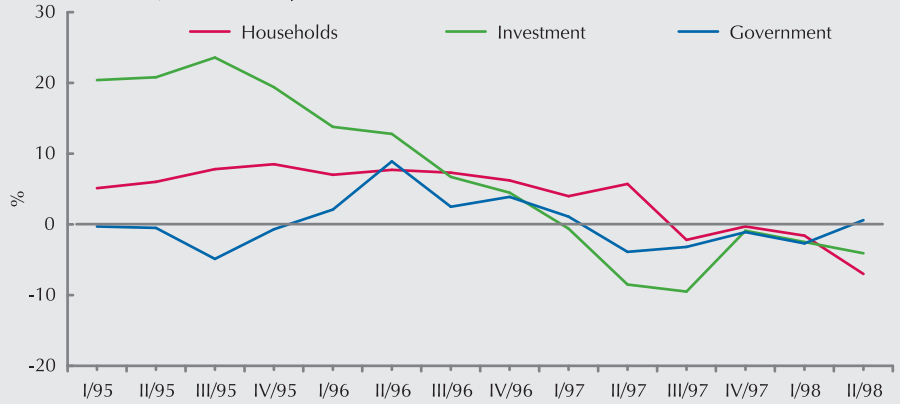
III.2.2 Domestic demand

The downward trend in domestic demand continued during 1998 Q2. The decline (excluding the change in stocks) was steeper than in 1998 Q1 (increasing from -2.1% to -4.6% year-on-year). In the first six months of 1998 domestic demand fell by 3.5%. Taking into account the change in stocks, this decline moved at broadly the same level in both Q1 and Q2 (-4.5% and -4.3% respectively year-on-year).

Household demand showed the most marked decline in 1998 Q2. Its downward trend was the steepest of all the components of domestic demand, and its effect on the overall drop in GDP was the most significant. Household consumption was responsible for almost 80% of the overall year-on-year fall in domestic demand of CZK 14.7 bn in 1998 Q2. Another factor contributing to the bigger domestic demand drop in Q2 was investment demand, which fell year-on-year by 2.5% in Q1 and 4.1% in Q2. Only government consumption slightly increased (by 0.6% year-on-year) in Q2, as a result of extraordinary expenses, after a 2.7% reduction in Q1. Its overall decline in 1998 H1 was thus only 1%.

Chart III.18 Growth Rate of Domestic Demand Components (y-o-y)

(in %, 1994 constant prices)



The ongoing contraction in domestic demand was caused primarily by the following economic policies:

- restrictive monetary policy, which through the existing level of interest rates affected the extent of newly granted credits by commercial banks,
- fiscal restrictions, resulting in declining government demand and investment,
- the curbing of wage increases in government institutions.

The effect of these measures, aimed at gradually reducing the external disequilibrium, was boosted by:

- the increasing prudence of commercial banks in granting new credits (especially to the corporate sector) with respect to the level of risk credits,
- greater interest in investment in government securities, ensuring higher yields and lower risks than investment in the corporate sector (loans, share purchases),
- a higher propensity of households to save, visible during 1998 Q2 especially in connection with the increasing unemployment rate,
- a wage growth deceleration in the business sector, resulting from the current financial situation of this sector, the ongoing restructuring of businesses and increasing competition,
- expectations of low economic growth.

III.2.2.1 Household consumption

The downward trend in real household consumption, visible from 1997 Q3, substantially strengthened in 1998 Q2. While in 1998 Q1 the absolute year-on-year decline was CZK 2.4 bn (1.6%), in Q2 it reached CZK 11.8 bn (ie 7%). This was largely the result of:

- a bigger decline in all basic components of real household incomes, amounting to 5.9% year-on-year in 1998 Q2 against 1.9% in 1998 Q1. Real wage incomes, which account for almost 65% of total household incomes, fell the most (by 8.2%); social incomes dropped by 4% in real terms and other incomes by 2.8%;

- a higher propensity of households to save. The renewed growth trend in the savings ratio[6/] in 1998 Q2 (to 11.8%) was most probably generated by increasing uncertainty connected with the higher unemployment rate (creation of money reserves). However, the influence of other factors cannot be excluded (eg saturation of consumer demand for some commodities).

Tab. III.7 Basic Data on Household Real Disposable Incomes, Consumption, Retail Sales and Savings

y-o-y change in %

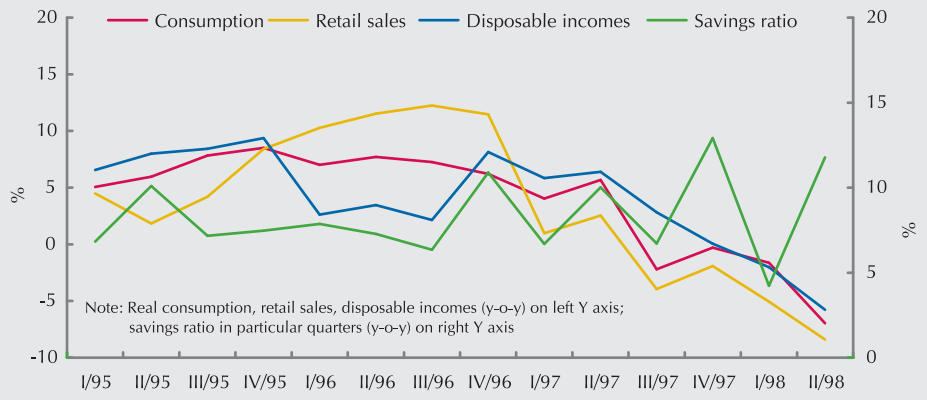
INDICATOR												
	I/96	II/96	III/96	IV/96	1996	I/97	II/97	III/97	IV/97	1997	I/98	II/98
Total household incomes	2.3	3.9	2.5	7.4	4.1	5.1	6.5	2.3	-0.1	3.3	-1.9	-5.9
Disposable household incomes	2.6	3.5	2.2	8.1	4.2	5.8	6.4	2.8	0.1	3.6	-2.0	-5.8
Household consumption	7.0	7.7	7.3	6.2	7.0	4.0	5.7	-2.2	-0.3	1.6	-1.6	-7.0
Retail and catering sales	10.3	11.5	12.2	11.5	11.4	1.0	2.5	-3.9	-1.9	-0.7	-5.1	-8.4
Savings ratio (percentage of savings in disposable incomes for the given year)	7.9	7.3	6.3	10.9	8.2	6.7	10.0	6.7	12.9	9.2	4.2	11.8

Source: CNB and CSO statistics

6/ Savings ratio = change in net financial assets : disposable income; Financial assets = CZK and foreign currency deposits + cash + securities + change in technical reserves for life insurance and supplementary pension insurance; Financial liabilities = CZK and foreign currency loans

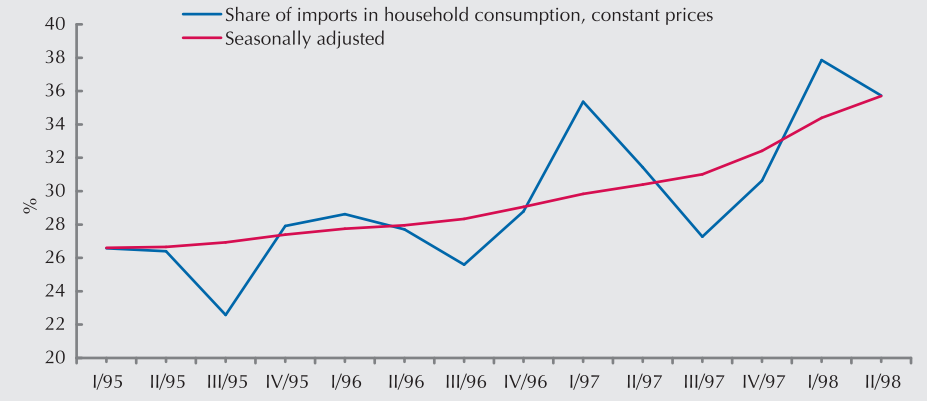
The declining effective household demand accompanied by the higher propensity to save was most strongly felt in falling real retail sales and a changing structure of consumer demand, primarily in a further fall in purchases of durables (vehicles, etc.). The declining purchasing power of households was also reflected in an ongoing drop in sales of services provided to households.

Chart III.19. Real Consumption, Retail Sales, Disposable Incomes and Savings Ratio



The more marked contraction of household consumption in 1998 Q2 helped not only lower net inflation but also reduce the trade deficit. The effect of declining consumer imports on narrowing the gap between domestic supply and demand was partially offset by an expanding import propensity of households.

Chart III.20 Import of Goods/Household Consumption



III.2.2.2 Investment demand

The year-on-year drop in gross fixed capital formation continued in 1998 Q2 (-4.1%). Compared with 1998 Q1 it deepened slightly, largely because of a further drop in government and non-financial institution investment. This was generated by persisting effects limiting demand for investment (especially lack of own funds and credit availability in the business sector and continuing fiscal restriction). However, the rate of investment remained quite high (30.4%). Demand for investment receded, but its structure indicated some positive tendencies. Investment demand in individual sectors was as follows:

- Non-financial businesses continued to account for the biggest share of overall capital investment (67.9% in current prices). In 1998 Q2 this sector's investment dropped slightly against Q1 in

year-on-year terms (by 3.1%), but this was mostly due to a steeper drop in construction investment (by 8.2%); in contrast, the active component of the investment - plant and machinery - increased year-on-year by 2.5%.

