



QUARTERLY REPORT ON INFLATION

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„The Quarterly Report on Inflation“ is published by the National Bank of Hungary with the aim of providing the general public with regular information on the current and expected state of inflation as well as the Bank’s interpretation of macroeconomic developments determining inflation. Wider access to information on monetary policy objectives is expected to lead to a better understanding of the Bank’s policy responses.

The goal of this publication is to describe and interpret the developments of the preceding quarter.¹



¹ The previous issues of the “Quarterly Report on Inflation” are available on the home page of the National Bank of Hungary.

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Summary

The objective of the National Bank of Hungary is **to reduce inflation at a sustainable pace** in order to achieve price stability. Predictability and the low interest rate levels concomitant with moderate inflation pave the way for long-term, robust economic growth. Inflation targets are achieved in part by using the crawling peg system, which is based on pre-announced changes in the exchange rate and promotes the evolution of a nominal path that poses no risk to economic equilibrium yet ensures the convergence of domestic inflation with Hungary's main trading partners.

In 1999 the consumer price index rose by 10% on average, compared to the 14.3% average increase in 1998. In contrast to the growth trend typical of previous years, there was a temporary upward movement in the price rate in the second half of last year, but this trend then fell back to 10% in January 2000. The temporary rise in headline inflation can be attributed to factors falling outside the scope of monetary policy. The Bank's *core inflation index*, which filters out the effects of seasonal variations in prices of foodstuffs as well as petrol, certain energy sources and regulated prices from headline inflation, remained in the single-digit range throughout the year, indicating a steady decline in inflation (to 8.1% in January 2000).

The fact that inflation appeared to decrease at a slower pace last year can be attributed to three factors. Regulated prices played a significant role, as 2.8% of the 11.2% rise in the consumer price index in December 1999 is accounted for the rise in this category. In the year 2000, prices for centrally regulated services are expected to rise at a rather subdued rate, which will exert downward pressure on inflation. The second factor was that food prices rose at a faster pace than a year earlier. In respect of this product category, the temporary acceleration of inflation is considered to be an equilibrium process, correcting the deflation of 1998. The third factor putting upward pressure on inflation was the increase in world prices for energy, which caused an upsurge in market-determined *household energy* inflation last year and is expected to push up inflation in regulated energy prices in the second half of 2000.

It should be noted that those factors which are likely to slow the decline of inflation over 2000 will also have a similar impact on the euro-area countries and Hungary's exports competitors. Therefore, the impact of energy prices on inflation will not change the prospective development of the real exchange rate. The favourable long-term inflation trend is supported by the fact that the inflation differential relative to the euro-area has continued to narrow. *Industrial goods* price inflation, commodities directly disciplined by the exchange rate, and *market services* price inflation, which reacts most quickly to growth in demand diverging from supply, have both continued to decline. The benign inflationary movements enabled the Bank to announce another decrease in the devaluation rate in December 1999, bringing down the pre-announced annual rate to below 4% in 2000.

Of the factors determining inflation on the longer term, changes in *demand* and *supply* continued to support the disinflation process. GDP growth gathered momentum in 1999 Q4, reaching 5.6% according to Bank estimates. This robust growth was primarily caused by a further rise in external demand (18.9%), while domestic absorption increased more slowly (4.7%). In terms of domestic absorption components, consumption (5.3%) grew nearly as fast as GDP, whereas capital formation expenditure (3.4%) lagged behind GDP growth. This moderate rate of increase was primarily due to the fact that firms ran down inventories that had remained high in the aftermath of the Russian crisis while the rate of fixed capital formation was around 8%. In the last quarter of 1999 this growth, with its favourable balance of components, resulted in a seasonally adjusted current account deficit of 4.5%, as a percentage of GDP, despite the high level of profit transfers.

The strongest influence on the growth path of the economy was the pick-up in the cyclical positions of Hungary's main trading partners. Activity is gathering pace in the European Union economies and there are signs of recovery in CIS and CEFTA countries as well. Hungarian export and import data reflect both these positive influences and the contribution of new investments to capacity expansion. According to Bank calculations, export volumes expanded at an annualised rate of around 25% over the last two quarters of 1999, while import volumes grew by approximately 18%. The deterioration in the terms of trade, due primarily to a sharp rise in energy prices and the significant change in the euro-dollar cross exchange rate, caused export and import values to grow at nearly identical rates in euro terms.

Domestic demand grew at a moderate rate, mainly due to changes in the stockbuilding. In the latter half of 1998, the collapse of Eastern markets led to an upsurge in stock levels, which were then continuously run down in the course of 1999, resulting in a negative contribution by inventory investment in the latter half of the year. Against a background of initial sales uncertainties early in the year, the investment demand of the corporate sector continued to expand at a considerably slower pace. However, the upswing in export demand in the latter half of 1999 and steadily growing consumer spending foreshadowed stronger economic growth, which, in turn, boosted investor confidence. In areas of the economy dominated by the private sector, investment grew at an annualised rate of approximately 10% in Q4. Against the backdrop of the relatively low level of capacity utilisation, however, firms' investment activity cannot be expected to accelerate as quickly as in 1998.

Some fundamental changes were seen in the way the **household sector** adjusted to the short-term fluctuations. Although real income growth rose by only 3.2% in the fourth quarter, consumption growth continued at a rate of around 5%. This leads to the conclusion that, on the one hand, there are expectations of continuing robust increase in personal income. On the other hand, due to developments in the financial sector, a large proportion of previously liquidity-constrained households have gained access to consumer credit, enabling them to maintain their desired level of consumption despite lower income growth, which was regarded as temporary. In the final two quarters, credit-financed consumption amounted to 1.5% of disposable income.

Parallel to the rapid rise in borrowing, gross household savings fell on average by 1% relative to 1998. There was a substantial change in the composition of gross savings, with the proportion of investment higher than the previous year, and financial savings down by 2.5%. The decline in the financial savings rate can be partly attributed to the fact that this rate was exceptionally higher in 1998 (around 7%) as compared to the rate for previous years (around 5%), so part of the change in 1999 can be regarded as a correction. Nevertheless, increasing

use of consumer credit and the expected growth in mortgages could lead to a financial savings rate which is consistently lower than in previous years, a fact that must be kept in mind when formulating an economic policy which ensures macroeconomic equilibrium.

From the second quarter of 1999, the expansionary fiscal impact of **the general government** in the first quarter was corrected, tightening aggregate demand by an estimated 0.4% of GDP for the year as a whole. The favourable fiscal position was achieved in spite of the fact that average growth and inflation rates fell short of projections and government tax rates decreased as a proportion of GDP. This correction was accomplished by freezing budget reserves, amounting to 0.4% of GDP, and curbing public sector investment.

Due to buoyant investment activity in 1998 and strengthening foreign direct investment in 1999, **domestic supply** grew robustly and **capacities** expanded. Following the relatively low rate of capacity utilisation over the previous three quarters, the surge in economic growth was again paralleled by a higher utilisation rate reflected by manufacturing sector indices, which, however, fell short of the level typical for the 1997–98 period. By contrast, potential labour force utilisation gained momentum as a delayed effect of the cyclical recovery of a year earlier, bringing **the rate of unemployment below 7%**. The activity rate was up by over 1 percentage point over the same period of 1998, amounting to 53.4%, which indicates a return to the levels seen in 1994. These favourable labour market developments were partially due to demographic changes, as the proportion of young people in the labour force rose significantly and the higher retirement age also contributed to the rise in activity.

In the final quarter of 1999, **wage inflation** remained virtually unchanged (15.4%) relative to the previous quarter. The rate of private sector wage growth (13.2%) continued to decline, while wage inflation in the public sector (21.3%) gathered pace, mostly on account of temporary distortions. After adjusting for distortions caused by the timing of *irregular payments* (bonuses, commissions, etc.), public sector wage growth also appeared to slow, yet the corrected rate remained about 4% above the private sector rate. Pay rates in *transport, storage, postal and telecommunication* services continued to grow above trend. The wage index (17.2%) of these sectors, 4 percentage points above the average for the private sector, can primarily be attributed to the expansion of telecommunications. As this sector requires highly qualified professional and skilled manual labour, *bottlenecks* could possibly emerge in the future.

The improvement of net exports during the year supported **the external balance**, and the current account deficit (EUR 1.97 billion), calculated on the basis of balance-of-payments statistics for the year as a whole, was lower compared to the previous year. Against the background of a virtually unchanged balance of trade, the lower credit side of services led to a deterioration of 250 million euros in the balance of real economy transactions, which was, however, offset by the drop in the debit side of income and current transfers. Within the latter, the annual amount of profit repatriation connected with foreign direct investment remained at the 1998 level, although the timing of profit outflows differed from that of 1998.

Comparing the composition of the external financing requirement in 1998 and 1999 as a whole indicates that the decline of households' financing capacity is still offset by increasing corporate sector net savings, while some minor changes occurred in their positions in Q4 as compared to the preceding quarters. The fourth-quarter pick-up of corporate investment activity and profit repatriation outflow, which also peaked in Q4, brought about a rise in the financing requirement, nevertheless, the level of external borrowing continued to remain considerably below the level for 1998. By contrast, household net savings grew slightly in Q4 rel-

ative to previous quarters, but their financing capacity remained 2% lower as a percentage of GDP than in 1998. Due to the fact that the general government revised its net financing requirement during the year, which had increased over Q1, its contribution to the economy's external financing requirement did not change over the year as a whole.

The growth of corporate investment activity, expected to exceed the average rate for 1999 in the year 2000, is projected to result in a higher corporate borrowing requirement, an effect which will be partially offset by the upward trend in the share of profits in GDP. The changes in households propensity to save over 1999 were broadly due to long-lasting effects, which poses the danger of a deterioration in the private sector external balance, if the acceleration of economic activity, particularly of investment, continues. However, the budget act for 2000 calls for continued fiscal tightening that may slightly restrict aggregate demand growth.

There was a significant change **in monetary conditions** at the beginning of 2000. While real interest rates fell relative to last year by around 150 basis points over the three-month horizon, changes in the real exchange rate implied tighter conditions. As a result, both in terms of the real exchange rate and real interest rate, there was a return to the monetary conditions prevalent in early 1998. As, by contrast to the lax fiscal policy characterising the first half of 1998, the budget law implies no fiscal easing in 2000, the Bank considers the monetary conditions outlined over the first few months of 2000 will enable both the external and internal balance to be maintained and inflationary pressures to be held in check.

The main reason for the decrease in interest rates was the fall in the risk premium on forint-denominated assets from about 550 basis points in 1999 to about 250 basis points. This decrease was due to several factors:

- The low level of confidence prevalent in the general perception of emerging market economies in the wake of the Russian crisis (contagion effect), a factor which had pushed up risk premium rates over the past one and a half years, has turned around.

- Domestic macroeconomic indicators have improved compared with the period prior to the difficulties in Russia. Compared to the first half of 1998, inflation is lower, and simultaneously there has been an improvement in the external balance and the budget position. These improved data combined have resulted in lower country-specific rates for interest premium.

- In addition to the aforementioned long-term effects, another factor in the rapid decrease of yields early in 2000 was that the fall of short-term yields was slowed down by the Y2K problems at the end of 1999 (while there was already a 100–200 basis-point drop in the interest rate on long-term yields in Q4). Without this effect, the fall would presumably have taken place gradually and at a slower pace.

- As a result of short-term euro yields being lower than dollar yields, the change in the composition of the currency basket justified an approximately 60-basis-point cut in the premium.

The longer-term interest expectations have declined considerably over the past few months. This trend is primarily due to domestic factors, but the fall of the EMBI+ indicator, reflecting the general perception of the international capital markets on emerging market risks, also had a favourable impact on forint interest rates. Long-term interest rates are becoming increasingly subject to the activity of “convergence players”. Accession to the European Union is expected to push domestic interest rates down, which is lending a special allure to investing in long-term forint-denominated instruments. This was one of the factors at work in the fall of three-year forward interest rates to below 8% by the end of February.

Over the past few months, both foreign investors and Hungarian residents have stepped up their forint-denominated investment. There has been another increase in interest-sensitive capital inflow, alongside considerable direct and equity investment, leading to higher central bank intervention in the inter-bank foreign exchange market. The surplus liquidity created by capital inflows was sterilised by the rise in the stock of the Bank's two-week deposit facility. Domestic agents continued to raise the share of forint-denominated assets in their portfolios. Narrow money demand rose at a rate higher than nominal GDP, also boosted by the precautionary cash stocking in December, caused by concerns over the millennium date change. The weight of non-bank assets in the household portfolio increased substantially at the expense of deposit bank accounts, keeping the growth rate of broad money down. M3 rose by 15.9% in December, which broadly coincided with the expansion of nominal GDP.