Changes were also visible in the investment activities of individual types of firms. During the first six months of 1998, investment activity substantially increased mainly in large firms under foreign control, where year-on-year investment growth in Q2 more than doubled in comparison with Q1. In large public corporations and private firms, the tendency was just the opposite: public corporations registered stagnation in Q2, while in private businesses the year-on-year decline substantially increased. At the same time there was an absolute decline also in medium-sized private firms. These facts reflected the overall lower efficiency of private domestic businesses and insufficient financial coverage of their investment projects compared with foreign firms.

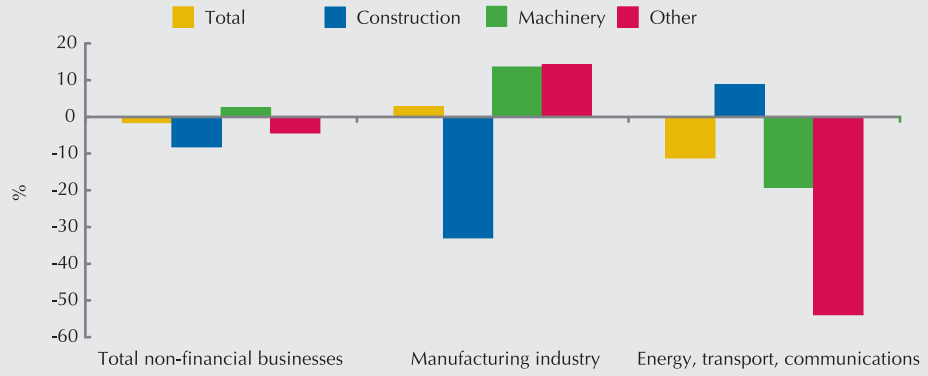
In terms of sectors, investment in manufacturing industry increased slightly, although it accounted for only 21.5% of overall investment. In comparison with the same period last year investment in this sector rose by 2.7% as a result of machinery investment (up by almost 14%), with construction investment dropping by 33%. In contrast to manufacturing, investment in infrastructure (energy, transport and communications) fell by 11.2% year-on-year.

Four branches accounted for nearly half (48.3%) the manufacturing investment: food and beverages, motor vehicles, chemical products and non-metallic mineral products. Extraordinarily high year-on-year increases were registered for processing of secondary raw materials, production of radio-technical products and office equipment production. But their share in manufacturing investment was quite low.

- The year-on-year fall in gross fixed capital formation in 1998 Q2 compared with the previous quarter was due in particular to declining demand for investment from the government sector (down by more than 12%) and the ongoing radical fall in financial institution investment (down by more than a third).

- Household sector investment showed comparatively robust growth in 1998 Q2 (12.5% year-on-year); about two thirds of this investment was accounted for by investment of natural persons not listed in the trade register and one third by individual housing construction. While the year-on-year rise in individual housing construction slowed in Q2, investment by natural persons grew substantially because of very extensive investment in machinery.

Chart III.21 Changes in Capital Investment of Non-financial Businesses (y-o-y)
in 1998 H1 (1997 H1 = 100%)



III.2.2.3 Government consumption

The gradual decline in government consumption in constant prices, visible from 1997 Q2, stopped in 1998 Q2. However, the negligible rise in this period (0.6%) did not signal a change in trend, but was the result of extraordinary state budget expenditure on the elections and spending outside public budgets in the narrower sense (particularly by health insurance companies in connection with rising health care costs). Overall, government consumption fell 1% year-on-year in 1998 H1 and its share of GDP dropped to 20.8% in Q2.

Government consumption in the first six months of 1998 was consistent with the overall development of expenditure of public budgets in the narrower sense (state budget and local budgets), which was also flat compared with the same period of last year (+ CZK 1.1 bn year-on-year in nominal terms). Budget spending in 1997 H1 was affected by the implementation of government "packages". This is showing up in the growth rates achieved this year, particularly with the state budget. While current expenditure as of the end of June was broadly in line with the seasonal rhythm, capital expenditure was far below last year's level (by about CZK 6 bn). In particular, there was a substantial decline in allocations to subsidised organisations and subsidies to business entities and civic associations, etc. All this resulted in public budgets in the narrower sense running a surplus of CZK 4.9 bn.

Tab. III.8 Public Budgets

	1995	1996	1997	H1 1997	H1 1998
State budget (CZK bn)					
Revenues	439.0	482.9	508.9	241.5	258.6
Expenditure	431.8	484.5	524.6	256.3	256.8
Balance	7.2	-1.6	-15.7	-14.8	1.8
Local budgets (CZK bn)					
Revenues	129.1	161.7	149.8	63.0	72.2
Expenditure	132.3	171.1	154.6	66.1	69.1
Balance	-3.2	-9.4	-4.8	-3.1	3.1
Public budgets balance - total	4.0	-11.0	-20.5	-17.9	4.9
Share of public budgets balance in GDP (%)	0.3	-0.7	-1.2	-2.4	0.6

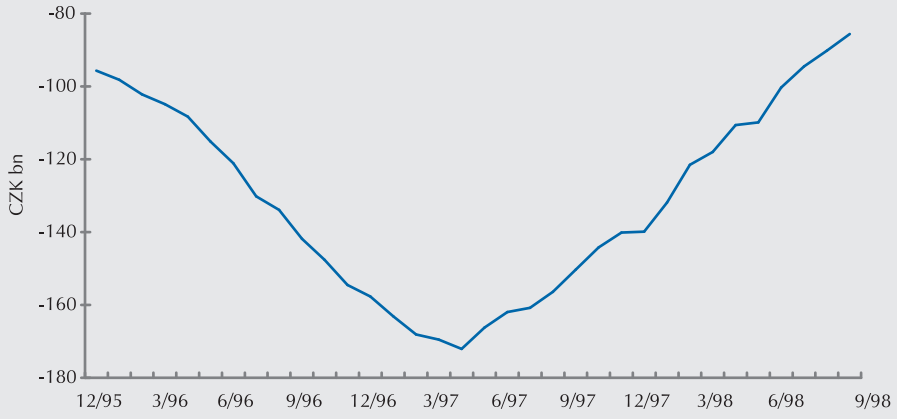
Note: Public budgets in the narrower sense, ie state budget and local budgets

III.2.3 Net foreign demand

The goods and services balance continued to develop favourably in 1998 Q2. Compared with Q1, the year-on-year growth rates of both exports and imports slowed (12.3% for exports and 7.9% for imports). Nevertheless, exports continued to outpace imports, though this lead was not as substantial as in 1998 Q1 owing to a higher comparison base from the previous year, particularly for exports. The continuation of this positive trend was confirmed by the trade balance development in 1998 Q3 (in current prices).

The deficit (net exports of goods and services) further diminished year-on-year (by almost 27%); its share of GDP dropped by 2 percentage points to 6.2%. The import propensity of GDP, however, remained high (82%), probably due to increasing production co-operation, calling for more imported materials and components.

Chart III. 22 Balance of Trade (moving aggregate for 12 months)



This trade balance improvement can be attributed to the revival of economic growth in West European countries (mainly in Germany, the Czech Republic's main trading partner with a 38% share in overall exports). The further reduction of household consumption in 1998 Q2 also played a part, helping to shift part of domestic production to foreign markets and at the same time depressing demand for imported consumer goods. The launching of capacities in businesses with foreign ownership interests also contributed to stronger exports of products with higher added value (machinery, electrotechnology).

The favourable trend in the balance of trade[7/] from the first half of the year continued into 1998 Q3 and was ever more affected by positive developments in the terms of trade[8/].

While in 1998 Q1 the improvement in the terms of trade accounted for 42% of the year-on-year reduction in the trade deficit, in Q2 it accounted for 100%. The development of physical volumes of exports and imports in Q2 by itself would have led to the same trade deficit as in Q1. However, export prices rose by 7.6% year-on-year in Q2, with import prices remaining unchanged.

The composition of exports and imports signalled some positive tendencies. In terms of direction of use, there was a continuing reduction in imports for personal consumption compared with the same period of last year[9/], linked particularly with the declining consumer demand and probably also the result of saturation of demand for some imported commodities. On the other hand, imports for intermediate consumption continued to grow. Investment imports were expanding rapidly as well. At the same time, imports of lower-value-added products fell faster than those of higher-value-added products. The year-on-year increase in exports of goods with higher value added represented a positive trend in exports.

In 1998 H1 the decline in the proportion of imported food, raw materials and semi-finished products was steeper (-1.5 percentage points) than that of imported machinery and electrotechnology commodities (-0.9 percentage points). This was largely the result of low global commodity prices, eg oil imports grew year-on-year by 5.8% in the first half of the year in volume terms, while in value terms they fell by 11%. At the same time, the proportion of commodities with high value added in total exports increased year-on-year by 3.4 percentage points to 47.6%. The share of exports of commodities with low value added dropped by 1.8 percentage points to 17.9%.

7/ The latest data on developments in this area under GDP methodology (in constant prices) are for 1998 Q2; for this reason Q3 is evaluated using balance of payments data compiled in current prices under IMF methodology.

8/ ie export prices outpacing import prices under CSO methodology

9/ According to January - August 1998 data

III.2.4 Output

In 1998 Q2 the decline in GDP continued to deepen. Following a 0.9% year-on-year drop in 1998 Q1, GDP decreased by a further 2.4% in Q2. The decline was caused by an ongoing fall in value added creation, particularly in the service sector (including retail trade) and construction, together with a slowdown in the pace of value added growth in manufacturing. This was mainly due to falling domestic demand (especially consumer demand), whose effect on domestic production was not fully offset by increasing exports.

The contraction in domestic demand resulted in another absolute decline in the main components of the service sector, which accounts for about 50%[10/] of GDP. Compared with 1998 Q1, retail sales continued to fall in absolute terms in 1998 Q2, particularly for non-food products and sales and repairs of motor vehicles and sales of fuels. The decline also continued in services in the area of data processing and related activities, services for businesses, and other services of a predominantly personal nature.

Overall, real retail sales dropped by 7% in January - July 1998 against the same period last year. The largest drops were for sales and repairs of motor vehicles, including sales of fuels (-9.3%), sales of non-food products (-7.5%) and catering and accommodation (-9.0%). Data processing and related activities fell by 8.3%, services for businesses declined by 2.8% and other services (of personal nature) dropped by 11.1%.

The decline in construction output[11/] was also bigger in 1998 Q2 (9.8% against 4.6% in Q1) and persisted into Q3. Following a 15.3% fall in July, the year-on-year drop slowed to 5.2% in August. This more favourable trend was mainly due, however, to a lower comparison base in August 1997. The overall real drop in construction output was 5.8% during the first eight months of 1998. The fall was more substantial in new constructions, reconstructions and modernisations, which account for about 85% of total construction output, and in activities abroad. Work on repairs and maintenance rose by 5.1% year-on-year. Construction work by industrial classification of economic activities also developed unfavourably, with the volume of preparatory work for construction dropping by 11.8% (other categories slid by 7.5% at most). The decline in construction work is due mainly to the present phase of economic development and weak expectations of future economic growth.

Growth in industrial production (which accounts for about 37% of GDP)[12/] gradually decelerated from the relatively high values at the beginning of the year (8.4% year-on-year in 1998 Q1 to 5.2% in Q2). This downward trend continued in the first two months of Q3 (to 3.6%). Overall industrial production rose by 6% in January - August 1998. Nevertheless, the decline in the rate of growth was accompanied by some positive changes, especially:

- an increasing share of high-tech products in overall industrial output,
- a longer-term growth trend in some industries,
- a moderate improvement in production efficiency,
- an increasing proportion of exports in industrial sales.

The biggest contribution to growth came from the production of electrical and optical appliances; the growth rate here accelerated for the third consecutive year (56.4% in 1998 Q2). A similar long-term upward trend was seen in other industries: vehicle manufacture (up 11.3% in 1998 Q2), production of machinery and equipment for further production (up 9.4% in Q2), paper and printing (up 15.3%), and the plastics, chemicals and pharmaceuticals industry. In contrast, the raw materials and energy

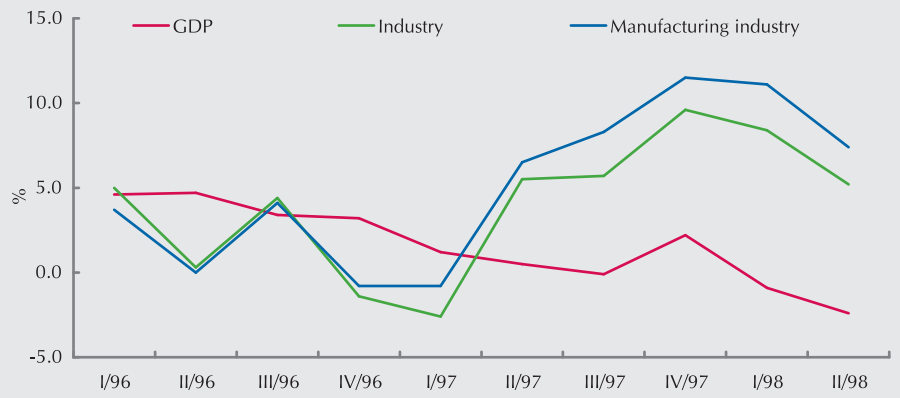
10/ Estimated using the 1994 national accounts data

11/ According to the 1994 national accounts data, the share of construction in GDP is estimated at 8%

12/ Estimated using 1994 national accounts data

industries are flat or falling in the long run, as is the textile and leather industry (in 1998 Q2: mining -5.3%, food industry +0.6%, coke production and oil refining -7.6%, production and distribution of electricity and gas -4.2%).

Chart III. 23 GDP and Industrial Production Index (constant prices y-o-y)



In agriculture, the indicators of crop and livestock sales in the group of so-called large businesses (representing almost half the industry) signalled that this year it might be possible to offset last year's decline, ie to achieve modest year-on-year growth. According to data for January - July 1998, sales in this group of businesses rose by 3.2% year-on-year in constant prices.

The financial performance of non-financial organisations and corporations[13/] indicated a slight improvement in efficiency in 1998 Q2 compared with the same period last year (see Table III.9) and a drop of about one quarter in the number of loss-making businesses. Compared with 1998 Q1, however, the year-on-year rate of growth of positive changes in quality indicators (profitability, material and wage costs) slightly deteriorated, mainly because of the deepening economic decline.

Tab. III.9 Selected Financial Indicators in 1998 (current prices)
(for non-financial organisations and corporations with more than 100 employees for all industries)

Year-on-year increase in %	1998			Q1		Q2		Change in p.p.	
	Q1	Q2		1997	1998	1997	1998	Q1	Q2
Total revenues	17.3	9.2	Profitability of costs (profit/costs)	3.82	5.49	3.03	3.23	1.67	0.20
Total output	16.7	11.2	Profitability of equity (profit/equity)	1.50	2.51	1.38	1.62	1.01	0.25
Total costs	15.4	9.0	Profitability of output (profit/output)	4.99	7.09	4.13	4.31	2.10	0.18
of which: intermediate consumption	15.4	11.8	Material costs (intermediate consumption/output)	67.06	66.35	68.30	68.67	-0.71	0.37
personnel costs 1/	8.4	5.7	Wage costs (personnel costs/output)	17.43	16.20	17.60	16.72	-1.23	-0.88
Pre-tax profit	65.9	16.1							

1/ Includes wage and other personnel costs, remunerations to members of companies and cooperatives, social security costs and social costs

13/ Non-financial organisations and corporations of all industries with more than 100 employees

The 16.1% year-on-year rise in gross profit in 1998 Q2 meant an absolute increase of CZK 3.2 bn against the same period last year (and of CZK 17.5 bn for the entire first half of the year). The main contribution came from industry (67%). A loss was registered in retail trade, catering and accommodation as a result of a fall in sales. More than half the gross profit was created in private organisations.

Despite the certain improvement in efficiency, the unfavourable trend in insolvency and thus in the overall financial situation of the corporate sector remained unchanged. This was reflected in increasing intercompany indebtedness together with a lower availability of other external resources and declining GDP.

As of the end of 1998 Q2, overdue liabilities were up by CZK 3.2 bn on the same period of 1997 and by CZK 0.5 bn on 1998 Q1. The increase was registered primarily in sectors reporting a loss (retail, catering, accommodation). In contrast, a significant drop occurred in manufacturing. The overall financial situation of businesses further deteriorated; the share of own funds (own liabilities) in total assets further diminished to 50% and in some sectors (retail, construction) was only 30%.

III.3 The labour market

III.3.1 Wages and financial incomes

Tab. III.10 Basic Data on Wages

y-o-y change in %

INDICATOR		1995	I/96	II/96	III/96	IV/96	1996	I/97	II/97	III/97	IV/97	1997	I/98	II/98
AVERAGE WAGE IN THE CR	(nominal)	17.5	17.4	21.0	16.5	17.1	18.0	13.7	13.0	12.4	8.4	11.9	10.9	7.0
	(real)	7.7	7.9	11.6	6.6	7.8	8.4	6.1	6.0	2.3	-1.5	3.1	-2.1	-5.0
of which:														
Non-business sphere	(nominal)	17.3	15.0	33.0	15.3	18.5	20.6	12.2	11.1	10.2	-6.6	5.8	5.0	-6.2
	(real)	7.5	5.7	22.6	5.5	9.1	10.8	4.6	4.2	0.3	-15.2	-2.5	-7.4	-16.7
Business sphere	(nominal)	17.7	18.2	17.1	17.0	16.6	17.1	14.1	13.6	13.0	13.0	13.6	12.6	11.1
	(real)	7.9	8.7	7.9	7.0	7.3	7.6	6.4	6.6	2.8	2.6	4.7	-0.6	-1.4
of which:														
Private organisations	(nominal) 1/	16.5	15.6	16.1	16.0	17.2	16.1	13.7	13.2	11.6	11.9	12.7	11.3	9.2
	(real)	6.8	6.3	7.0	6.1	7.9	6.7	6.1	6.2	1.6	1.6	3.9	-1.8	-3.1
State organisations	(nominal) 2/	18.2	17.4	28.6	16.2	16.6	19.7	12.8	12.5	11.4	-0.4	8.6	7.0	-1.6
	(real)	8.3	7.9	18.5	6.3	7.3	10.0	5.2	5.5	1.4	-9.5	0.1	-5.7	-12.7
International organisations	(nominal) 3/	17.7	19.3	17.6	17.7	20.7	18.8	13.2	15.7	14.7	13.5	14.4	14.8	17.3
	(real)	7.9	9.7	8.4	7.7	11.1	9.2	5.6	8.5	4.3	3.1	3.9	1.3	4.1

1/ Including domestic (legal and natural) entities without state interest

2/ Including domestic (legal and natural) entities with state interest

3/ Including entities with domestic and foreign capital

Source: CSO

During the first two quarters of 1998, the average nominal wage in the business sector fell further and further behind CPI inflation, which resulted in a greater absolute drop in real wages in the business sector. In this sense, the diminishing purchasing power of business sector employees helped ease demand-pull inflationary pressures in the economy. At the same time, in industry - a key component of the business sector - labour productivity growth outpaced growth in the so-called real product wage. This caused an absolute year-on-year decline in real unit wage costs in industry of 5.5% in 1998 Q1 and 3.9% in Q2. This downward trend, visible since 1997 Q3, can be interpreted as a successful effort by industrial producers not to allow any increase in wage costs per unit product.