Main macroeconomic indicators

	1997				1998				1999			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Growth rate (at constant prices)</i>												
<i>Changes over the same period of the previous year (%)</i>												
GDP*	2.2	4.8	5.7	5.4	4.2	4.9	5.5	4.9	3.3	3.8	4.4	5.6
Of which: domestic absorption	3.4	4.6	4.7	3.8	3.9	8.5	10.9	8.6	5.1	5.3	2.6	4.7
– final consumption	2.0	2.0	1.7	3.4	2.7	3.8	4.7	5.3	4.4	4.3	4.7	5.3
= household consumption	1.1	1.0	1.9	2.9	3.4	5.1	5.4	5.7	4.4	4.9	5.0	5.6
– investment	7.0	11.8	13.7	4.8	6.7	20.3	27.8	16.8	6.8	7.6	-2.0	3.4
= fixed investment	12.0	10.4	15.1	4.3	8.6	14.5	20.3	9.8	6.4	6.8	4.2	8.1
Export (GDP)	20.1	26.2	27.6	30.0	28.9	18.3	14.5	10.1	10.8	8.8	14.9	18.9
Import (GDP)	22.3	25.8	25.5	25.3	26.7	25.8	26.0	17.5	13.7	11.2	11.0	16.5
Real effective exchange rate index**												
On CPI basis	-4.7	-4.2	-4.2	-3.5	-3.0	-1.2	2.1	4.3	2.9	0.4	-3.6	-6.1
On PPI basis	-8.2	-5.6	-4.5	-2.0	0.6	2.5	5.2	7.2	5.5	2.3	-1.7	-7.1
On unit labor cost basis (on value-added basis)	-1.7	-2.2	-1.8	-0.5	-0.3	3.2	4.8	7.2	6.4	4.0	5.0	4.9
On unit labor cost basis (on gross output basis)	1.8	2.7	4.9	3.8	5.9	8.5	9.2	10.0	7.5	4.8	5.6	5.6
Deficit												
Balance of the budget (cash flow basis)***	-5.3	-3.8	-6.0	-4.2	-7.5	-2.8	-4.0	-4.7	-10.1	-5.0	-2.7	-1.1
Primary balance of the budget****	4.5	3.3	1.2	3.4	1.9	2.6	1.8	0.6	-0.2	0.3	3.7	3.3
<i>As a percentage of GDP</i>												
<i>EUR billion</i>												
Current account balance	-0.4	-0.3	0.1	-0.3	-0.4	-0.5	-0.4	-0.8	-0.5	-0.6	-0.1	-0.8
Foreign direct investment (net)	0.4	0.3	0.3	0.5	0.4	0.5	0.2	0.4	0.3	0.3	0.3	0.7
Saving rate**** (%)	8.5	9.2	10.7	12.3	8.4	11.8	12.1	10.3	8.6	6.2	6.9	8.1
Unemployment rate+ (%)	9.3	9.1	8.7	8.3	8.0	7.9	7.7	7.5	7.1	6.9	7.0	6.9
Gross average income per capita income **												
(same period of the previous year = 100%)	25.7	21.4	21.2	21.1	21.2	19.2	18.1	15.5	16.7	16.0	15.9	15.9
Household real income***												
(same period of the previous year = 100%)	6.4	4.7	4.2	5.0	3.2	3.2	4.3	4.3	5.0	5.0	3.6	3.8

* These entries are partially based on Bank estimates, which might differ from data published by the Central Statistical Office. Recent data on foreign trade and consumption have been revised as a result of a methodology change. The correction meant a separation of business travel and the revision of the management of foreign exchange purchased from residents. Net currency payments placed on household FX accounts continue to be accounted for in terms of the former methodology and not as travel credit.

** Positive figures indicate real depreciation; nominal exchange rate indices are calculated with market exchange rates from 1995; Deflators refer to the manufacturing industry.

*** Estimated values, as there are no appropriate quarterly data for local governments.

**** Net financial savings of households as a percentage of total household income. (Net financial savings do not include the revaluation total due to exchange rate changes and other factors.)

+ Based on the labour-market survey of the Central Statistical Office according to ILO standards; Unemployed people as a percentage of the entire population; seasonally adjusted data.

** Central Statistical Office data. Average income of full-time employees in the public sector and at businesses employing over ten people until 1998 and over five people from 1999. Therefore, the data for 1999 can only be compared to earlier data to a limited extent.

*** As the data provided by the Central Statistical Office for 1999 did not contain tax allowances, average net earnings recorded by monthly statistics were about 2% points lower than actual figures. The table above shows revised data.

Main monetary indicators

	1997				1998				1999			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Changes over the same period of the previous year (%)</i>												
Inflation (CPI)**	18.8	18.7	18.0	18.4	16.4	14.2	12.5	10.3	9.3	9.1	10.9	11.2
Producer price index**	21.8	19.4	19.7	19.5	13.5	11.6	10.4	7.1	4.9	4.5	4.8	8.2
Devaluation rate of the forint's central parity	15.7	15.3	14.7	14.0	12.9	11.4	10.3	9.4	8.4	7.5	6.5	6.5
<i>Real growth of monetary aggregates*</i>												
<i>Changes over the same period of the previous year (%)</i>												
M0	-1.8	-1.2	0.5	-2.2	1.7	3.3	3.7	5.8	8.5	7.9	3.9	11.5
M1	1.7	0.4	1.3	4.3	6.7	9.1	7.9	6.1	7.1	6.3	5.6	6.8
M3	-0.2	-1.0	0.0	1.0	2.3	4.0	4.6	4.4	8.0	7.1	5.0	4.3
M4	6.8	6.4	7.1	7.1	10.0	9.8	9.4	9.4	9.1	9.0	7.7	6.9
<i>Real growth of loans extended by credit institutions**</i>												
<i>Changes over the same period of the previous year (%)</i>												
Corporate sector, foreign + domestic*	6.3	8.1	8.3	11.2	13.1	14.5	16.4	11.2	13.4	10.8	7.0	13.4
Corporate sector, domestic	19.0	23.9	22.9	16.8	14.5	15.5	15.6	9.9	11.0	7.2	3.5	11.3
Household	-23.8	-20.5	-14.7	-13.2	-11.4	-2.4	2.4	0.8	11.6	14.0	17.8	20.4
<i>Interest rates (%)**</i>												
Reverse repo/one month deposit***	21.50	20.75	20.25	19.75	18.75	18.00	18.00	16.75	16.00	15.25	14.75	14.25
90-day Treasury bill	21.07	20.05	19.48	19.36	18.65	17.33	19.06	16.10	15.68	14.74	14.07	12.44
12-month Treasury bill	20.58	20.09	19.58	19.20	18.70	17.32	18.96	15.88	15.61	14.77	14.17	12.33
3-year Treasury bond	17.42	17.27	18.02	18.25	17.42	16.31	18.00	14.18	14.01	14.03	13.45	10.75
Budapest Stock Exchange (BUX)	5,414	6,795	7,693	7,999	8,656	7,806	4,571	6,308	5,490	6,486	6,747	8,819
Interest rate premium (bsp)****	377	338	257	459	364	363	674	533	531	551	551	426
<i>Conversion</i>												
Conversion, EUR million	384	1,081	1,257	297	2,253	850	-1996	-175	313	239	1,211	1,043
Net foreign borrowing of the banking sector, EUR million*	155	45	33	136	854	231	-617	-158	7	-173	151	312
Net borrowing of the corporate sector** EUR million*	-303	428	307	788	384	-24	209	579	109	753	390	316

* Based on methodology considerations, the Bank has retroactively revised the monthly balance of payments accounts as well as certain entries for foreign-related assets and liabilities published for 1995-1999.

** At the end of the period, in the case of government securities reference yields of the State Debt Management Agency.

*** The maturity of the reverse deposit facility was reduced from one month to two weeks from January 8, 1999.

**** Interest rate premium: the excess yield on three-month T-bill investment over the devaluation rate and foreign interest rates. The current devaluation rate was modified at the official announcement of the change.

+ Without revenues from privatization.

** Including inter-company loans.

I. Inflation

Since July 1999 the consumer price index (CPI) has been back in the double-digit range. While the twelve-month CPI values showed signs of acceleration during November and December, at 10.6% and 11.2% respectively, the index decreased to 10.0% by January 2000, bringing the annual price index to the level seen in late 1998. By contrast, the Bank's *core inflation index*¹, which excludes the inflationary effects of seasonal foodstuffs, petrol, certain energy and regulated prices, has consistently remained within the single-digit range, indicating a steady slowdown in the rate of inflation (see Chart I-1). At the same time, inflation has gathered pace in the euro area (reaching 2.9% in January for the first time in several years). As the acceleration in both domestic and euro-area inflation can partially be attributed to common factors, namely the rise in fuel and energy prices, convergence in terms of narrowing the inflation differential between Hungary and the euro-area countries is continuing at an unbroken pace (see Chart I-2).

The Bank regards core inflation indicators as the key measures of inflationary developments falling within the scope of monetary policy. Since core indicators reflect disinflation going forward, the temporary halt in the decline of the consumer price index is of minor significance from a monetary policy point of view and is accounted for by temporary factors essentially unrelated to aggregate demand and supply. The most notable of these factors are the rising world prices for oil and the reversal of the previous deflationary trend in unprocessed foodstuffs. Developments in inflation relevant for and controllable by the monetary authorities have remained unchanged compared with the previous period. It is to be noted though, that over the last few months the disinflationary trend seen in tradables – mostly *industrial products* – has been continuing and even gaining momentum, and the decline in the rate of non-tradable inflation – denoting mostly market services – has continued. The slight increase in *processed food* inflation and the sharp rise in market-determined *household energy* price inflation followed the inflationary course of non-processed foodstuffs and world oil prices, respectively.

Regulated prices, which fall outside the scope of monetary policy, increased at a fairly subdued rate in January, reflecting the government's strong anti-inflationary commitment. According to Bank estimates, the effects of actual and prospective changes in regulated prices will feed through to coming months only to a moderate extent. Although inflation of centrally-determined or

¹ The items measured by the core inflation index computed by the National Bank of Hungary are listed in the Box text in Chapter I of the December 1999 Report.

Chart I-1 Consumer price index and core inflation indicators (Relative to the same period a year earlier)

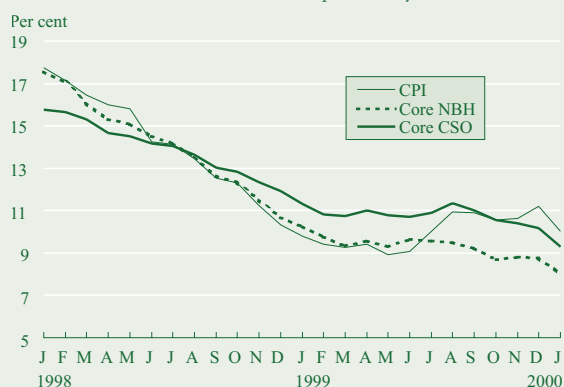
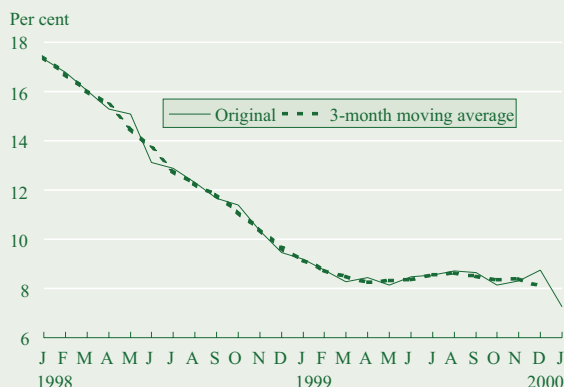


Chart I-2 Inflation differential relative to the euro area*



* Moving average refers to a three-month central moving average. Euro-area inflation is measured by the harmonised consumer price index (HICP), published by Eurostat. For the sake of comparability, Hungarian inflation is measured with an indicator which is consistent with the HICP in terms of the consumer basket and thus excludes goods and services not included in the HICP (pharmaceuticals, medical products, owner-occupied housing, health services and educational services).

influenced prices is not regarded as an issue of special significance from the perspective of monetary policy (which is concerned with the changes of aggregate demand and supply), regulated prices still make an indirect impact on the path of domestic inflation. Certain regulated prices, such as energy or transport service prices, are used as inputs in the production of other goods whose prices are determined by the market, thereby linking up inflation in the former category with that in the latter. Moreover, the development of regulated prices may provide market participants with a message which is easily deciphered when forming inflation expectations. Hence, regulated prices, accounting for nearly one-fifth of the consumer basket, may function as an efficient co-ordination device.

1 Imported inflation

Following a decline and subsequent temporary flat in the first half of 1999, commodity prices, excluding energy, were up by 4% in 1999 Q4 over the previous quarter. This included a halt in the decrease of food prices and growth of 4–15% in other categories. The rapid rise in the price of crude oil, prevalent since March, continued. Oil cost 15% more on average in Q4 than in Q3.

As a result of the 10–15% drop in food and beverages prices, offset by the 10–13% rise in agricultural raw material and metal prices, commodity prices excluding energy remained unchanged compared with the same period of 1998 (*see Table I-1*). However, crude oil prices were up by 100% compared to the same quarter of the previous year. The 133% increase during the 10-month period from February to December can be explained by the supply-restricting behaviour of OPEC, cyclical growth in demand as well as a drop in reserves.

Imported inflation continued to accelerate in 1999 Q4, with the *import unit value index* up by 7.6% over the same period a year earlier and compared to the 5.1% rate in Q3. This pace of growth exceeded that of devaluation against the currency basket (6.8%). Quarter-on-quarter indicators also reported acceleration (with annualised growth rates² at 12.8% in Q3 and 17.2% in Q4). The imported inflation indicator, calculated with effective foreign prices, continued to show a decline to rates of 5.1% and 4.2% in Q3 and Q4, respectively. This growth was broadly due to rising prices for imports (primarily energy) from the Eastern and Central European area: there was a marked rise (from 10.5% to 30.8%) in inflation due to imports from these countries, while inflation due to increases in the prices of mostly engineering industry imports from developed countries was slightly down (from 4.4% in Q3 to 3.9%) (*see Chart I-3*).

Primarily as a result of the rapid increase in energy prices, the twelve-month consumer price index in the euro-area countries, Hungary's most important trading partners, rose from 1.2% in September to 1.7% in December, and then to 2.0% in January 2000. In addition to the cheap euro boosting import prices, consumer prices were further pushed up by the fact that the disinflationary effect of declining unprocessed food prices had

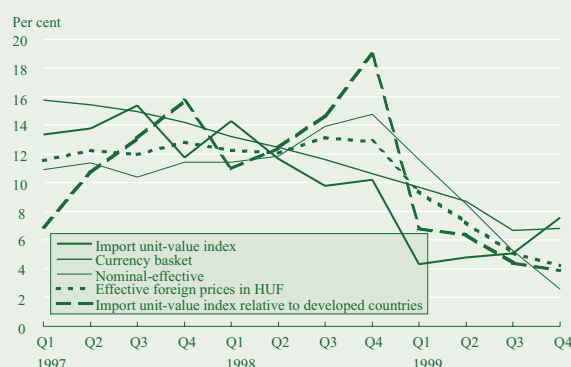
Table I-1 Changes in world prices in 1999*
(Compared to the 1995 average)

	Per cent				
	1998	1999			
	Q4	Q1	Q2	Q3	Q4
Commodities excluding energy	78.1	75.7	74.5	75.1	78.2
Foodstuffs	84.8	78.8	73.8	71.9	72.4
Beverages	82.9	78.9	73.4	65.3	74.9
Agricultural raw materials	73.8	75.6	75.7	77.1	81.0
Metals	72.1	68.2	72.1	78.5	81.7
Crude oil	68.9	68.5	95.2	120.1	138.0

Source: IMF IFS.

* World prices in dollars terms.