Chart III. 24 Real Wages and Labour Productivity in Industry, y-o-y

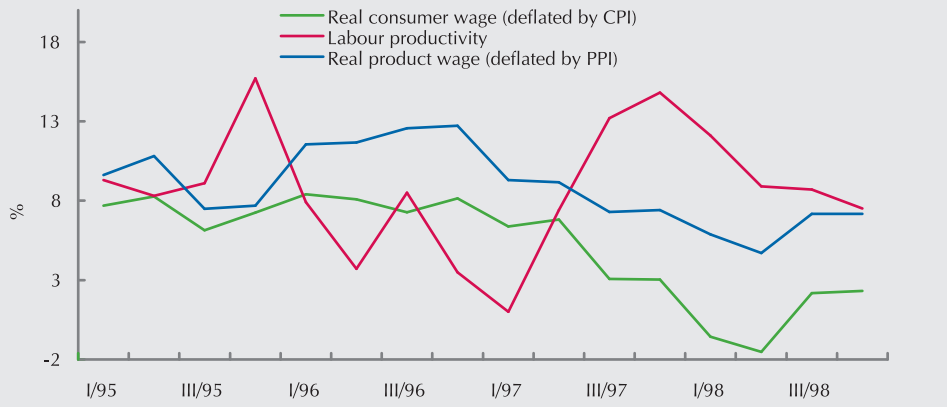


Chart III.25 Real Wage and Labour Productivity in Construction, y-o-y

In construction, however, real unit wage costs dropped only in 1998 Q1, while in Q2 they were up by 7.8%. This was because the real product wage grew more rapidly than labour productivity. In such a situation - under otherwise identical conditions - real profit margins decrease. This may result either in wage cost pressures on prices or in a bigger decline in employment in this sector.

Average nominal wages in the non-business sector in 1998 H1 were still feeling the effects of the restrictive measures introduced in budgetary and subsidised organisations during the previous year. In 1998 Q2, this restriction resulted in a 16.7% year-on-year fall in average real wages in the non-business sector, the third consecutive real quarterly decline. The developments in both sectors led to a 7% year-on-year rise in average nominal wages in the whole economy in 1998 Q2; real wages dropped by 5%. Given the fall in aggregate employment, the growth rate for nominal wage incomes in 1998 Q2 was much lower than for the average nominal wage. For the same reason, the drop in real wage incomes was much greater than that of the average real wage.

Tab. III.11 Wage, Price And Productivity Indicators

y-o-y change in %

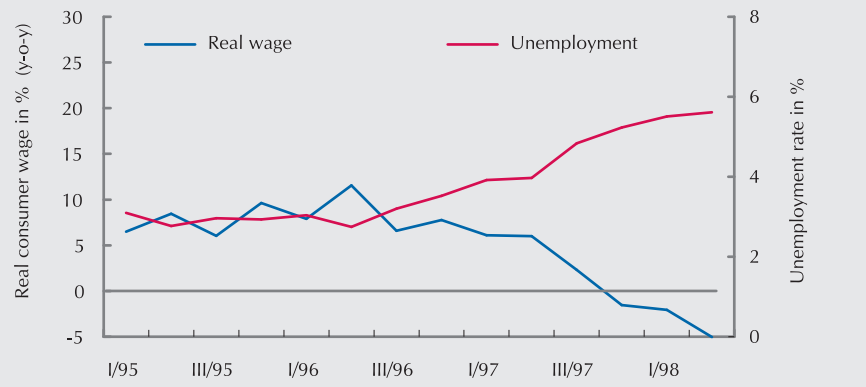
INDICATOR	I/96	II/96	III/96	IV/96	1996	I/97	II/97	III/97	IV/97	1997	I/98	II/98
Unit wage costs (nominal wage incomes/GDP in c.p.)	11.6	14.8	10.8	12.4	12.4	9.7	8.8	9.7	2.4	7.2	8.6	6.1
GDP deflator	10.0	10.3	9.7	7.8	9.4	6.3	5.9	6.8	7.2	6.6	11.4	11.3
Real unit wage costs (unit wage costs/GDP deflator)	1.4	4.1	1.0	4.2	2.8	3.2	2.7	2.7	-4.5	0.5	-2.5	-4.7
National economy labour productivity	2.6	3.6	1.6	3.1	2.7	1.4	0.8	1.0	3.6	1.7	0.8	-0.7

Source: CSO, CNB calculation

The trend towards a year-on-year slowdown in the growth of nominal unit wage costs has been felt in the economy since 1997 Q1. In 1998 Q2 unit wage costs rose by 6.1% year-on-year, which means a further decline in the growth rate for this indicator. As the GDP deflator increased in the same period by 11.3%, real unit wage costs dropped by 4.7%. This confirms that wage-cost inflationary pressures have been kept within acceptable limits at the macroeconomic level, ie productivity indicator growth has outpaced wage indicator growth, which is a desirable trend.

Chart III.26 Nominal Unit Wage Costs and GDP Deflator (y-o-y)

Chart III.27 Real Wage and Unemployment Rate



The fact that nominal unit wage costs are growing more slowly than the GDP deflator is leading to an absolute drop in real unit wage costs. The resulting real reduction in the price of labour per unit GDP is consistent with the growth in unemployment and the greater supply of free labour force. If there is excessive labour supply, wage earners lose the capability of maintaining their relative share in income distribution, which is reflected in a fall in real unit wage costs. The argument about the indirect proportionality between unemployment and the price of labour can alternatively be illustrated by the relationship between the purchasing power of employees and the unemployment rate. As soon as the unemployment rate achieved a certain critical limit (3.2% in 1996 Q3), the quarterly growth rate of real wages started to slow year-on-year. With a further rise in the unemployment rate (to 5.2% in 1997 Q4) real wages started to fall in absolute terms. The rise in unemployment in this sense was a necessary prerequisite for wages to return to economically reasonable limits. These limits were constantly exceeded during 1995 - 1997.

Tab. III.12 Basic Data on Household Incomes *y-o-y change in %*

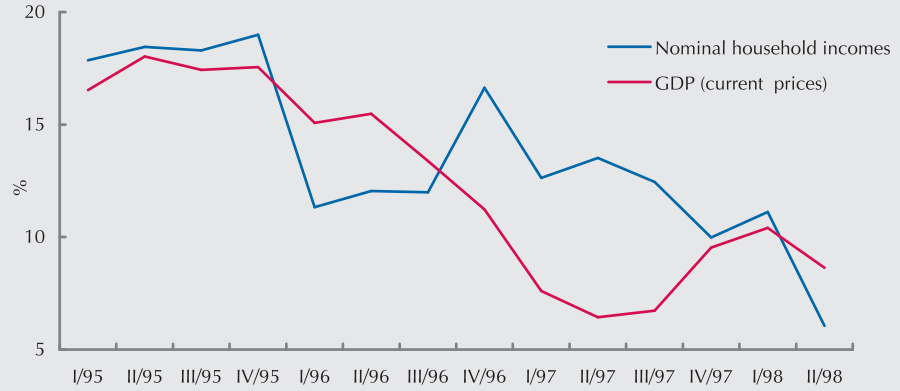
INDICATOR		I/96	II/96	III/96	IV/96	1996	I/97	II/97	III/97	IV/97	1997	I/98	II/98
HOUSEHOLD FINANCIAL INCOMES	(nominal)	11.3	12.0	12.0	16.6	13.3	12.6	13.5	12.4	10.0	12.1	11.1	6.1
	(real)	2.3	3.9	2.5	7.4	4.1	5.1	6.5	2.3	-0.1	3.3	-1.9	-5.9
of which:													
Incomes from wages	(nominal)	16.7	18.6	14.5	15.9	16.8	11.1	9.4	8.6	4.6	8.2	7.7	3.5
		7.3	10.8	4.8	6.7	7.4	3.6	2.6	-1.1	-5.0	-0.3	-5.0	-8.2
Social incomes	(nominal)	13.3	17.3	12.0	18.4	16.2	13.8	10.1	14.2	14.7	13.2	11.2	8.2
Other incomes	(nominal)	1.0	-1.9	8.0	17.0	5.5	14.8	24.6	17.9	17.6	18.7	17.6	9.5

Source: CNB Statistics Source

The rate of growth of households' financial incomes has been consistently falling since 1997 Q4, and in 1998 Q2 was less than half the level in the same period of last year. Besides the developments in nominal wage incomes described above, there has been a substantial drop in the growth rates of other incomes - 15.1 percentage points year-on-year in nominal terms. The slackening of growth in nominal social incomes is much lower. Real household incomes fell by 5.9% because of the above factors.

A whole series of interlinked factors has caused the decline in real household incomes: the labour market has been registering an increasing excess of labour supply, which has led to a drop in real wages. The decline in the purchasing power of wage earners is being reflected in weaker consumer demand, which is indirectly reducing growth in other household incomes (eg revenues from the business activities of households). Another problem is that an increasing number of wage earners are going over to unemployment benefit, which in turn is lowering wage income growth and consumer demand as well as other household incomes, with the above-mentioned effects.

Chart III.28 Relative Income Position of Households
(y-o-y rise in nominal incomes and nominal GDP)



As regards demand inflationary pressures it is important that in 1998 Q2 the financial incomes of households rose by 2.5 percentage points less than nominal GDP. Unlike the same period of last year, there was no redistribution of overall income to the benefit of households that would have disproportionately raised the volume of money they hold. On the contrary, the relative income position of households deteriorated and so the demand inflationary pressures coming from the household sector can be considered negligible.

III.3.2 Employment and unemployment

The imbalance between labour supply and demand on the labour market is increasing both in quantitative terms (ie in the form of excessive supply) and structurally (particularly as regards skills, regions and sectors). The result of this has been a rise in the unemployment rate coupled with a decline in aggregate employment. Overall employment in the national economy has been falling since 1997. In 1998 Q2 it fell by 1.4% and in the first six months by 1.2% year-on-year.

In the primary sector, the number of employees fell by 4.7% against 1997 H1. This long-term tendency was felt in all branches of the primary sector. The number of employees in the secondary sector was down 2.9% year-on-year as of 30 June 1998. This drop was seen in all branches of the secondary sector and was biggest in construction (8%), linked with the declining growth in this industry (construction output fell by 7.2% in constant prices in 1998 H1). The number of tertiary sector employees dropped by 0.5% against the same period of 1997. Development within this sector was varied, though: a recession was seen in banking and insurance, catering and accommodation, finance, transport, storage, post and telecommunications, education and health care; in contrast, retail, repairs of motor vehicles, services predominantly for businesses, and public administration all experienced a rise.

The most important factors in the decline in employment include the overall downturn in economic activity and a lower absorption capacity of the tertiary sector than in the past. Taking into account the labour productivity level and the limited sales possibilities, most services are even showing some signs of overemployment. For these reasons, workers in low-income professions are having more success in finding jobs.

Tab. III.13 Basic Data on Employment and Unemployment

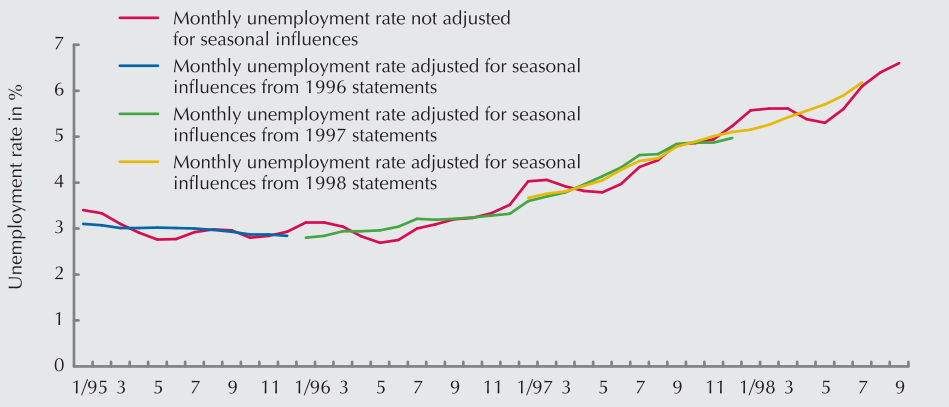
INDICATOR				Q 1997				MONTHS 1998				
	1995	1996	1997	I/97	II/97	III/97	IV/97	3/98	6/98	7/98	8/98	9/98
Number of persons employed in national economy (average numbers)												
Year-on-year change in %	2.6	0.6	-1.0	-0.2	-0.3	-1.4	-1.4	-1.3	-1.4	.	.	.
Natural persons - number (in thousands)	5011.6	5044	4922	4959.3	4967	4913	4908	4897	4899	.	.	.
Number of unemployed 1/												
Natural persons - number (in thousands)	153.0	186.3	268.9	199.6	202.6	247.6	268.9	284.1	289.5	313.8	330.0	350.7
Unemployment rate	2.9	3.5	5.2	3.9	4.0	4.8	5.2	5.5	5.6	6.1	6.4	6.8
Number of job applicants per vacancy 1/	1.7	2.2	4.3	2.3	2.5	3.4	4.3	4.4	5.0	5.5	6.0	6.8

1/ as of the end of period

The upward trend in unemployment, visible since the beginning of 1998, strengthened further in the second half of the year. From June through September the unemployment rate increased by 1.2 percentage points to 6.8% and the number of unemployed rose by more than 100,000 year-on-year. The number of unemployed young people and disabled persons has been gradually increasing. At the end of September the proportion of persons under 25 years exceeded 25% of the total number of unemployed. A change has also occurred on the demand side because of a fall in the stock of vacancies. The increasing number of unemployed persons and decreasing number of vacancies has resulted in a higher number of job applicants per vacancy: 6.8 applicants as of the end of September, compared with five in June. Besides the fall in GDP, the increase in unemployment also reflects a seasonal reduction of jobs in construction, agriculture and travel, together with an increasing number of school leavers.

The districts hardest hit by unemployment have been those with substantially falling employment (particularly in mining) and districts with a predominantly rural population (employment in agriculture has dropped).

Chart III.29 Seasonally Adjusted Unemployment Rate



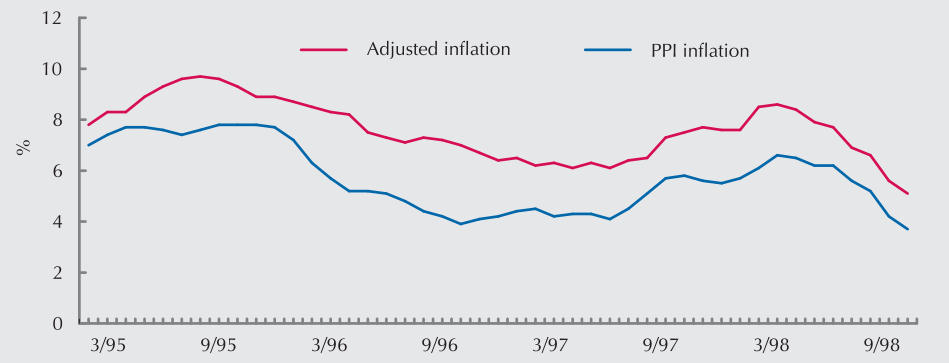
III.4 Costs and prices

III.4.1 Producer prices

In Q3 producer price growth levelled out. With a 0.3% month-on-month increase in July and a 0.2% decline in August, the year-on-year PPI dropped by 0.4 percentage points (to 5.6%) in July compared with the previous month and to 4.2% in August. In September, producer prices were flat month-on-month, while the year-on-year growth rate dropped to 3.7%. This favourable trend was mainly due to the ongoing favourable price development on global markets (see part III.4.2), especially for energy raw materials. Low oil prices had the biggest impact on prices in the manufacturing sector (3.7% in August year-on-year), especially coke production and oil refining (down by 21.6% in August in year-on-year terms).

The favourable PPI development can also be attributed to a number of factors on the demand side (the ongoing decline in domestic demand), the downward trend in wage costs in industrial corporations and the koruna appreciation.

Chart III.30 PPI Inflation and Adjusted Inflation, y-o-y

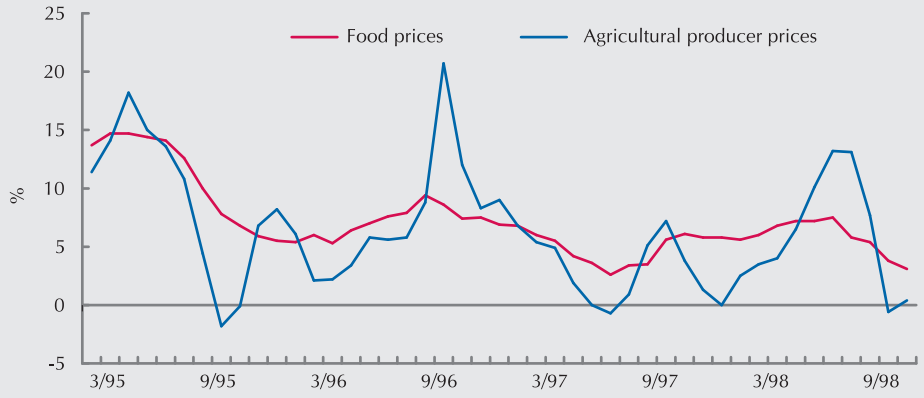


In 1998 Q3, construction work prices continued declining moderately. Month-on-month they rose by 0.5% in July and 0.7% in August, while year-on-year they slowed from 10% in June to 9.1% in July and 8.8% in August. A further year-on-year decrease occurred in September (to 8.5%), when the month-on-month rise was 0.4%. Nevertheless, inflation in this area remains relatively high, mainly

because of a steady rise in prices of building materials. At the same time, the constant demand from the "grey" economy cannot be excluded as one of the influences. However, the falling domestic demand has been gradually weakening the influence of these factors.