Chart I-3 Import prices and exchange rate indices



² Short-term indices are calculated from seasonally adjusted trend-cycle data.

dwindled by the latter part of the year. Over the period December to January, four euro-area countries (Italy, Spain, Portugal and Ireland) reported higher consumer price increases than the 2% upper limit to inflation set by the European Central Bank. In a number of countries, the added effect of rising world prices for energy and the pick-up in economic activity resulted in higher-than-expected, 4% year-on-year increases in industrial producer prices (see Table I-2).

In spite of buoyant activity and the presence of labour-market bottlenecks in the United States, inflationary pressures there remained subdued. Twelve-month consumer price inflation edged from 2.6% in September to 2.7% in December, remaining lower than expectations. The benign consumer price index was supported by the strong dollar, robust competition and the rapid rise in productivity.

In Poland, the mid-year inflation rate of 6.5% rose to 8% in September and 9.8% in December. This higher-than-expected rise in consumer prices was brought about by increasing oil and domestic food prices. As regards the Czech Republic, which seems to be taking a long time to recover from recession, the low CPI inflation of 1.2% in September gathered pace in the final quarter, with the year-on-year rate reaching 2.5% in December.

2 Components of changes in consumer prices

Our data indicate that the main cause for the acceleration of inflation at the end of 1999 was the increase in motor fuel prices: the rise in petrol prices in Q4 alone made a 0.6-percentage-point upward contribution to the rate (see Table I-3; I-4). The table also shows that petrol prices exerted increasing upward pressure on inflation as the year progressed. According to our estimates, with the impact of energy prices considered exogenous, and if the increase in administrative prices had been identical to the previous year, inflation could have declined to 8% by the end of 1999. The minor fall in regulated prices in Q4, due to the fact that structural changes caused by measures to alter the pharmaceuticals subsidy system were incorporated into price statistics, exerted downward pressure on inflation in Q4. On the other hand, food prices, which had previously tended to reduce inflation, began to put upward pressure on the average rate from the latter half of 1999. By contrast, industrial goods, which in line with previous observations had been keeping pace with the decline in the rate of crawl, started to show a marked disinflationary impact in Q4 (see Table I-4).

Goods with typically *market-determined* prices account for about 72% of the consumer basket. Such goods constitute the largest category where price changes are relevant for monetary policy, because changes in regulated prices are not influenced by the development of aggregate demand and supply, but by fiscal policy taken in a broad sense. Within the private category, it is primarily the inflation of industrial products and market services that monetary policy is concerned with, since non-regulated energy and petrol prices – as became evident in the course of 1999 – are significantly influenced by world prices. Although the inflation rates of regulated prices and market-determined prices

Table I-2 International inflation data, 1999

(Relative to the same period a year earlier)

	Per cent					
	June 1999		September 1999		December 1999	
	Producer	Consumer	Producer	Consumer	Producer	Consumer
	Price changes					
United States	1.6	2.0	3.2	2.6	3.0	2.7
Japan	-1.7	-0.4	-1.1	-0.2	-1.5	-1.1
Germany	-1.5	0.4	-0.5	0.7	1.0	1.2
Czech Republic	0.4	2.2	1.5	1.2	3.2	2.5
Poland	5.2	6.5	6.2	8.0	7.1	9.8
Hungary	4.1	9.1	4.8	10.5	6.9	11.2
OECD total	1.5	3.1	2.9	3.4	n/a	n/a
EU-11	n/a	0.9	1.3	1.2	4.0	1.7
EU-15	-1.0	1.1	1.5	1.3	n/a	2.1
G-7	0.1	1.3	1.5	1.7	n/a	n/a

Source: OECD Main Economic Indicators, 2000 February.

Table I-3 Inflation rate of different components

(Relative to the same month a year earlier)

	Weight in CPI	1999				2000 Jan.	Per cent
		Oct.	Nov.	Dec.	Average		
		100.0	10.5	10.6	11.2		
Consumer Price Index (CPI)							
Of which:							
Industrial products, food, alcohol, excluding tobacco and petrol	29.6	7.6	7.2	6.9	8.8	5.9	
Petrol	4.9	24.9	28.3	37.8	18.7	30.7	
Non-regulated energy	1.3	15.1	15.7	16.5	11.7	12.0	
Food	19.1	2.9	3.8	5.4	1.7	5.4	
Regulated prices	18.0	18.4	17.7	17.6	16.6	13.6	
Market services	17.6	11.5	11.4	11.0	12.5	10.8	
Alcohol and tobacco	9.4	10.3	10.6	10.6	11.5	10.9	
Core inflation	89.9	8.8	8.9	8.8	9.3	8.1	
Depreciation of the nominal effective exchange rate		2.1	3.0	2.7	7.0	4.2	
Pre-announced nominal devaluation of the forint		7.3	7.0	6.7	8.4	6.4	

* The classification of items included in the consumer basket is different from that applied by the Central Statistical Office. See previous issues of the Bank Report for more details.

Table I-4 Contribution of certain product and service categories to changes in the inflation rate*

(Relative to the same month a year earlier)

	Weight in CPI	Quarter				Dec.-1999- Dec. 1998	Per cent
		Q1	Q2	Q3	Q4		
		100.0	-1.0	-0.2	+1.8		
Consumer Price Index (CPI)							
Categories causing a rise in the rate of inflation							
Petrol	5.0	+0.2	+0.4	+0.4	+0.6	+1.6	
Regulated prices	18.0	+0.2	+0.2	+0.7	-0.4	+0.7	
Food	21.3	-0.8	-0.7	+0.1	+0.7	+0.2	
Non-regulated energy	1.7	+0.1	+0.0	+0.1	+0.1	+0.2	
Categories offsetting the rise in the rate of inflation							
Industrial products	28.8	-0.3	+0.0	-0.3	-0.5	-1.0	
Market services	16.3	-0.3	+0.0	-0.1	-0.2	-0.6	
Alcohol and tobacco	8.9	-0.2	-0.0	-0.0	-0.1	-0.3	

* Changes in the rate of inflation should be interpreted as follows:
 – if prices in each category had continued to rise at the same rate as in 1998, the December inflation rate would have been identical.
 – If, for instance, a category had a price index of 10% in 1998 and a 15% rise was registered in 1999, the difference is +5% points, whereas if the category had a 5% price index, the difference is -5% points.
 The weights used in this table apply to 1999.

Chart I-4 Consumer price index and its main components (Relative to the same period a year earlier)

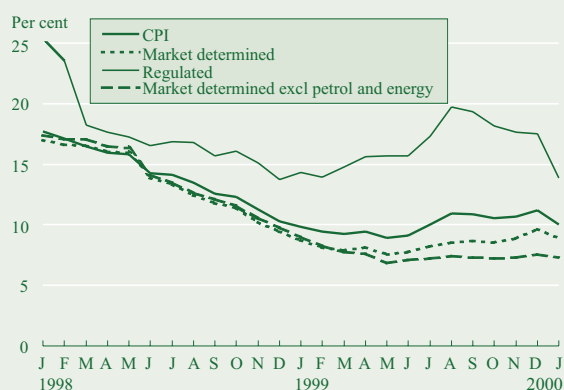


Chart I-5 Twelve-month relative inflation rate of industrial goods

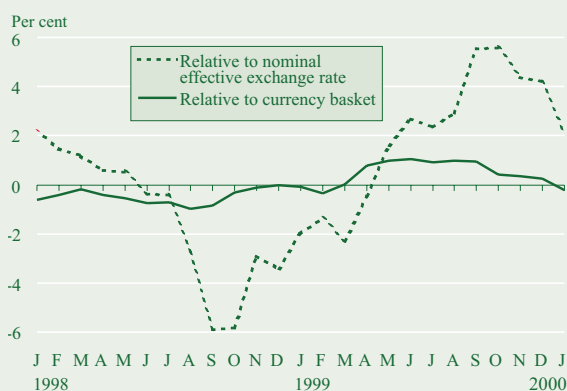
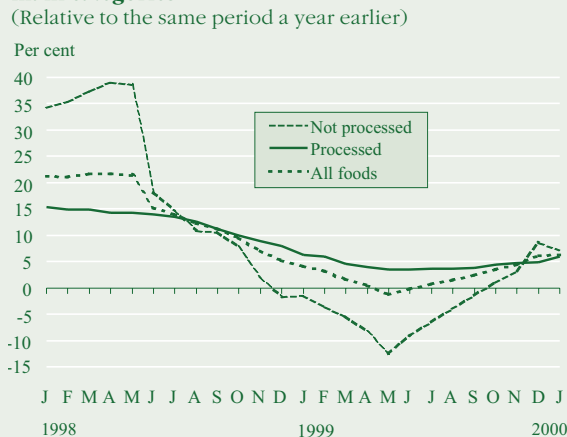


Chart I-6 Changes in price levels for food and its main categories (Relative to the same period a year earlier)



are interrelated in the economic sense, it is mainly in the industrial goods and market services sectors that monetary policy plays a great role, by influencing the path of the exchange rate and aggregate demand (see Chart I-4).

Tradable goods³ inflation continued to decline, in line with the earlier trend (see Chart I-5). Price developments in this category are directly affected by the path of the nominal exchange rate, i.e. the pace at which the forint is depreciating against the currencies of Hungary's trading partners. As reported in the December Report, in mid-1999 there was a jump in industrial goods price inflation relative to the forint's *nominal effective* exchange rate index. It was also noted that this could be regarded as a transitory "overshoot" occurring in the correction process, since by late 1998 the annual industrial goods price index had fallen 6 percentage points below the exchange rate index. The difference had visibly narrowed by Q3 and has since fallen to 2 percentage points, in line with the December Report. However, the high volatility of price inflation for industrial goods relative to the nominal effective exchange rate points to the assumption – already raised in previous Reports – that pricing behaviour is determined by the pre-announced devaluation rate of the forint: in other words, changes in cross rates and temporary movements within the trading band are not built in domestic prices. Chart I-5 shows that industrial goods price inflation relative to the twelve-month devaluation rate has stayed within the $\pm 1\%$ range for a long time. As the intra-band shifts have taken place practically within the statistical error margin of the industrial price index, they should not be regarded as significant. The stability of tradables price inflation relative to the devaluation rate tends to reinforce the Bank's confidence in the role of the nominal exchange rate path as a nominal anchor.

The second largest market-determined category is *food* (see Chart I-6). This category also reflects the continuation of previously reported tendencies. A steady rise in the twelve-month price index of *non-processed foodstuffs* in the second half of 1999 fed through to other goods, leading to an acceleration of average food price inflation in late 1999. As pointed out in the December Report, the sharp rise in non-processed food price inflation last year could be regarded as a correction or "re-balancing" in the wake of the deflation seen in 1998. This correction, beginning from the summer of 1998 and lasting for nearly one year, accounted for almost half of the overall drop in the price level, bringing back prices of non-processed food to levels prevalent in 1998 Q1 by the beginning of 2000. (Although data for January reflect a slowdown in the correction, given the well-known volatility of prices in this category, any judgement of reasonable certainty will only be possible when data from subsequent months become available.)

Processed foodstuffs either come from imports or are produced from domestic raw materials. Thus, it is no surprise that price levels in this category reflect inflation in both industrial goods and non-processed food prices. Accordingly, processed food price inflation had for a long time showed a smoothly declining tendency, similar to industrial goods. At the end of last

³ This category also includes owner-occupied housing. See box in our previous Report for more details.

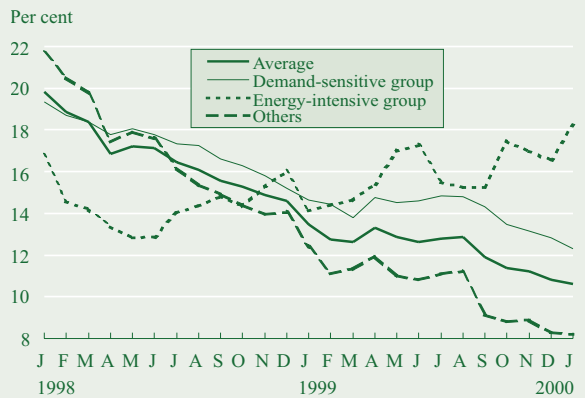
year, however, this steady decline had turned into a mild acceleration against the background of a sharp rise in prices for non-processed foodstuffs. As a result of these developments, the increase in average food price inflation in late 1999 is accounted for by the acceleration of both processed and non-processed food price inflation. However, this was not related to stronger aggregate demand, that is, household consumption, but rather to the reversal of the earlier trend of raw materials deflation and its impact on the entire vertical food range.

Inflation in *market services*, which account for nearly one-quarter of private sector, determined prices continued to decline and approached the single-digit range for the first time since 1992 (see Chart I-7). Market service prices are only indirectly affected by the nominal exchange rate path. Inflation in this category is determined by domestic demand, relative prices – i.e. industrial goods inflation – and the divergence between productivity rates for industrial products and services, as well as cost-push from energy prices in the case of certain services. It was noted in the December *Report* that the inflation differential of market services relative to industrial goods started to rise in 1999 Q3. Recent data suggest that this tendency has been continuing, yet the extent of divergence – considering the variance in the twelve-month rate of the two components – cannot be regarded as significant. The question is to what extent rising relative inflation in market services prices reflects the impact of demand or supply-side (cost-side) factors. An analysis of prices for individual items that define the average inflation rate for services offers evidence of both effects. Over the last few months, the average price index for market services has increased as a result of inflationary pressures on a number of services that seem to be highly sensitive to changes in aggregate demand. These include health and beauty services, repair services, cultural and entertainment as well as (domestic) travel services, which account for about one-third of all market services. At the same time, the price index of services most affected by fuel prices (taxi, transport) reached a very high level, but carried no significant weight.

Monetary policy is not concerned with the impact of energy price increases on certain market services, as changes in world prices are considered to be exogenous supply shocks. Nevertheless, note should be taken of the price increases caused by an upturn in domestic demand, that is, the difference in the increasing relative rates of inflation compared to industrial goods. Separating out the group of market services which are sensitive to aggregate demand it can be seen that while inflation for this group has consistently exceeded the average for market services, the rate of this excess inflation has remained unchanged since 1999 Q2. It seems thus likely that although rising household consumption tends to increase price inflation for certain market services, this impact has shown no acceleration over the recent term, nor has it hindered disinflation within the sector (see Chart I-8).