Agricultural producer prices developed quite favourably in 1998 Q1. Their rate of growth picked up in Q2 but fell back again in Q3 (7.7% in July, -0.6% in August and 0.4% in September). The slowdown was mainly due to a fall in crop prices, which were down by 6.3% year-on-year in September largely because of substantially lower grain prices (particularly wheat imported from Hungary). However, the influence of grain prices on the overall rise in agricultural producer prices will be multiplied, because crops have a substantially greater weight in the structure of the agricultural PPI in the second half of the year than in the first half. Livestock product prices maintained a roughly 10% year-on-year rise in 1998 Q3.

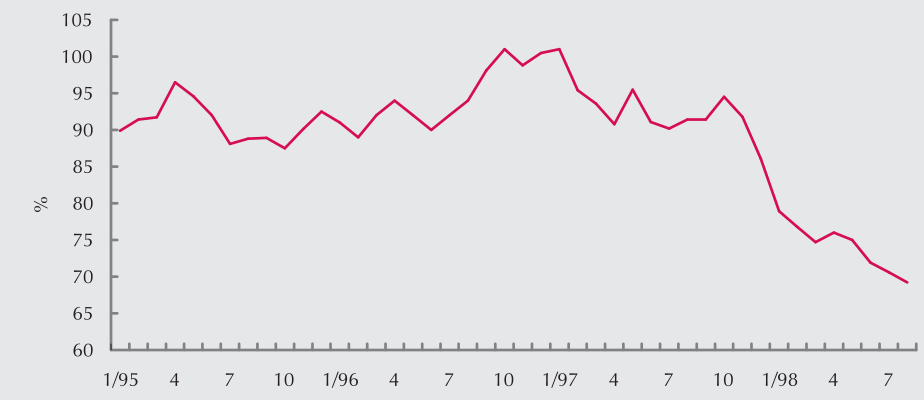
Chart III.31 Food Price Inflation and Agricultural Producer Price Inflation, y-o-y



III.4.2 Import prices

Prices of basic raw materials, which are imported to the CR in substantial volumes, were still quite favourable in 1998 Q3 from the point of view of their effect on domestic price levels. The HWWA index, an aggregate price index of raw materials and foodstuffs, dropped by 23% year-on-year in July - August. Prices of energy raw materials fell the most (-28.7%). The price of Ural crude stood at USD 11.15 per barrel on average during July, almost 40% lower than the average for 1997. Prices of industrial raw materials and food commodities also fell significantly in 1998 Q3.

Chart III.32 HWWA Index (1990 = 100)



After stagnating in May, import prices, monitored by the CSO selection index, started to shrink in June 1998 (in August they were down by 6.2% year-on-year). This extraordinarily favourable development was the result of falling raw material prices on global markets and the koruna's appreciation.

IV. MONETARY POLICY MEASURES AND INFLATION OUTLOOK

IV.1 Inflation and its determinants - an overview of the main trends

The easing of inflationary pressures that started in 1998 Q2 continued during Q3, causing the disinflationary process to pick up. In September, all inflation indicators reached their lowest levels since the beginning of the year. The year-on-year net inflation index dropped from 6.5% in June to 4.3% in September, 3.6 percentage points down from this year's high of 7.9% seen in February and March. The slower pace of net inflation was to a large extent the result of food market developments, which were more favourable than in the same period a year earlier. Food prices fell by 1.4% in July and 0.9% in August month-on-month, compared with a decline of 0.9% in July and a 0.6% increase in August 1997. The positive trend in net inflation and a lower July rise in regulated prices (against July 1997) were the main factors behind the slowdown in CPI inflation. The year-on-year CPI fell from 12% in June to 8.8% in September and was 4.6 percentage points lower than the high of 13.4% reached in February and March.

During the first five months of 1998 net inflation was moving above the upper limit of the target interval set for the end of this year. In June, however, it reached this limit, in July it hit the middle of the interval, and since August it has moved below the lower limit. Inflation factors - particularly the short-term inflation forecast - are indicating that net inflation will be much lower at the end of 1998 than the lower limit of the short-term target. The disinflationary process during 1998 Q3 was steeper than the projections contained in the July Inflation Report had indicated. This was due to an extraordinarily favourable concurrence of circumstances acting to ease inflationary pressures. The most important factors were a radical fall in import prices and a major contraction in domestic demand. Also, monetary development, the changing situation on the labour market, the majority of cost factors and improving inflationary expectations all had an anti-inflationary effect.

The extremely positive situation in import prices was generated by declining raw material prices on world markets and the koruna's appreciation in Q3. The fall in import prices started in June and continued into July (6.1% year-on-year) and August (6.2%). A series of financial crises, the subsequent slowdown in economic growth in most East Asian economies, including Japan, and the chronic structural problems in many emerging markets kept commodity prices on global markets at a very low level. Supply has continued to outweigh demand for energy raw materials, industrial raw materials and food commodities throughout 1998. From the point of view of monetary policy instruments, these are exogenous factors and the CNB is assuming that their favourable effect on inflation will drop out in the medium run.

The substantial contraction in domestic demand felt since 1997 Q2 continued into 1998 Q2. Adjusted for changes in stocks, the year-on-year growth rate of final domestic demand fell from -2.1% in Q1 to -4.6% in Q2. The changing consumer behaviour in the current phase of economic development was characterised by a 7% decline in household consumption. This was caused not just by the high comparison base from the same period last year (due to extensive purchases of consumer goods linked with the exchange rate developments at that time) but primarily by an ongoing drop in disposable household incomes and an increasing savings ratio. The decline in gross fixed capital formation also accelerated, from -2.5% in Q1 to -4.1% in Q2. A slight rise in government spending (of 0.6%) and relatively favourable net exports only partially offset the overall decline in economic activity. All this resulted in a 2.4% fall in GDP in Q2, according to CSO estimates. The contraction in domestic demand was brought on by both monetary policy and the fiscal tightening initiated by the government's stabilisation measures in spring 1997. Another contribution came from a substantial curbing of wage growth, which had been unsustainable in the long run, and, through the income effect, from a rise in several regulated prices. The easing of inflationary pressures from the demand side is an expected reaction of the economy to restrictive policies and a necessary prerequisite for restoring sustainable macroeconomic proportions.

Monetary development in 1998 Q3 also reflected the monetary, fiscal and wage restrictions and at the same time was consistent with the disinflationary process. In July and August, monetary aggregates continued to increase slightly in both nominal and real terms. Average nominal growth in L moved broadly at the level of nominal GDP growth, while M2 growth was slower. The decline in nominal interest rates seen throughout 1998 has not yet resulted in a major upturn in lending. The high proportion of risk credits and increasing CNB provisioning requirements are intensifying the pressure for efficient bank performance. This is leading to a more prudential approach to lending and increased interest in high-quality assets, eg investment in CNB bills. Real interest rates have been increasing, owing to a rapid fall in inflation in Q3 that is not being accompanied by a corresponding decline in nominal interest rates.

After several years of relatively stable unemployment, the situation on the labour market has changed substantially since mid-1997. The number of unemployed has been rising steadily during 1998, with an acceleration seen in the unemployment rate in Q3 in particular. This reflects not only the deepening economic difficulties but also the ongoing microeconomic restructuring of the corporate sector. Growing competition on the labour market and low demand for labour has significantly changed the position of job applicants and has worsened their position in wage bargaining. This has led to a temporary suppression of wage demands and to real wage stagnation or decline.

The accelerating decline in both CPI and net inflation in Q3 created favourable conditions for an improvement in inflation expectations, as confirmed by the slope of yield curves throughout 1998. In the first half of the year the yield curve had an upward slope, but in the mid-year the situation changed and the slope started to be inverse. The downward slope continued to steepen in Q3 and was only temporarily interrupted by the effects of the Russian crisis.

In Q1 and Q2, the nominal exchange rate depreciated year-on-year, but in Q3 it showed a relatively significant appreciation. Despite short-term fluctuations, the koruna appreciated by about CZK 0.60 against the Deutsche Mark in Q3 against Q2 and by about CZK 2.60 compared with January. Owing to a substantial weakening of the USD against the DEM, the koruna appreciated against the dollar, exceeding the level it stood at prior to the exchange rate turbulence in May 1997. The appreciation of the nominal koruna exchange rate, together with the still positive inflation differential, resulted in an appreciation of the real koruna exchange rate and in the cheaper imports mentioned above.

The favourable trend for cost factors and the gradually improving inflation expectations linked with the falling inflation rate brought about a further slowdown in PPI inflation, which is an aggregate indicator of cost pressures. PPI inflation has been gradually slowing throughout 1998. This slowdown intensified in Q3, with PPI inflation falling from 5.6% in June to 3.7% in September year-on-year. A longer-term downward trend is also visible in prices for construction work and agricultural producer prices. The relationship between real wage growth and labour productivity has acted favourably on costs for several consecutive quarters. Of similar significance is the comparison of the growth rates of unit wage costs and the GDP deflator. Although the GDP deflator's lead over unit wage costs has slightly diminished recently, the existing relation is not yet indicating the presence of wage inflationary pressures.

The tightening of economic policies came through not only in the slower pace of inflation, but also in a fundamental reduction of the external imbalance. The annual moving aggregate of the current account deficit in relation to GDP peaked in 1997 Q1 at 8.5%, then fell back to 1.9% at the end of 1998 H1. The external equilibrium has been renewed despite the gradual koruna appreciation and worse export conditions stemming from the financial crises in Asia and Russia.