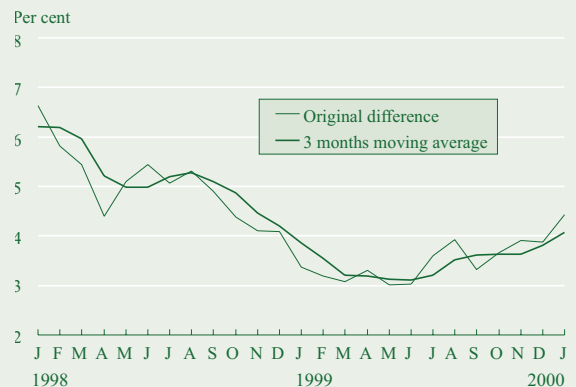
Against the background of rising world prices for oil, prices for motor fuels (petrol) and non-regulated household energy (coal, briquette, coke, firewood and butane gas⁴) continued to

Chart I-7 Inflation rates in individual market service sectors*
(Relative to the same period a year earlier)



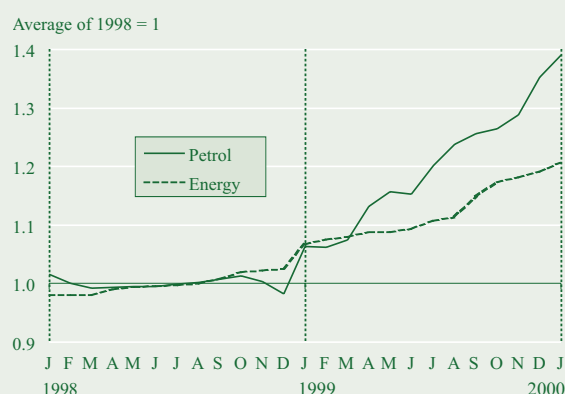
*The demand-sensitive group includes restaurant and canteen catering, snack-bar goods, repair, health, beauty and educational services, cultural and entertainment services, and domestic holiday-related travel, which combined account for 53% of all market services. Taxi and transport of goods services (2%) require considerable energy (petrol) input. Other items, not included in any of the above categories (e.g. school and nursery school meals, newspapers, books, periodicals, housing repairs and maintenance services, holidays abroad, other services), account for 45% of market services.

Chart I-8 Difference between the twelve-month tradable (industrial goods) and non-tradable (market services) inflation rates



⁴ Fuel oil, which used to be included in this category, was removed from the consumer basket in January 2000.

Chart I-9 Average price levels for petrol and non-regulated energy



rise sharply (see Chart I-9). Petrol prices jumped by nearly 10% in the period October 1999 to January 2000. However, the soaring, twelve-month price index of nearly 38% for petrol in December contains substantial distortions, as the price was at a low in December 1998 following a decline for several months. The real issue here is that last year's starting point, having only gradually risen from the 1998 low, would continue to produce a high twelve-month price index for petrol over the coming months even if the price remained constant (see Box for more details).

The average price level for *non-regulated household energy* rose by about 3% in the three months from October 1999, markedly outpacing changes in prices for regulated household energy (central and district heating, electricity, gas supplied through pipes) over the same period. Market determined and regulated energy price inflation seems to have generally diverged since the summer of 1999. While the average regulated price level increased only slightly (and as late as this January), market determined prices rose month by month on the heels of oil prices. As the divergence between market determined and regulated energy price inflation is likely to be corrected during the coming price review for the regulated category, the phenomenon outlined is regarded as temporary.

Government control also plays a role in non-regulated energy price inflation. Excise duties on heating oil were raised in January 2000, and a tax valorisation of 7% was set for unleaded and leaded petrol. The current value of the excise duty is HUF 92 (accounting for 44% of the price of petrol) and is not to be changed in the course of the year. Together with the VAT, tax content accounts for nearly two-thirds of the price. The tax valorisation early in the year – assuming all other costs constant – brought about an approximately 4% increase in the consumer price (the actual rise in petrol prices in January was one percentage point lower on account of a temporary minor fall in world prices). Excise duties on liquefied and compressed gas were cut to nearly half of the previous value, in an attempt to take the level nearer to butane gas prices and thus drive the supply of fuel for gas-fuelled vehicles into legal channels.

Alcohol and tobacco account for some 9% of household consumption. Pricing in this category carries signs typical of both the private and regulated categories, as while such prices are influenced by the decisions of market participants, the high proportion of built-in excise duties also makes the central authorities a major pricing influence. Consequently, for several years average price inflation in this category has exceeded that of industrial goods. Looking at items individually, market structure and excise duties corresponding to the rate of average inflation do not divert alcohol prices from average private sector inflation, not counting seasonal fluctuations. As regards tobacco, its price has increased at a consistently faster pace than inflation, despite the fact that the world market price for its raw material followed a downward trend until the autumn of 1999. The sharp rise in tobacco prices in 2000 was due to a significantly higher increase in the tax content than the rate of inflation, the impact of which is expected to feed through to the price index only gradually, as some retailers still offer stocks priced prior to the measure.

Hungarian inflation is greatly influenced by changes in *centrally regulated or influenced prices*, which account for nearly

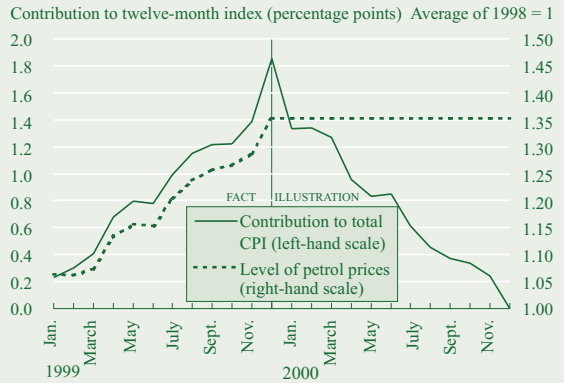
The effect of the base period price level on twelve-month price indices – the case of petrol prices

Changes in inflation are primarily studied using twelve-month indices (relative to the same period a year earlier) instead of raw data in order to remove the impact of seasonal variation from the time series. However, 12-month indices may show high inflation even when actual price levels are constant or falling. This may well occur in the case of petrol in 2000, too. The low price level of early 1999 had risen sharply by the end of the year, thus in the first half of 2000, the effect of the low base will produce high twelve-month rates even against currently stable or falling prices. The situation is aggravated by the large weight of petrol in the consumer basket. The distortion caused by the analysis of twelve-month indices for petrol, which accounts for nearly 5% of the consumer basket, will also cause a major error in the analysis of the overall consumer price index.

While petrol prices did continue to increase over 1999, the low 1998 base caused the twelve-month indices to appear higher than justified. The same holds true for the end of 1999, when 4% out of the nearly 38% index could be accounted for by the low base. As there was an actual rise in petrol prices last year, at least these distortions in the 12-month indices did not reflect untrue *tendencies*. However, the situation may change this year, as is illustrated by the following simulation. Suppose that petrol prices remain at the December 1999 level throughout 2000 (represented by the dotted line). In this case, the twelve-month index would have been 27.2% in January 2000, gradually falling to 12% in July and 0% in December. Accordingly, this would produce a nearly 15% average rate of headline inflation for petrol prices in 2000, whereas the price of petrol did not change at all! As a result of the relatively low base in early 1999, this distortion would naturally be the strongest for the beginning of 2000, when the twelve-month indices of 20–25% or more would raise the overall consumer price index by 1-1.5 percentage points in each month (see Chart I-10).

The conclusion to be drawn is that certain prices, typically fixed by sellers with some monopoly power, are not affected by volatile changes, since these sellers change their prices only on one or two occasions a year⁵. Such prices include *regulated prices*. Added to these from the private category is *petrol*, which – although its price is changed more than once or twice a year – shows no “natural” seasonality on account of marked supply shocks and market structure-related factors. In the case of such items, the analysis of *price levels* seems a justified and feasible course to take, as the series carries no “disturbing” seasonality, fluctuations of other origin or erratic movements. Against this background, in the case of such items, the Bank has switched over to the analyses of price levels, such as base-weighted indices comparing against averages for 1998, in the *Reports*.

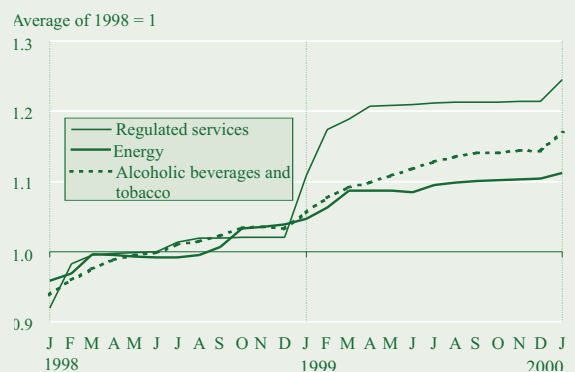
Chart I-10 Simulation: the effect of constant petrol prices over 2000 on the twelve-month consumer price index



one-fifth of the consumer basket (see Chart I-11). In mid-1999, regulated prices played a crucial role in halting the headline rate of disinflation. Even though prices in this sector did not change in late 1999, the 12-month price level reflected a 17.6% increase in December. Consequently, 2.8% of the 11.2% inflation rate at the year-end can be accounted for by regulated price inflation measured *during the year*.

Twelve-month price inflation for *services with regulated prices* (including local government housing rents, communal charges, telephone and postal services, public transport, television subscription fees and gambling) amounted to 18.7% by end-1999, reflecting the impact of rises during the year as noted above, and dropped to 13.6% by January 2000. This took place against the background of “real” factors, such as the lower rate of

Chart I-11 Price changes within the chief categories of the regulated or centrally influenced sector



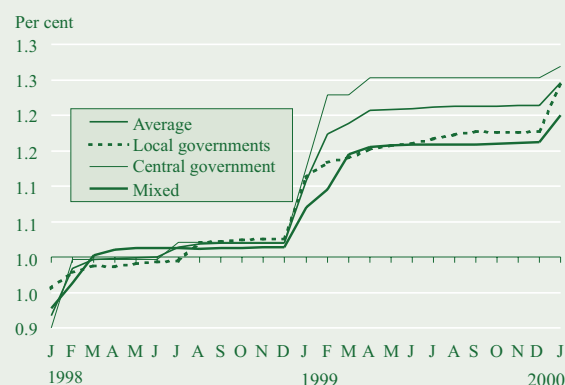
⁵ The “smoothness” of such prices could also be attributed to the fact that basically no estimation error affects observation there, given that monthly monitoring by the Central Statistical Office involves prices set only by one or two sellers rather than by several thousand.

Table I-5 Price indices for goods and services in the government regulated or influenced category (Relative to the same period a year earlier)

	Weight 1999	Weight 2000	1999				Jan. 2000
			Oct.	Nov.	Dec.	Ave- rage	
			Per cent				
Total	18.02	17.99	18.4	17.7	17.6	16.6	13.6
Regulated energy prices	7.17	7.29	6.7	6.5	6.2	8.9	6.4
Regulated non-energy prices	10.06	10.15	27.2	26.0	26.0	22.0	18.9
Of which: pharmaceuticals	1.80	1.70	63.5	56.9	56.9	32.9	55.4
services	9.05	9.00	18.7	18.7	18.7	19.5	11.6

Chart I-12 Breakdown of regulated services price levels according to price determiners*

(Relative to the same period a year earlier)



* Regulated housing rents, waste disposal and local public transport fees were included in the category determined by local authorities. Prices for telephone, postal services, TV subscription and gambling are controlled by central authorities. The "mixed" category, including water supply and sewage, as well as travel, is influenced by both types of regulatory control.

customary central price increases in January, reflecting the government's anti-inflationary commitment, alongside temporary factors, such as postponing increases for certain items (see Table I-5). According to Bank estimates, although the postponed increases together with the protracted impact of January rises will appear in the consumer price index, this is not likely to push up the regulated category 12-month average index to as high levels as last year (see Box for more details).

Against the background of the government's anti-inflationary programme for 2000, services prices controlled by the *central authorities* rose very moderately in January, namely by 1.3% compared to the level for last December (see Chart I-12). The January price index was lower than it could have been as the new *telephone* tariff system fed through to the price index in February instead of January. The impact is expected to be felt over the coming months, and, in terms of Bank estimates, will cause a 5–8% rise in twelve-month indices, depending on the method of statistical accounting.

As far as items controlled by *local authorities* and only indirectly influenced by the central government are concerned, there was a nearly 6% rise in January over December. Contrary to expectations in the light of increases early last year, housing rents and transport services prices, partly included within this category, rose at a subdued rate in January, with only *refuse disposal* prices showing a jump (6.1%).

Energy constitutes the third centrally controlled category (including central heating, electricity, gas supplied through pipes), which follow world prices in terms of a price formula. Last year's increases in world energy prices, however, were not fed through to the price of pipeline-supplied gas in the course of the price review during the year, due to the delays built into the formula and the availability of cheaper supply sources. Late in the year, the seasonal rise in the price for central heating was negligible. Hence, the twelve-month price index for regulated energy amounted to 6.2% in December. It should be remembered when interpreting the 6.4% January increase in this category that the full impact of the nearly 6% January increase in district heating and electricity prices is expected to feed through to the price index over the coming months, similar to 1999, while pipeline-supplied gas prices are to be increased towards the middle of the year, again similar to last year.

The government's anti-inflationary programme in the light of the January CPI data and prospective price measures over 2000 taken within the regulated category

January data on centrally regulated or influenced price inflation underscore the government's commitment to the announced anti-inflationary programme in terms of sticking to the not-higher-than 6% average rate for 2000 as a whole. With regard to certain government-controlled prices, increases that did not take place in January are expected later in the year or their full impact is expected to feed through to the indices only in the months to come. According to Bank estimates, the expected annual average increase for prices within this category is consistent with the anti-inflationary programme. Although the government has only limited influence over locally controlled service prices, January data reflect equally moderate increase rates of 5–6% in this field.

- In respect of household energy supply, *central heating and electricity prices* have increased by 6% since January. The headline consumer price index for January reflected only a 1–1.2% one-month rise, with the full impact expected to feed through to twelve-month indices, producing 7–9% rates over February and March. While local authorities have a say in regulating central heating charges, electricity prices are set centrally. In view of the development of price rises during last year and the government's intentions, this category is expected to produce a 7–7.5% average twelve-month index for 2000 as a whole.
- *Pipeline gas* prices, which did not change at the beginning of the year, are projected to increase as of July 1st. The prospective rise is determined by world prices and the central guarantee of an 8% pre-tax return, on which the price formula is based. Although it would raise the price further, a modification of the formula by basing it on import prices is not to be expected owing to the jump in oil prices last year.
- Because of the highly volatile prices for pipeline gas, the actual price in import contracts is calculated from quarterly figures, based on the average of oil prices for the nine months prior to the given quarter. The fall in energy prices over 1998 and early 1999 did not bring down domestic prices, thus providing substantial reserves for domestic gas prices in the first three quarters of 1999. The impact of the rise in world prices for energy, starting in the spring of 1999, is expected to feed through to Hungarian prices over 2000. This will be moderated by the low price of gas of domestic extraction, which accounts for 20% of consumption.
- The negotiations concerning *pharmaceuticals prices* have not yet commenced, but preliminary information indicates the feasibility of meeting the not-higher-than-6% target for consumers. The non-subsidised category, which accounts for a smaller share of consumption, is expected to be hit by a 10–12% increase, whereas subsidised prices are expected to rise at a 2–3% rate, with the impact of structural changes also included. To limit the rate of intended price increases, the government may temporarily shift pharmaceuticals prices to central control.
- As regards *transport and housing prices* controlled by the central budget, a 6% increase rate has been agreed on. The stabilisation of the world oil price at a high level may lead to tensions for transport and local traffic, which are heavily subsidised and where no financing is available to modernise the vehicle fleet.
- Regulation of the centrally determined price rates for *telephone services* is to undergo considerable changes during the year, as the former retrospective indexation method (where the upper limit for increasing prices over the year concerned was set in terms of the consumer price index measured in September of the previous year, less an efficiency factor) has been replaced by forward-looking indexation, which implies adjustment to current-year inflation. In contrast to last year, Matáv did not raise its prices in January 2000, but the introduction of a new tariff system in *February* is expected to feed through to the price index over February and March. Preliminary calculations suggest that telephone service prices with a likely impact on households will increase on average by 7.5% as a result of the combined effect of falling minute-based rates and rising subscription fees. The Central Statistical Office's decision to include mobile phone charges in the index as of January is expected to moderate the overall phone price index by about 1.5 percentage points. Hence, the expected average increase of around 6%, implying annual indices of 5–8% over the coming months.
- Within the category of centrally controlled items, TV licence charges are not to change under the budget law. Average prices for postal services (excluding phone-related items) rose by 6% in January and no further increase is expected during the year.
- The section of regulation governing the tax content in the price of goods will increase by 6% on average, with the exception of tobacco products. Excise duties levied on tobacco increased at a significantly higher rate than inflation, a tendency which is likely to continue over the next few years in line with a related EU harmonisation requirement calling for a higher excise duty content in tobacco prices. (The rate for the most popular brands was 40% in 1999, which is to be raised to 57%. The excise rate per item is to increase by HUF 7 during 2000, in addition to the 17% percentage-based rate. Thus this tax rise alone is expected to produce a nearly 6% increase in the consumer price index of this category.

Prices typically controlled by local authorities are out of reach of government regulation. Within this category, *local government housing rents* and *refuse disposal* charges rose by 5-6% in January. Further rises cannot be ruled out regarding the latter, which has always been subject to frequent over-the-year increases. Prices for some *public transport* services, with special regard to local transport, are also controlled by local authorities (although discounts for students, old age pensioners, etc. as well as compensation payments to local transport companies are determined centrally). As noted above, the government can find only very limited recognition for its anti-inflationary programme within this sector. This January transport service price increase was less than 6% as against the 10-14% rate last year. As during-the-year rises are not common in this sector, no further increase is expected.

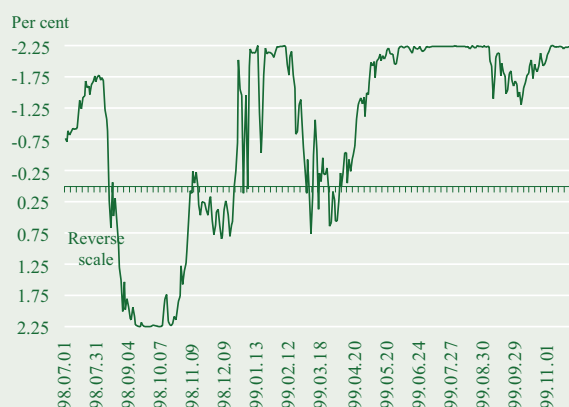
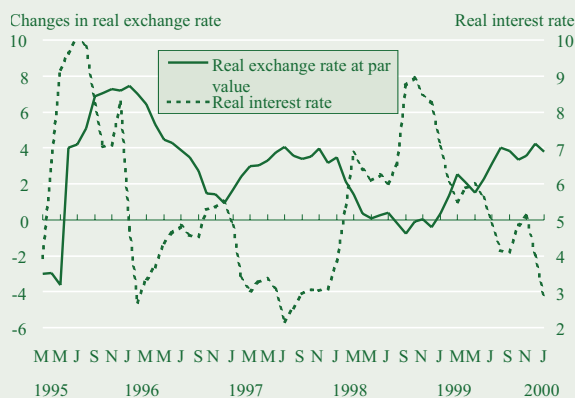
II. Monetary policy

1 Monetary conditions and changes in the interest rate and the exchange rate

The Hungarian economy continued to expand vigorously in 1999 Q4, with the GDP growth rate reaching 5.6%, while domestic absorption grew at a slower pace than GDP, similar to Q3. The pick-up in economic activity of euro-area countries in the second half of 1999 had a favourable impact on the external balance, keeping the current account deficit lower than expected. Although consumer price inflation showed temporary acceleration during November and December, the core inflation index, which is regarded as the key indicator of inflationary processes relevant from the perspective of monetary policy, was falling steadily, bringing down the January rate of inflation below market expectations. Another factor at work behind the favourable macroeconomic indicators was the improvement of the general government balance, with fiscal policy restricting aggregate demand for the year as a whole.

By maintaining the exchange rate path the National Bank of Hungary made a major contribution to implementing the nominal path which was announced in conjunction with the Government. Positive macroeconomic developments made possible another cut in the devaluation rate of the forint in December 1999. This 0.3% monthly rate will come into effect as of April 1 2000, bringing the pre-announced annual rate under 4%. The announced nominal exchange rate path is consistent with the Government's inflation projections for 2000, as well as with the Bank's judgement that a balanced path for the real exchange rate, based on the consumer price index, allows for a real appreciation of 2–3%. By designating the exchange rate path the Government and the Bank wish to influence the trend of inflation over the long term, and thus supply shocks with temporary effects will not affect the course of this path. Therefore, the recent substantial rise in energy prices has not affected the pre-announced devaluation rate, just as the decrease in such prices in 1998 did not. It should be noted that as world price changes have a similar effect on the inflation rate of Hungary's trading partners, the impact on the real exchange rate remains subdued.

Since the autumn of 1999, the monetary policy stance has been primarily determined by the significant drop in market yields, which occurred in spite of the fact that the European Central Bank, which quotes the currency basket, has increased its leading rates by 75 basis points since the beginning of the year. The over 300-basis-point fall in market yields is linked to both

Chart II-1 In the interest rate premium on three-month Treasury bills**Chart II-2 Intra-band position of the forint****Chart II-3 Monetary conditions**

fundamental and technical causes. One such fundamental cause, deserving special attention, consists of country-specific factors. The favourable macroeconomic indicators published at the end of 1999 helped to dissipate previous concerns about the internal and external balance. Moreover, the general perception of emerging market economies has also improved. The currency basket swap on January 1, 2000 also put downward pressure on domestic interest rates, as the short end of the yield curve is characterised by euro interest rates, which are lower than dollar rates. At the longer end of the yield curve, domestic interest rates are increasingly influenced by “convergence speculators”, as prospective European Union entry is expected to bring down domestic rates, adding an extra allure to investment in long-term forint-denominated instruments. All these factors combined caused the interest rate premium on forint investments to fall from the approximately 550-basis-point value last year to around 250 basis points.

Foreign investor confidence has prompted a nearly unbroken inflow of capital since early 1996, when the credibility of the crawling peg system stabilised and the Hungarian economy was set on a long-term path of balanced growth, giving the forint a strong position within the intervention band and setting the interest rate premium on short-term forint investments fluctuate within the range of 250 to 400 basis points (*see Chart II-1*). However, in the wake of the Asian and Russian crises in the second half of 1998, international capital markets began to attach a great deal more risk to investment in emerging market economies, and this change of perception was promptly reflected by the interest rate premium on forint investments. The 700-basis-point short-term premiums in the aftermath of the Russian crisis stabilised in the 500–550 range in 1999. By last autumn, however, it was clear that the countries affected by the crisis were recovering relatively quickly, and that the contagion effects of the crises in Asia, Russia and Brazil were less severe than expected. The decrease in the premium, starting in the autumn of 1999, can be regarded as a correction of the high rates prevalent a year earlier, bringing down the premium on short-term yields to the level typical of the pre-crisis period.

In response to the fall in short-term market yields, the Bank cut interest rates in several steps. In the period from December 1999 to March 2000, the Bank cut the leading interest rate on the two-week deposit facility on four occasions amounting to a total of 275 basis points, namely by 25, 50 and 150 basis points on December 17, January 4 and January 19, respectively. The latest 50-basis-point cut took place on February 17. As a result of robust forint demand, the exchange rate was almost uninterruptedly at the strong edge of the trading band until mid-February (*see Chart II-2*), when there was significant intervention in the interbank exchange rate market.

The capital inflows did not lead to a fast expansion of domestic liquidity, as nearly all the excess was absorbed by the Bank’s sterilisation instruments.

As a result of the decrease in the premium over the past three months, the real interest rate calculated on the basis of three-month market yields has fallen by about 300 basis points relative to the level for 1999 Q3 (*see Chart II-3*). Due to the fact that real interest rates have decreased compared with a year ago, changes in the real exchange rate called for monetary tightening.

As a result, both in terms of the real exchange rate and real interest rate, there was a return to the monetary conditions prevalent over early 1998. The Bank believes that the monetary conditions taking shape over the first few months of 2000 will enable both the external and internal balance to be maintained and the inflationary trend to be further reduced.

Under the current monetary system, the key policy instrument for influencing monetary conditions is the setting of the *exchange rate path*. This pre-announced path will, in turn, provide the economy with an *efficient nominal anchor*. Under this system, forint real interest rates are the sum of euro real interest rates, the real appreciation of the forint against the euro and the risk premium expected by investors. While this latter component has considerably fallen recently, the same market forces that tend to decrease interest rates will cause the forint to appreciate. By setting a real exchange rate path with greater appreciation than in the last one and a half years, similar to the trend for the period between early 1997 and August 1998, the Bank can shape monetary conditions in accordance with domestic economic activity.

The risk premium on forint investments continues to exceed the trend real appreciation rate, and international experience indicates that this is likely to linger on over the next couple of years, implying that the real interest rate on forint-denominated market instruments is not expected to fall permanently below the euro-area rate. As the business cycle in Hungary seems to mirror European Union business cycles, the Bank expects imported monetary policy to make for appropriate domestic monetary conditions, in terms of which changes in the risk premium diverging from economic fundamentals will cause only temporary fluctuations. This will all pave the way for Hungary to become a member of the ERM II exchange rate system and subsequently the Economic and Monetary Union after it has joined the European Union.

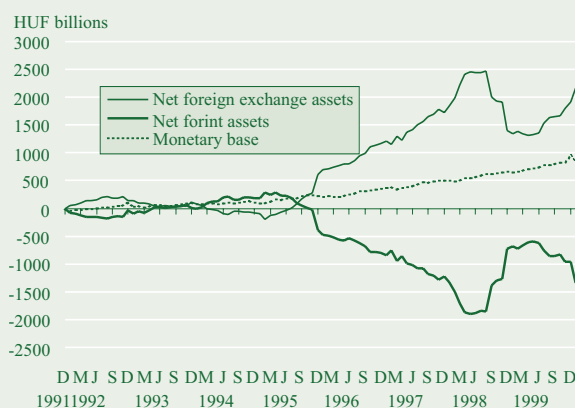
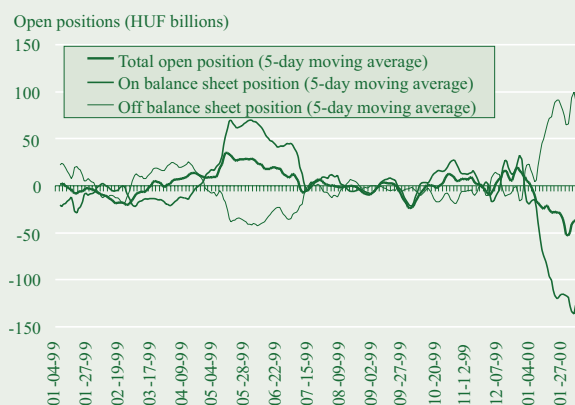
At the same time, partly owing to the cyclical position of the economy and partly to the restructuring underway in the financial sector, the equilibrium position of the economy, with special regard to the position of its participants, is likely to change. These processes, however, are only marginally affected by the real interest rate of the forint, and even higher premium rates would not be able to prevent these changes from occurring. Simultaneously with the upswing of corporate sector investment activity, the borrowing requirement of enterprises is also likely to increase in 2000.

The rate of investment borrowing is influenced by the recovery of domestic markets and heightened expectations in connection with the European Union, Hungary's most important export market. Households' propensity to save is also expected to decline as a result of the continued rise in consumer borrowing.

The low sensitivity of household borrowing demand to interest rates is well illustrated by the robust growth of household consumer credit over the past two years in the face of exceptionally high real interest rates. These effects, which are due to cyclical changes and the restructuring of private sector portfolios, are to be partially offset by the fiscal policy stance aimed at restricting aggregate demand.