IV.2 Monetary policy

The CNB's interest rate policy is based on a conditional inflation projection that signals the expected effects of inflationary factors and the probability of the inflation target being hit. The month-on-month net inflation outturns in Q2 indicated that a disinflationary process had started, but year-on-year inflation fell only slowly up to June. The net inflation prediction for the end of the year still remained in the upper part of the targeted interval. Moreover, there existed some shorter-term risks for inflation in

the area of the exchange rate and some longer-term uncertainties about cost inflationary pressures, public budgets and the sustainability of the low world commodity prices. In that period, the CNB left nominal interest rates unchanged.

Inflation in Q3 confirmed the downward trend started in June. Forecasts of the most important inflation factors started to indicate that room was opening up for a gradual lowering of key interest rates. At the end of Q2 and the beginning of Q3, the CNB's attention in formulating monetary policy started to shift from the short-term target in 1998 to the expected inflation development in 1999.

At the end of June, the CNB concluded that in view of the expected development of most inflationary factors, the probability of hitting the short-term inflation target at the end of 1998 was high. As the potential short-term risks to this target were considered insignificant the Bank Board decided to cut the most important rate - the 2W repo rate - from 15% to 14.5% (ie by 0.5 percentage points) with effect from 17 July 1998. In addition, the Board lowered the minimum reserve requirement on primary deposits from 9.5% to 7.5%, effective 30 July.

After evaluating the July developments, the Board agreed in mid-August that space existed for further interest rate cuts. The accelerating downward trend in inflation put an end to a phase of rising inflation expectations, when the main task of monetary policy was to provide the economy with a nominal anchor and prevent inflation from escalating. The drop in inflation in June and July was the first sign of a shift to a new phase of inflation development, characterised by improving inflation expectations, the continuing favourable effect of the depressed domestic demand and a positive trend for most output factors. After assessing the real risks of possible inflation developments, the Board decided to cut the 2W repo rate from 14.5% to 14% (ie by 0.5 percentage points) with effect from 14 August. At the same time, it decided to lower other interest rates: the discount rate from 13% to 11.5% and the Lombard rate from 19% to 16% with effect from the same date.

At the end of August, the Board assessed the short and medium-term risks linked with the possible effects of the Russian financial crisis. It concluded that the unfavourable impact of the Russian crisis on the Czech economy was relatively small and gradually diminishing. At the same time, it identified the still unclear framework for public budgets and the risk of wage growth as the main sources of uncertainty. Because of these factors and the fact that rate cuts were made only recently, it decided not to change monetary policy.

At its September session the Board agreed that the disinflation outlook was positive in the short run and was creating space for further cuts in interest rates. Expectations were expressed about the CPI and net inflation decline continuing in the next period unless exogenous factors changed substantially in the next few months. The falling inflation should help to improve inflation expectations. In the future period, inflation would also be positively affected by the downturn in domestic demand, seen primarily in lower household consumption caused by declining disposable incomes and an increasing propensity to save. Despite the persisting uncertainty about budget performance in 1999, the Board decided to cut the 2W repo rate from 14% to 13.5%, ie by 0.5 percentage points again.

Despite the substantial decline in CPI and net inflation, which at present is on course to finish well below the lower limit of the short-term target for the end of 1998, the CNB opted for a gradual lowering of rates. The slowdown in inflation has been largely due to cost factors, some of which are to a certain extent outside the reach of monetary policy. Although quantifying the impact of exogenous cost factors on prices is very difficult, the CNB estimated the contribution of "positive cost shocks" at between 1 and 2 percentage points. This means that, excluding exogenous cost factors, the short-term inflation target for the end of 1998 would be hit approximately at the lower limit of the interval or slightly below it. The reasons for the gradual lowering of nominal rates were the persistence of external risk factors with a possible impact on the exchange rate, the danger of an upsurge in cost wage pressures that could affect inflation in 1999, signs of potential public budget deficits at the end of 1998, and the probability of a turnaround in the favourable development of world commodity prices.

IV.3 Future inflation factors

The considerable moderation of growth in all price indices in Q3 has greatly increased the likelihood of net inflation being well below the lower limit of the short-term target at the end of 1998. Given the significant lag in the effect of demand on inflation, this could only be impaired by a sudden massive increase in world commodity prices or by a substantial weakening of the koruna exchange rate (the lag in the effect of these factors on inflation is much shorter than that of demand). It is not very likely, however, that this could happen in the near future.

The CNB is assuming that the effect of exogenous factors will persist and the downward trend in inflation will continue in the remaining months of 1998 and at the beginning of 1999. In the second half of 1999, the CNB expects a stabilisation or slight increase in inflation. A repetition of the positive influence of exogenous inflation factors is unlikely. A slight growth in real wages can also be foreseen, and the expected trend towards higher deficits in public finances will play a role as well. This should not lead to major acceleration in inflation, though. The disinflationary process in the second half of 1998 is having a positive impact on inflation expectations. Provided economic subjects are deriving their inflation expectations mainly from past inflation development, it can be assumed that this positive trend will feed through into price and wage agreements at the start of 1999.

The current and expected price development is not indicating that inflation will pick up in the future. Thanks to the banks' prudence in lending, the process of gradually lowering interest rates is not posing a serious threat of excessive lending. Money supply growth is unlikely to be excessively accelerated in the next period either by net government borrowing or by net foreign assets. These factors, though, do present a certain risk of monetary aggregate growth accelerating in the future.

It is highly likely that the absolute decline in domestic demand, which began in Q3 1997, continued into Q3 1998. In view of the expected lag of the domestic demand effect on inflation, this trend is to a large extent reducing the risk of an upsurge in domestic inflationary pressures in the first half of 1999. In the next period, a stagnation or possibly an only moderate recovery in demand is expected, although it is not possible to exclude completely the risks stemming from a possible excessive easing of fiscal policy or from potential wage pressures triggered by a raising of wage tariffs in the public sector. Rapid growth in unemployment generated by a decline in economic growth and strengthening pressures for restructuring and for increasing business sector competitiveness will act against demand-led inflation.

In the next period, the depressed domestic demand will limit the room for cost-push inflation. On the strength of recent developments, the CNB is expecting most cost factors not to deteriorate substantially in the one-year horizon. In view of the series of financial crises, the stagnation of most East Asian economies (including Japan) and the chronic structural problems of many emerging markets, it is highly improbable that commodity prices on world markets will increase in the near future. Productivity growth in the tradables sector, the sharp reduction in the inflation differential and the relatively fast restoration of external equilibrium have not so far triggered a significant weakening of the exchange rate in the medium-term horizon, though a moderate weakening in the short run cannot be excluded. Nor have developments in the business sector testified to a change in the present trends that are positive for inflation. Though the lead of productivity growth over wages has somewhat decreased, it does still exist. Under otherwise identical circumstances, this will prevent the occurrence of inflationary pressures. The expected relatively favourable development in cost factors, together with the gradually improving inflation expectations, will continue to act positively on producer prices, which are an aggregate indicator of cost-push inflation.

IV.4 Inflation outlook

The conditional inflation outlook assumes that the recent positive developments in most cost and demand inflationary factors will continue and that inflationary expectations will gradually improve. Having evaluated the situation and taken into account the lag of the effects of individual groups of

factors on prices, the CNB expects net inflation to be moving below 4% at the end of 1998. As mentioned above, net inflation will fall below the targeted interval mainly because of the unexpectedly strong effects of exogenous factors, although the contraction in domestic demand is also playing an important role. Owing to the significant impact of exogenous factors on net inflation, the CNB does not view the lower-than-targeted inflation outcome at the end of 1998 as a substantial deviation from the medium-term trajectory of the disinflationary process. The slowdown in net inflation is also passing through into CPI inflation, which should be moving slightly above 8% at the end of 1998. The average annual inflation rate will be below 11%.

The CNB's conditional inflation outlook for the end of 1999 foresees a stabilisation or possibly an only slight net inflation rise, in line with the projected moderate strengthening of cost pressures and demand stagnation. The expected development of net inflation in 1999 indicates that the medium-term inflation target of between 3.5% and 5.5% for the end of 2000 is realistic. As a result of the slower pace of regulated price increase in 1999 planned by the government, the CNB expects a considerable decline in inflation. Provided inflationary pressures do not increase substantially because of wage and public finance developments or unfavourable developments in world commodity prices, year-on-year CPI inflation in 1999 should be about 6.5%. CPI and net inflation should thus converge during 1999.

Minutes of the Board Meeting on 30 July 1998

The CNB Bank Board mentioned during the meeting that positive trends were beginning to show up in inflation development. In June, year-on-year net inflation was pushed to the upper limit of the target interval for 1998. By the end of the year, values are expected to be near the lower limit of the interval. After inflation acceleration in the second half of last year, the growth tendency diminished, and conditions for maintaining the disinflationary process had been set in place. This positive occurrence was caused among others by the favourable development in exogenous factors, eg world commodity prices. The anti-inflationary effects of these factors could, nevertheless, be temporary in nature.

The Bank Board was in agreement that the likelihood of meeting the inflation target after 1998 is high. Cost and demand factors have been experiencing positive development. The short-term risk potential for the inflation target up to the end of 1998 was regarded as insignificant. An increase in the yield curve's inverse slope suggested that inflation expectations decreased. Moreover, financial markets indicated that the central bank's disinflation strategy could have positive effects on the business sector even in the short run. A steady decline in long-term interest rates means lower costs for long-term investment. It was mentioned that the Czech economy reacts in a standard way to fiscal and monetary stimuli. This implies that the inflationary process is well controllable by the central bank.

One of the main medium-range inflation risks is considered to be the rigidity of nominal wage growth which in the case of decreasing inflation leads to real wage acceleration. The discrepancies in the wage growth in the public and private sectors were also mentioned as a potential inflationary risk. It was stressed that respecting the disinflationary trend during wage negotiations is an important condition for ensuring the continuation of the disinflationary process. Other medium-range risk factor includes growing import propensity of demand, which in case of growing demand pressures could once again lead to external imbalance.

In a discussion on optimal monetary policy response to the short-term exogenous factors influencing inflation, it was stated that instead of actively eliminating such exogenous effects, it is better to concentrate on stabilising the actual effects.

In conclusion, the CNB Board decided unanimously not to make a change in the monetary policy instruments.

Minutes of the Board Meeting of 13 August 1998

Present at the meeting: Pavel Kysilka (Vice-Governor), Jan Vít (Vice-Governor), Miroslav Hrnčíř (Chief Executive Director), Otta Kaftan (Chief Executive Director), Luděk Niedermayer (Chief Executive Director), Jiří Pospíšil (Chief Executive Director).

At the meeting the CNB Board assessed newly available economic information and characterised the starting situation for monetary policy in the forthcoming period. The latest information on the real economy, in particular the unemployment data, had confirmed the trend of curbed domestic demand. This had created space for interest rate cuts. The development in regulated prices and net inflation in July had also provided a favourable signal. The change in rates, along with reduced inflationary expectations, should feed through into investment decisions in particular. The favourable trend initiated at the microeconomic level could be slowed down by a signalised easing of budgetary restraint in the public sector and by the consequences of this, for example in a return to divergence between wage growth and labour productivity growth.

The Board concluded that the Czech financial markets could be affected in the next period by strong capital flows in both directions. Should the region stabilise successfully, a relatively strong inflow of capital with various maturities could be expected, with a volume similar to that seen in 1995. The impacts of the Russian crisis had indicated that it might be also necessary to reckon with short-term capital outflows. These features imply that the economic decisions will face larger exchange rate uncertainty and that it will be an important role for financial markets to help the domestic economy adapting to the new situation.

The present capital inflow and the interaction between capital flows and the exchange rate were being determined both by domestic and external factors. The successfully started disinflationary process had reduced inflationary expectations and the risk premium. The risk premium had also been relatively low due to external factors since relatively well-developed Czech financial markets were allowing investors to re-orient fast to the koruna in the cases of sudden deterioration of the situation in other countries of the region.

The Board characterised two transmission channels of fiscal policy. First, public deficit/surplus influences economic development. If public sector performance, including off-budget funds, were to send out inflationary stimuli, the parameters of monetary policy would have to be changed in the medium-term. The second channel concerns expectations. A change in government strategy of imposing a hard budget constraint on the economy could, through this channel, affect the risk premium.

The Board defined three stages of inflation development. At the end of 1997, the Czech economy had entered a stage of accelerating inflationary expectations. In this stage, the main tasks of monetary policy had been to provide the economy with a nominal anchor and to prevent inflation from escalating. The end of the first half of 1998 had brought a transition to a second stage. Inflation had reached levels corresponding to those seen before the period of exchange rate turbulence in May 1997. Monetary policy was focused on a disinflationary process which would gradually bring inflation below the level seen in previous stages. This stage was characterised by a decline in inflationary expectations with a subsequent reaction from the financial markets, and was bringing new types of problems for monetary policy calibration. Specifically, a potential volatility of inflation indicators could become a serious problem. If economic players do not accommodate to conditions of the second stage, their delayed response could spell a return to excessive growth in real wages. Prospectively, a transition to a third stage of very slow disinflation could be expected that would correspond in its characteristics to standard strategy of inflation targeting with horizontal band.

The Board considered a proposal of lowering the Lombard, discount and two-week repo rates. It stated that this was an important monetary policy decision which would change the parameters of monetary policy so that they correspond to features of the above-characterised second stage. With lowered rates, the inflation outlook derived from important economic indicators would be consistent with the targeted

disinflation trajectory. The suggested scope of changes to monetary policy parameters corresponded to usual uncertainty in the inflation outlook implied by including expected risk factor values without extreme deviations. It was mentioned that should these factors deviate extremely (a possibility which could not be excluded but which was relatively unlikely), it would be necessary to consider a modification of adopted measures. The Board emphasised that calibrating the measures according to the medium-term inflation outlook with the possibility of a correction in the case of a difficult-to-predict shock was a standard monetary policy procedure. At the end of the meeting, the Board decided unanimously to cut the two-week repo rate from 14.5 to 14%, the discount rate from 13 to 11.5% and the Lombard rate from 19 to 16%, effective 14 August 1998.

Minutes of the Board Meeting on 27 August 1998

Present at the meeting: Josef Tošovský (Governor), Pavel Kysilka (Vice-Governor), Jan Vít (Vice-Governor), Miroslav Hrnčíř (Chief Executive Director), Ota Kaftan (Chief Executive Director), Jiří Pospíšil (Chief Executive Director).

The CNB Bank Board assessed the monetary situation following the recent cut in key central bank interest rates on 13 August 1998.

The Board evaluated the short- and medium-term risk factors connected to the escalation of the Russian crisis. It was stated that the likelihood that Russian economic instability would have a direct adverse effect on the Czech Republic is relatively low, because the Czech economy has very few trade and financial market ties to Russia. The secondary effect of the crisis, assuming that it would spread to Central Europe, was seen as a more serious threat considering the importance of this region to Czech export.

It was mentioned that after the steady decline in world commodity prices in the recent past, some corrections in the opposite direction could be expected. Nevertheless, a hypothesis was put forward indicating that the effects of the Russian and Asian crises on the world commodity market would interfere with these corrections. The impact of this exogenous factor was considered to be a significant element in assessing current inflation development.

Unclear objectives in the area of the general government budget were considered to be a significant source of uncertainty. It was stressed that relatively favourable results in public sector performance could have positive or negative macroeconomic implications depending on the economic cycle or the strength of capital flows. Little improvement in the efficiency of government administration, which in turn produced wage pressures in the public sector, was indicated as a significant risk factor that could affect the medium-term disinflation process. In connection to this, it was mentioned that falling inflation this year in regard to the forward-looking character of monetary policy will not lead to continued cuts in interest rates should imprudent fiscal development or wage policies develop.

In a discussion about the effect of interest rates on the volume of granted credits, stress was put on the prompt development and approval of a legal and institutional framework that would improve the position of creditors. Changes in this area could lead to improved interest rate policies of banks vis-a-vis the business sector and consequently to the strengthening influence of interest rates in the transmission mechanism.

In closing, the Board stated that due to the short amount of time since the last change in monetary policy instruments, no new economic information is available at this time that could seriously affect the medium-term inflation outlook. The Board unanimously decided not to change the set monetary policy instruments.

Minutes of the Board Meeting on 24 September 1998

Present at the meeting: Josef Tošovský (Governor), Ota Kaftan (Chief Executive Director), Luděk Niedermayer (Chief Executive Director), Jiří Pospíšil (Chief Executive Director)

The CNB Board stated that in the short run, the disinflation outlook is positive and will create space for further policy easing. As long as there is no significant change in external exogenous factors in the next few months, net inflation and inflation in general should continue to decline. It was expressed that the correct monetary policy response to the expected inflation decline will largely depend on quantification of the impact of the exchange rate and foreign price movement on the price level and on the assessment of future demand effects over a longer period of time.

In a discussion about future demand, stress was put on the analysis of the factors that shape household consumption. An opinion was expressed that as a result of expected unemployment growth and a general reassessment of future incomes in connection to economic development, households' propensity to save has increased. Doubts were raised as to whether this factor could be maintained for a longer period because of the possible effects of the anticipated slowdown of price corrections in the area of energy and rents on savings.

In relation to future household consumption, the expected wage developments were also discussed. Inertia in nominal wage growth (downward rigidity), the potential negative effect of the expected wage growth in the budgetary sphere on wage negotiations in the private sector and an expected drop in inflation for next year indicate a risk of excessive real wage growth in the economy next year. The growing unemployment rate which negatively affects the wage negotiation position of employees and an expected increase in household savings were, on the other hand, shown to be factors that could dampen the onset of demand-led inflation associated with possible unfavourable wage development.

The Board agreed that a lack of a clear conception for the state budget has led to continued uncertainty. In assessing demand effects, public finance performance was still considered to be one of the main sources of uncertainty. In addition to the possible impact of demand pressures resulting from the structural part of the expected public finance deficit, future price developments are threatened due to uncertainty about economic growth estimates for next year and price elasticity of demand for commodities which, according to government intentions, should be connected to higher consumer taxes.

The causes of the decline in economic growth were assessed from a cyclical and structural standpoint. During the discussion, a difference of opinion was expressed in how to perceive the intensity of the restrictive effects of macroeconomic instruments and longer-term microeconomic structural problems.

The discussion continued with the balance of trade, the extent of improvements in the balance after the elimination of price effects and the risk of reoccurrence of an external imbalance in the case of strengthening domestic demand. It was stressed that in respect to the external equilibrium, gradual lowering of the current account deficit is a key factor due to its difficult financing in current economic conditions.

After analysing the effects of future demand and cost factors on net inflation, the CNB Board, in a majority vote, decided to cut the two-week repo rate from 14% to 13.5%.

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