Table II-1 The monetary base (End-of-period stocks)

	HUF billions						
	1999						2000
	Initial	June	Sept.	Oct.	Nov.	Dec.	Jan.
I. Monetary base (II + III)	1,161	1,239	1,286	1,318	1,323	1,439	1,318
Notes and coin	736	781	807	818	833	956	822
Reserves	425	459	479	500	490	483	496
II. Net forint assets (b + c + d - a)	339	449	211	232	103	101	-269
a) Sterilisation instruments	525	316	447	408	522	619	813
b) Credit to financial institutions	167	134	129	127	124	120	117
c) Net claims against the government	718	582	482	454	443	512	417
of this KESZ (-)	33	115	195	214	227	199	301
government securities(+)	377	420	409	406	404	401	401
other (+)	375	277	269	263	265	310	317
d) Other	-21	49	47	58	59	88	10
III. Net foreign exchange assets	822	790	1,075	1,086	1,220	1,338	1,587
Net foreign	-502	-115	165	163	429	504	771
Claims	2,260	2,632	2,901	2,924	3,231	3,269	3,488
Liabilities	2,762	2,747	2,736	2,760	2,802	2,765	2,717
Net domestic	1,324	905	910	923	791	834	816
Claims	2,146	1,736	1,680	1,669	1,567	1,551	1,497
Liabilities	823	831	770	747	776	717	682

Chart II-4 The monetary base and its components**Chart II-5 Total on-balance-sheet and off-balance-sheet open foreign exchange position of the banking sector**

1.1 The monetary base

The annual growth rate of the monetary base fell to 14.6% in January 2000, consistent with the rate of Hungarian economic growth and inflation. The strong increase at the year-end was a one-off event, caused by the precautionary cash stocking amounting to HUF 70 billion in December, related to the millennium date change problem, as is illustrated in *Table II-1 and Chart II-4*.

Over the past few months, the Bank has intervened in inter-bank foreign exchange markets on several occasions. Liquidity in excess of narrow money demand was sterilised by the Bank, indicated by the spectacular rise in the total volume of two-week Bank deposits relative to last October. There was a simultaneous large-scale increase in the Bank's net foreign exchange reserves, absorbing the foreign exchange purchased.

1.2 Components of intervention forint demand

Intervention by the Bank over 1999 Q4 amounted to HUF 297 billion, which brought the demand for forint in the second half to triple its value for the first six months of 1999. A key factor in this respect was the return of external confidence as initial concerns over the budget and the current account turned out to be unfounded by autumn. Over the final three months, the current account deficit, adjusted by the foreign direct investment inflow and the Bank's foreign interest payments, decreased forint demand by merely HUF 10 billion, despite the fact that the current account deficit (HUF 144 billion) peaked in December, similar to a year earlier, as a result of the customary year-end rise in profit repatriation by multinational companies. This was, however counterbalanced by the equally strong direct investment inflow (HUF 134 billion), which brought about, for the second half as a whole, an FDI rate nearly HUF 80 billion over the corrected current account deficit.

The final quarter saw strong growth in the inflow of interest-sensitive capital. Such items include the conversion effect of banks and futures transactions, domestic foreign exchange deposits, foreign demand for government securities, as well as corporate foreign exchange borrowing. The surge in foreign demand for government securities should be noted, as in December alone the stock increased by more than the combined total for the first three quarters. Furthermore, corporate foreign exchange borrowing did not decline in Q4, contributing to intervention demand by HUF 76 billion.

The HUF 30 billion foreign exchange short position, open for a few days in late September, was hedged by a negligible amount of futures deals, implying that the on-balance-sheet and total foreign exchange open position of the banks was broadly identical. Subsequently, however, for the greater part of the quarter, the banks strove to maintain neutral on-balance-sheet positions. From Christmas on there was a fundamental change in the behaviour of commercial banks, as they began to gradually open their on-balance-sheet foreign exchange positions. By late December, they had accumulated a HUF 22 billion on-balance-sheet short foreign exchange position, which they were able to hedge in the reviving futures market. Intervention in the foreign exchange markets was reduced by HUF 32 billion as a result of the nearly neutral total open position, and was increased

by HUF 24 billion as a result of the creation of futures foreign exchange long positions. However, from early January, the entire banking sector started to gradually increase its total foreign exchange open position, as the growing on-balance-sheet open position could not be hedged by similarly increasing futures counter deals. The total open (short) foreign exchange position amounted to HUF 40–50 billion in early February. The last time an open position of this scale was held was prior to the Asian crisis. This time, however, it was the net result of much smaller on-balance-sheet and futures positions. Currently, the banking system maintains an on-balance-sheet open position equal to about a quarter of that prior to the Russian crisis. At that time, commercial banks were enabled to have such large-scale on-balance-sheet borrowing by hedging it formally with futures deals made with their own brokers. This caused a similarly four-fold increase in the volume of futures transactions, but provided no real hedge as potential losses remained within the same financial group. The real purpose it served was to comply with regulations restricting open positions (see Chart II-5).

As is clearly illustrated by Chart II-6, the fall in the premium on the yield of forint instruments coincides with an increase in the banking sector's on-balance-sheet foreign exchange open position. The on-balance-sheet open position does not present a full picture of capital inflow effected by the banking sector, as this does not include the share converted into forints and invested in government securities and central bank repo. Part of these amounts, which are not absorbed by the banking sector at the aggregate level, are sterilised by the National Bank and appear partly as an increase in international reserves.

Therefore, total interest-sensitive items accounted for HUF 184 billion in Q4, amounting to over 60% of intervention in the foreign exchange market. For the last six months of the year, the corresponding value was HUF 318 billion, which looks particularly remarkable in comparison with the low figure for the first half of the year. The non-interest-sensitive part of portfolio inflow, notably equity investments by foreigners, also picked up over the second half of the year and accounted for HUF 105 billion of the intervention in Q4 (see Table II-2).

2 Yield curve, interest rate and inflation expectations

In the three months to February 2000, yields in the Hungarian government security market fell dramatically, which was a logical sequel to the decline starting in early October, analysed at length in the previous Report. In the period from early October to February 22, there was an almost parallel 350–400-basis-point downward shift of the yield curve up to the 5-year maturity. However, this decline can be divided into two easily distinguishable phases. The first phase, ending in early December, it was predominantly long-term yields which decreased. In the course of December, a parallel downward shift was observable at most maturities, except the shortest (three-month) ones, which exhibited a slightly steeper fall. Over January and February short-term yields caught up with the previous steep fall in long-term yields. As a result, by mid-February the slope of the yield curve showed

Chart II-6 On-balance-sheet foreign exchange open position of the banking sector and interest premium on HUF financial assets

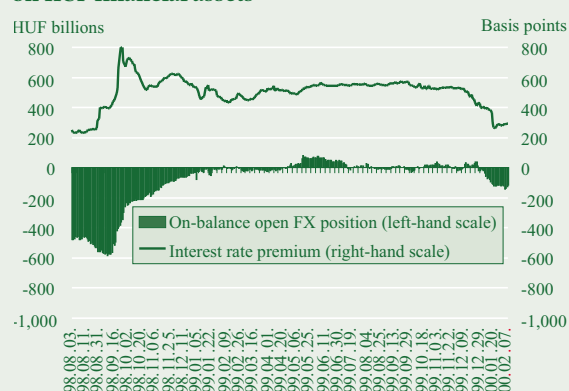


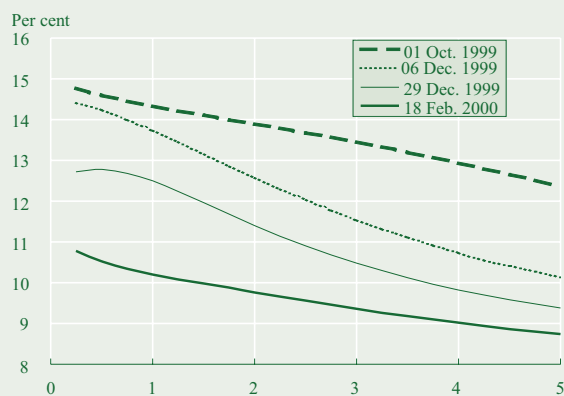
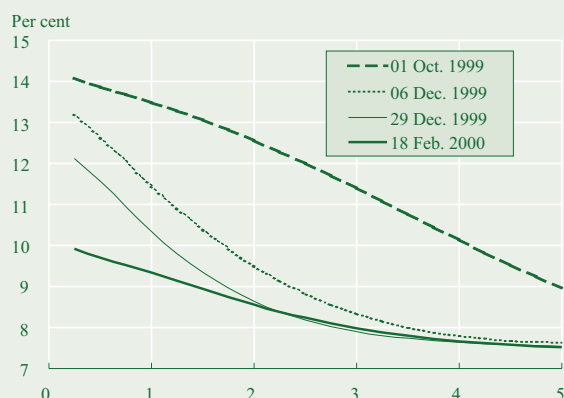
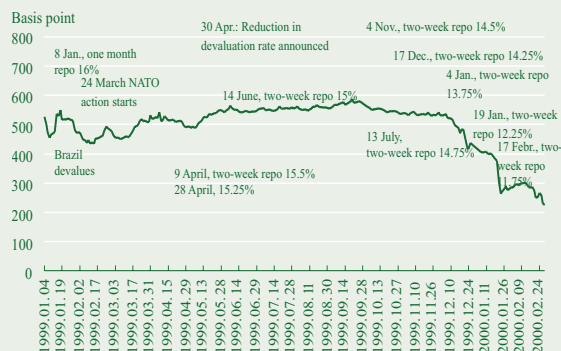
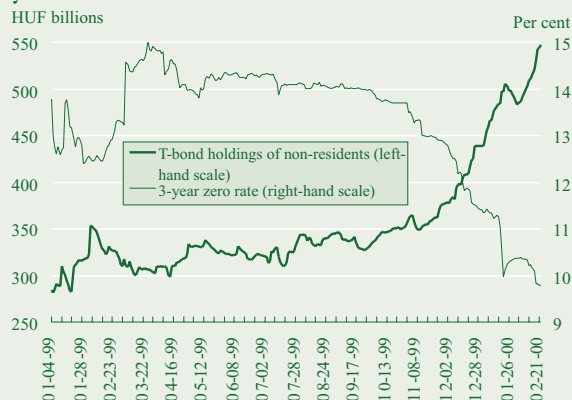
Table II-2 Components of the demand for forints

	HUF billions									
	1998 Total	H1	Q3	Oct.	Nov.	Dec.	Q4	H2	1999 Total	
A Conversion	192	203	307	28	133	137	297	604	807	
a) Intervention in inter-bank foreign exchange market	154	138	304	0	129	137	266	570	708	
b) NBH purchases from budget	37	65	3	28	4	0	32	34	99	
Sources of conversion (I.+...+VIII.)	192	203	307	28	133	137	297	604	807	
I. Current account balance corrected with net foreign interest payments (1+2)	-383	-232	1	-15	-35	-143	-193	-192	-424	
1 Current account balance	-495	-284	-17	-13	-40	-144	-197	-214	-498	
2 Net foreign interest payments by NBH	112	51	18	-2	5	1	4	22	73	
II. Foreign direct investment	333	137	87	25	25	134	183	271	407	
III. Intervention due to commercial banks*	-73	-22	43	-50	25	-8	-32	10	-11	
IV. Effect of derivatives**	-206	-119	37	2	12	10	24	61	-58	
V. Intervention due to domestic foreign exchange deposits	6	14	-27	-8	0	19	11	-15	-2	
VI. Net portfolio investments (1+2)	384	348	74	42	71	97	210	284	632	
1 Government securities	176	35	13	22	21	62	105	118	152	
2 Equity***	208	313	61	20	50	34	105	166	479	
VII. Corporate foreign exchange (1+2) = (a+b)	90	111	69	28	23	25	76	145	256	
1 Domestic	49	56	11	24	16	47	87	97	153	
2 Foreign	41	55	58	5	7	-22	-10	47	102	
a) Short-term	-37	-16	-10	-14	-11	-3	-28	-38	-54	
b) Long-term	128	127	78	42	33	29	104	182	310	
VIII. Capital transfers	41	-34	24	4	11	3	18	42	8	
B. Interest rate-sensitive (III.+IV.+V.+VI./1+VII.)	-7	19	133	-6	82	109	184	318	336	
C. Speculative (B.-V.-VII./b)	-141	-122	82	-40	48	61	69	151	29	

* Conversion effect due to the change in commercial banks' total open position, in other words, the part of the open positions not hedged by derivative transactions.

** Conversion effect of the change in the volume of forward contracts. With these two items the negative sign indicates the closing of long forint positions built up earlier.

*** As the balance-of-payments statistics on stock purchases by foreigners are rather uncertain, the entries in this row were calculated on the basis of the residual principle.

Chart II-7 Zero-coupon yield curves**Chart II-8 One-year implied forward curves****Chart II-9 Interest premium on three-month T-bills over the past year****Chart II-10 T-bond holdings by non-residents as registered by KELER and three-year zero coupon yields**

a similar picture to that prior to October, the date for the onset of the decline (see Chart II-7). The changes in the implied forward rate curve provide an even more expressive illustration of the changes in interest rate expectations underlying the shifts in the yield curve. It can be clearly seen that the expected future path of 1-year interest rates had already markedly changed by early December: the earlier trend of steady, approx. 100-basis-point expected declines each year, reflected in the expectations, had been replaced by a much faster fall, followed by expected 1-year rates stabilising at a 7.5–8% level beyond the three-year horizon. After early December, there were no significant changes in these long-term interest rate expectations, and the shifts in the implied forward curve (and thus, in the yield curve) were dominated by the steady decline of implied 1-year yields one to three years ahead (see Chart II-8).

The yield fall over the period studied was caused by both fundamental and technical factors, as well as speculation regarding cuts in central bank interest rates. However, the weight of these three factors has been constantly changing since October.

As noted in the December Report, the fall of long-term yields over October and November was due to fundamental factors, most notably some favourable country-specific macroeconomic developments (such as better-than-expected current account and budget deficits) and, to a smaller extent, the improvement in the global sentiment of emerging market economies. The fact that the preliminary data for the October balance of payments, announced on December 3, were again better (by approximately USD 110 million) than market expectations was another factor which helped to push yields down, reflecting positive developments in economic fundamentals. The spread of the EMBI index (reflecting the sentiment of the riskiness of emerging market investments) over US T-bond yields also decreased until late December, following the trend which started in mid-October.

In the course of December, in addition to the improvement of fundamentals, certain technical factors also contributed to the decline of rates (see Chart II-9). One such factor was the removal of the dollar from the currency basket. As dollar rates at that time were much higher than euro rates (the difference in early December was about 270 basis points at the three-month maturity), this technical change in itself would have raised the forint's interest rate premium relative to the new currency basket by about 80 basis points (with forint interest rates and the devaluation rate remaining unchanged). If the market had recognised this impact of the basket change in time, forint yields would have started to fall gradually well before the introduction of the new basket in order to "work off" this 80-basis-point technical premium. The decrease would have been gradual, first affecting long-term then short-term yields, depending on how much of the remaining maturities fell in the period following the adoption of the new basket. In this ideal scenario (i.e. if the market previously recognised the prospective effect of the change), by the time the new basket is adopted the interest premium cannot include the technical premium caused by the basket change. It cannot be ruled out, however, that it was not until December, i.e. relatively late, that the market discovered the presence of the extra premium. This would account for the exceptionally high foreign demand for bonds with short remaining maturities from the second week of December. The last three weeks of December not only saw a sig-

nificant increase (by about HUF 60 billion) in government security holdings of non-residents, but the shortening of average maturity from 2.5 years to 2.25 years as well, which implies a shift of preference towards short-dated securities (see *Chart II-10*).

Although short rates began to fall more quickly than long-term rates as early as December, the difference in the speed of fall became most visible in January and February: by this time the slope of the yield curve had returned to the September level. One plausible explanation for short-term interest rates taking a longer time to adjust is the uncertainties stemming from Y2K concerns. As Y2K concerns disappeared in January, there was no longer any obstacle to a downward correction bringing the short end of the yield curve in accordance with the sound fundamentals.

There are several indications that, in addition to the technical factors, speculation on the rapid adjustment of short-term interest rates was also a factor contributing to the yield drop in January and February. These indications include a jump in the two-week central bank deposit facility holdings of commercial banks, a continued decrease in the average maturity along with a sharp rise in the amount of non-residents' forint-denominated government security holdings (despite the slight increase in the EMBI spread after January) and the increase in on-balance-sheet forex open positions by commercial banks. These phenomena also imply that some market participants began to see a potential appreciation of the forint as more probable compared to previous periods. Having examined the fundamental, technical and speculative reasons for the yield decrease in the period since October, it seems worthwhile to take a look at their effect on the decomposition of nominal yields, in other words, at how much of the decrease was caused by the decline in real interest rates, inflationary expectations and the risk premium, respectively. From October to December market analysts' average forecast inflation¹ for end-2000 (surveyed by Reuters) decreased only to a small extent, by around 50 basis points, and it even increased slightly in January and February (see *Chart II-11*).

Thus, the greater part of the approximately 400-basis-point decrease was caused by the decline of the risk premium and the real interest rate. Some indirect information on long-term real interest rate expectations is provided by the secondary market price of the 2005/D index-linked bond. This bond is rather illiquid, therefore the information derived from its price movements has to be handled cautiously. However, the implied five-year real interest rate, calculated on the basis of the mandatory price quoting of the bond, showed a robust drop of around 100 basis points in January, bringing the long-term real rate down to around 4%. This seems to imply that the contribution of fundamentals to the yield fall took place primarily via the decrease in the forint risk premium. This assumption is supported by the fact that among the fundamentals it was the sequence of better-than-expected current account deficits which had the greatest impact on the yield curve, as this macroeconomic indicator probably has the most direct impact on the forint's risk premium.

It is worth to analyse the behaviour of the central bank in the period being reviewed. In October and December, when long-term yields were falling, the Bank proceeded with caution

¹ Average forecast: trimmed mean of forecasts, dropping the highest and lowest individual forecasts when calculating the mean.

Chart II-11 Analysts' average forecast for end-2000 and end-2001 year-on-year CPI inflation

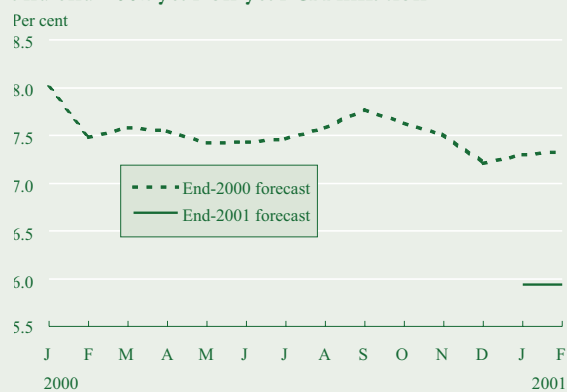
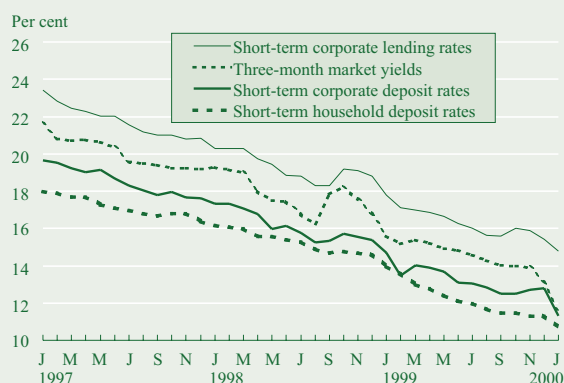
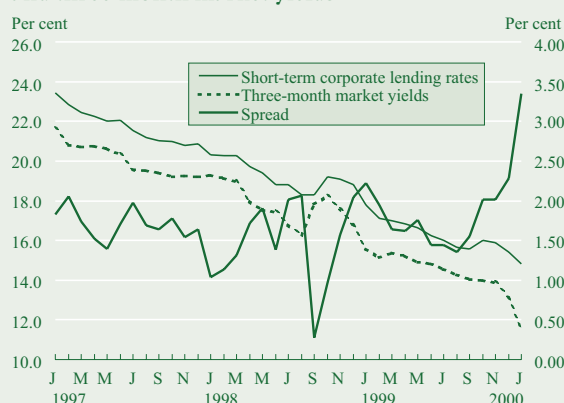
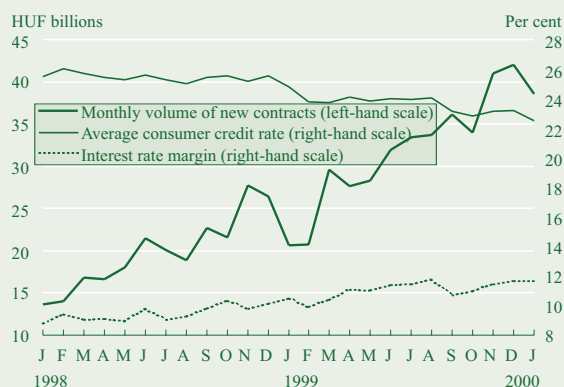
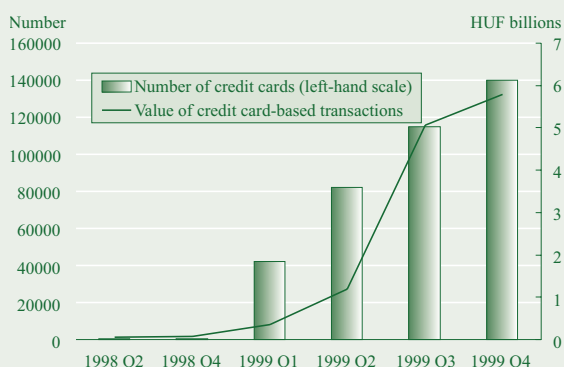


Chart II-12 Commercial bank rates and market yields**Chart II-13 Short-term corporate borrowing rates and three-month market yields****Chart II-14 Consumer credit in 1999****Chart II-15 Number of credit cards and the value of credit-card-based transactions**

in following market movements. It had two straightforward reasons to do so. First, the adjustment of the forint interest premium to the lower required risk premium was helped by the rise in foreign interest rates (the ECB and the Fed raised short-term leading rates by 50 and 25 basis points on November 4 and 16, respectively). Second, Y2K concerns called for a more cautious interest rate policy than usual. Accordingly, over this period the Bank cut the rate on its two-week deposit facility only twice (each time by 25 basis points), on November 4 and December 17. When it became clear that the millennium had caused no greater problems than expected, the Bank was ready to make a more substantial move (a 50-basis-point reduction on January 4), in line with the decrease in short-term market yields. The exceptionally rapid fall in short-term yields in early January, combined with indications that this was partly due to the market's rising expectations of appreciation, prompted the Bank to take firmer action. The 150-basis-point reduction in the two-week deposit rate on January 19 was to convey the message to market participants that the Bank continued to regard the narrow-band crawling peg devaluation system as the appropriate nominal anchor. It tried to make clear that the Bank is willing to accept the decrease in the real interest rate in exchange for maintaining the crawling peg system, provided that sterilisation costs remained reasonable. The current 2.5–3% level of the one-year forward-looking real interest rate is not without precedent, as similar rates were observable in the period before the Asian crisis in 1997. However, the slowdown in interest-sensitive capital inflow and the reduced speed of the accumulation of the Bank's two-week deposits which followed the significant cut in the Bank's short interest rate proved to be only temporary, despite foreign interest rate hikes (February 2, Fed; February 3, ECB: 25 basis points each). Therefore, the Bank resorted to another 50-basis-point cut on February 17 in another demonstration of its commitment to the narrow-band exchange rate regime.

3 Interest rate policy of commercial banks

Consistent with the disinflation process, market and commercial bank interest rates continued to follow a downward trend in 1999. However, there was a gap between the volatility of commercial bank credit and deposit rates, essentially depending on the power relations between banks and their customers. As illustrated in *Chart II-12*, interest rate smoothing was most powerful in the case of household deposit rates, as household deposit demand shows smaller sensitivity to interest rates than corporate sector demand for credit or deposits. The decline of short-term market yields, starting in December, was followed by a reduction in commercial rates after a delay of one month. Corporate deposit rates decreased at the fastest rate in January, which could be viewed as a correction of the high rates of 1999 Q4. The October rise in average short-term corporate borrowing rates was only temporary and was not related to the changes in market yields, but rather to large-scale credit extension by two banks at a rate exceeding the average for the banking sector. *Chart II-13* illustrates the fast growth of the spread between corporate borrowing rates and market yields over December and January, as the effect

of the marked drop in yields has not yet fed through to commercial bank lending rates. The stability of the spread experienced in the recent period makes it very likely that lending rates are to be considerably reduced over the near term. A similar reduction is expected for household deposit rates, which did not remain completely abreast of the yield decrease in December and January. Buoyant borrowing activity continued in the household sector in Q4. Despite the overall downward trend in interest rates, the average rate for consumer credit did not decrease until December, and the margin between credit and deposit rates remained in the range of 12%. There is a rather large dispersion behind the average borrowing rate, displayed in *Chart II-14*, and the full credit cost index, which represents the real costs of borrowing, is lower (at 20%–30%) for current account and car purchase loans than for goods purchase and personal loans (at 30%–40%). Since early 1998, which marks the beginning of large-scale household borrowing, the term to maturity of non-current-account-type consumer credit has been gradually, if not substantially, growing. This is a welcome phenomenon, increasing the efficiency of consumption smoothing over time. In the period between January 1998 and December 1999, a large proportion of new borrowing contracts within the banking sector was represented by current-account and long-term loans, mostly at the expense of six-to-twelve-month contracts. The factors behind the rise in maturity dates include the gradual decline of inflation along with overall interest rates, as well as the ongoing improvement of credit rating and risk management techniques. In 1999 a new type of household borrowing facility was introduced in the form of a credit card not secured by a deposit on the holder's account. In addition to standard credit cards, *Chart II-15* also includes data on the number and transaction value of cards linked to current accounts which make overdrafts possible. In most countries the widespread use of credit cards has led to the growth of household indebtedness. Credit cards remove most of the liquidity constraint as loans are no longer arranged one by one, but are freely available within the credit line. Furthermore, the accumulation of high interest payments on card use may also significantly increase the debt burden. In Hungary, standard credit cards are within reach for only the relatively wealthy, some of whom use them only for convenience and try to settle the balance every month in order to avoid high interest payments. The robust growth of household incomes and the expansion of related databases are expected to make credit cards available to the less affluent strata of the population as well. Only when this happens will any rise in household sector debt associated with credit card use be a concern.

4 Monetary aggregates

Chart II-16 shows that relative to their fast growth in 1998, monetary aggregates continued to expand at a more even rate in 1999.

In 1999 Q4, the volume of narrow monetary aggregates, serving transaction purposes, was influenced by Y2K caution, reflected chiefly in an increase in cash holding (see *Chart II-17; II-18; II-19*). Information on notes and coin in circulation seems to prove the cash-demand-boosting effect of the date change.

Chart II-16 Real growth rate of monetary aggregates
(Three-month moving average, same month of a year earlier = 100)

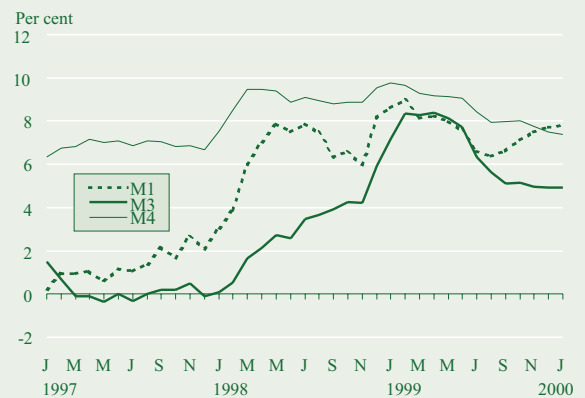


Chart II-17 Real growth rate of households' M1
(Relative to the same month of a year earlier)

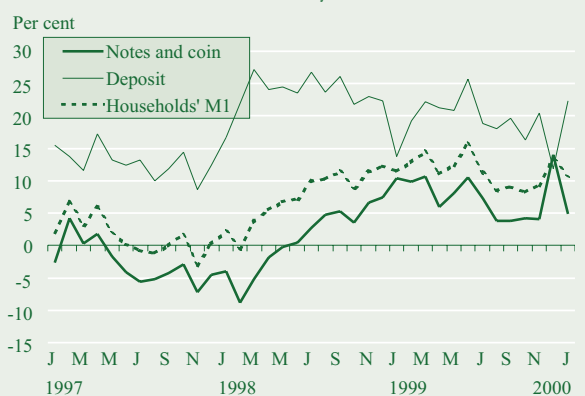


Chart II-18 Growth rate of nominal notes and coin outside the banking sector
(Relative to the same month a year earlier)

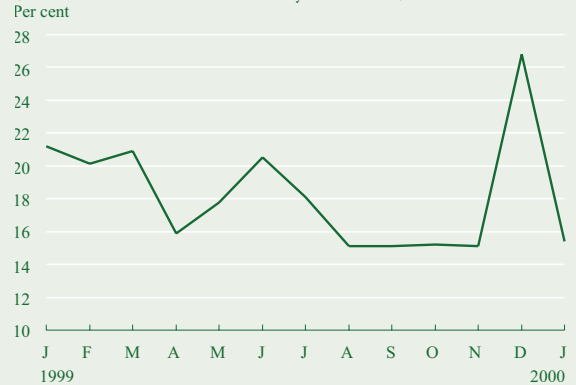


Chart II-19 Velocity of households' transactions-based demand (1997 Q1 = 1)

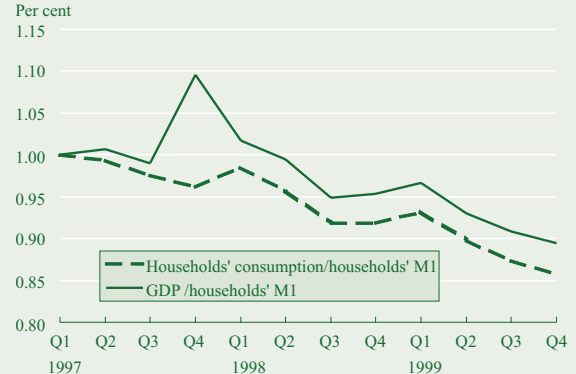


Chart II-20 Real growth of the corporate and household components of M3 (Three-month moving average, relative to the same month a year earlier)

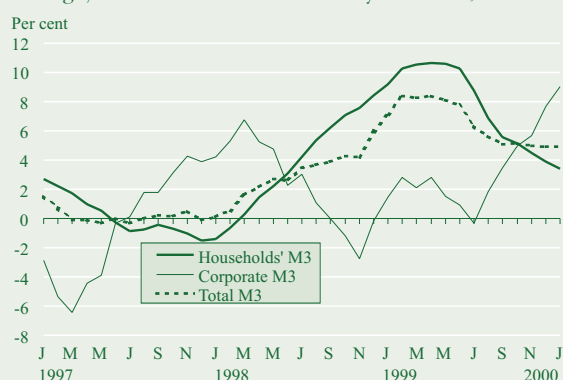


Chart II-21 Proportion of households' total non-bank assets to net financial wealth

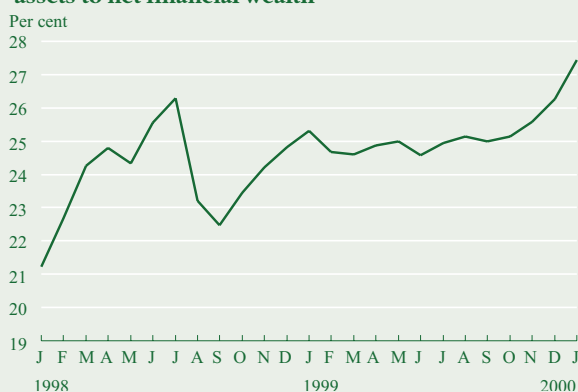


Chart II-22 Households' sight deposit, deposit account and government bond holdings relative to net financial wealth

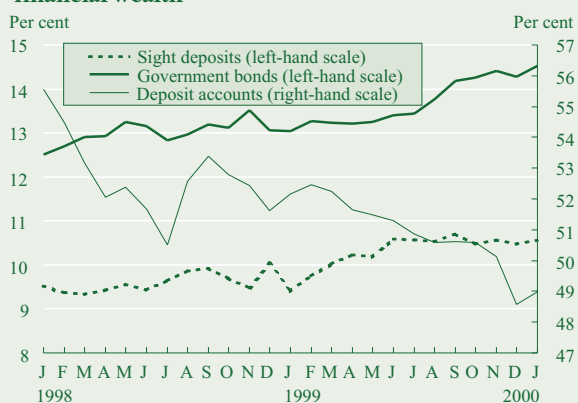
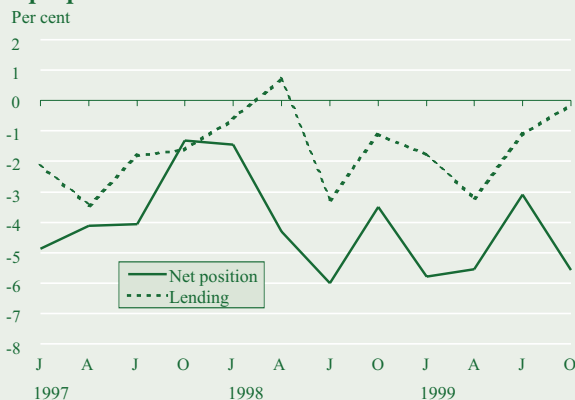


Chart II-23 Seasonally adjusted operational change of the net position and lending to the corporate sector as a proportion of GDP



While in 1998 cash holdings returned to their former level with the Christmas shopping over by the end of the month, in 1999, after a few days' lull, they rose again sharply. This accounted for about HUF 70 billion.

Apart from this effect, the downturn in the velocity of circulation, commencing in early 1998, continued, probably owing to the decline in inflation and interest rates, as well as the wider use of services linked to sight deposits.

As regards broad money aggregates, M3 growth was influenced by two opposing forces. While the corporate sector saw a rapid accumulation of various bank and non-bank financial assets as a result of an upturn in profitability, household M3 continued to grow at a steadily slowing pace over 1999 (see Chart II-20).

The composition of household wealth is controlled by long-term trends, and with the exception of the Russian crisis in 1998, the impact of the business cycle seems to play a secondary role. It is clear from the charts that the ratio of deposit accounts to total net financial wealth has taken a downward turn, while the proportion of sight deposits, households' government securities and total non-bank financial assets has been moving upward.

The key factor in the growing use of the latter two instruments is the process of disintermediation, stemming from rising standards within the financial infrastructure and services. At the same time, the increasingly greater role of sight deposits tends to put a brake on the progress of disintermediation (see Chart II-21; II-22).

This long-term trend was interrupted by the crisis in August 1998, which caused households to temporarily turn to safer bank deposits rather than high-risk assets.

5 Demand for credit

Net borrowing by the corporate sector fell steadily over the second half of 1999. With the simultaneous pick-up of investment, this reflects a significant improvement in corporate profitability. Assets and liabilities continued to increase side by side, indicating the segmentation of the corporate sector according to what phase of the investment cycle firms were in (see Chart II-23).

In spite of the high interest premium, corporate financial investment in forint instruments declined over Q4. The fact that forint deposit and government security holdings change side by side indicates that a great number of companies have access to highly profitable deposit opportunities which provide a reasonable alternative to investing in government securities. The high forint asset holdings stem from previous years' profits turned into financial assets. Consequently, firms have a buffer they can resort to at much lower cost and more flexibility than if they had to finance investment projects from credit when there is need for such action in terms of their expectations.

Despite the slowdown in the accumulation of forint assets, there has been a shift in the corporate sector total net position towards the forint, as on the liabilities side the sharp rise of foreign exchange borrowing and the decline of forint borrowing have overcompensated movements on the assets side.

III. Demand

Relative to the moderate rate in the first six months of 1999, economic growth in Hungary picked up significantly in Q3 and continued over Q4. In the final three months of the year, GDP expanded by an estimated 5.6% compared with the same period a year earlier. This acceleration took place with a stronger contribution by domestic absorption to GDP growth, while net exports on national income accounts once again made a positive contribution, although it was smaller than in the previous quarter (see Chart III-1).

Of the components of domestic absorption, consumption played the most pronounced role in the expansion of GDP in Q4, following the pattern seen in the previous two years (see Table III-1). The rate of household consumption growth (5.6%) is due to the combined effect of a faster rise in real incomes (3.3%), a drop in the number of liquidity-constrained households, as well as positive income expectations.

Another major item in domestic absorption, gross capital formation, again gave impetus to economic growth in Q4; thus, its negative contribution to Q3 growth was presumably a transitory phenomenon. Within gross capital formation, the positive contribution of investment to GDP was much stronger in the final quarter than in previous ones. Improvement in the external environment and vigorously expanding domestic demand boosted investment, which in contrast to Q3 was reflected not only by short-base indices but also by annualised indicators. In general participants in the economy took a more favourable view of both the economic situation and their own prospects, and stepped up

Chart III-1 Contribution of net exports to GDP growth

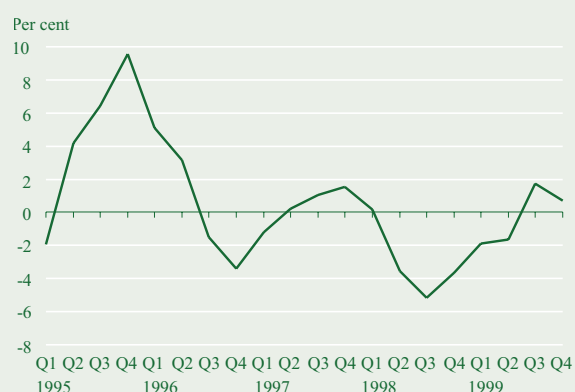


Table III-1 Annual growth rate of GDP and its components*
(Relative to the same period a year earlier)

	Per cent									
	1998					1999				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
Total consumption	2.7	3.8	4.7	5.3	4.2	4.4	4.3	4.7	5.3	4.7
Household consumption	3.4	5.1	5.4	5.7	4.9	4.4	4.9	5.0	5.6	5.0
Public consumption	-1.0	-3.1	0.3	3.0	-0.2	4.3	1.1	2.5	3.5	2.8
Gross capital formation**	6.7	20.3	27.8	16.8	17.9	6.8	7.6	-2.0	3.4	3.9
Fixed capital formation	8.6	14.5	20.3	9.8	13.3	6.4	6.8	4.2	8.1	6.6
Total domestic absorption	3.9	8.5	10.9	8.6	8.0	5.1	5.3	2.6	4.7	4.5
Exports	28.9	18.3	14.5	10.1	17.1	10.8	8.8	14.9	18.9	13.5
Imports	26.7	25.8	26.0	17.5	23.7	13.7	11.2	11.0	16.5	13.1
GDP	4.2	4.9	5.5	4.9	4.9	3.3	3.8	4.4	5.6	4.4

* The GDP estimates used in the Report are partly Bank estimates and may differ from official data published by the Central Statistical Office. The quarterly Bank estimates are based on preliminary data for 1998 published by the Statistical Office in January 2000, but take into account the revisions to the balance of payments, such as the separation of business travel and the outcome of the review of currency purchases from residents by non-bank foreign exchange trading institutions. These estimates are consistent with the Bank analyses describing the income positions of certain income holders.

** Includes the statistical discrepancy, represented by the difference between the results of calculations for production and absorption.

Table III-2 Contribution to GDP growth by individual items of absorption
(Relative to same period a year earlier)

	Per cent									
	1998					1999				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
Final consumption	2.0	2.8	3.5	3.9	3.0	3.2	3.1	3.3	3.8	3.4
Private consumption	2.1	3.1	3.3	3.5	3.0	2.7	3.0	3.1	3.5	3.1
Public consumption	-0.1	-0.3	0.0	0.3	0.0	0.5	0.1	0.3	0.3	0.3
Gross capital formation*	2.0	5.6	7.2	4.7	5.0	2.0	2.4	-0.6	1.1	1.2
Fixed capital formation	1.1	2.8	4.4	3.1	2.9	0.9	1.4	1.0	2.7	1.6
Total domestic absorption	4.0	8.4	10.7	8.5	8.0	5.2	5.5	2.7	4.9	4.6
Exports	12.5	8.8	7.1	5.0	8.2	5.8	4.8	7.9	9.9	7.2
Imports	-12.3	-12.4	-12.2	-8.7	-11.3	-7.7	-6.4	-6.2	-9.2	-7.4
Net exports	0.2	-3.5	-5.2	-3.6	-3.1	-1.9	-1.7	1.7	0.7	-0.2
GDP	4.2	4.9	5.5	4.9	4.9	3.3	3.8	4.4	5.6	4.4

* Includes the statistical discrepancy, represented by the difference between the results of calculations for production and absorption.

investments in parallel with the growing sales opportunities. Fixed capital formation within the national economy rose in Q4 at a considerably higher rate of 8.1% relative to a year earlier, which reflects the effect of the low base, in addition to the strengthening trend.

Stockbuilding, the other major capital formation item, continued to slow down GDP growth in Q4, along with other unspecified components of absorption. This was partly due to the effect of the high base, as the drop in external demand in the aftermath of the Russian crisis a year earlier had caused inventory levels to rise considerably, whereas data available for late 1999 indicated a pick-up in economic activity (see Table III-2).

The world economic environment continued to improve in Q4 with buoyant activity in both the euro area and the CEFTA countries. The strengthening of external demand also fed through to Hungarian export and import rates. Although export volumes grew at a considerably faster pace than imports, the balance of trade showed signs of deterioration in Q4.

1 Household consumption

The real disposable income of households expanded by 3.3% in the final three months of 1999, indicating a faster pace of growth than in Q3. This went hand in hand with the continued expansion of consumption, with its rate in Q4 exceeding that of the previous year by 5.6%. Consumer spending grew at a considerably higher rate than disposable income, although part of this divergence is due to a mere statistical phenomenon. Operational income – a term coined on the analogy of operational savings – which is total income less the part of interest receipts compensating inflation, grew faster over the year as a whole than unadjusted income. Nevertheless, this divergence between operational income and consumption reflects favourable expectations for household income over the long run (see Table III-3).

Table III-3 Annual growth of household income and consumption
(Percentage changes relative to the same period a year earlier)

	Per cent				
	1998	1999			
		H1	Q3	Q4	Total
Income	2.9	4.1	2.4	3.3	3.5
Operational income	3.8	5.7	2.9	3.2	4.3
Consumption	5.0	4.6	5.0	5.6	5.1

The expansion of disposable income can be broadly attributed to the nearly 4% increase in net earnings, with the other categories falling short of this rate. The primary reason for the slower growth of total income was the more moderate rate at which the social transfers in kind and the social benefits payments expanded. Social benefits payments grew by merely 2% as a result of a fall in unemployment-related transfer payments in real terms.

In contrast to the trend over the past two years, in 1999 Q4 operational and disposable household incomes increased at the same pace. Operational income had always increased faster from 1997 Q3, because the annual expansion of inflation-based compensation included in the interest rates calculated at current values always remained below the growth rate of current disposable income, due to the decline of inflation.

After a long time 1999 Q4 was the first time that the expansion of inflation compensation included in interest rates slightly exceeded the corresponding indicator for disposable incomes, thereby levelling out the growth rates for these two income categories.

The household savings¹ rate showed a slight increase in the final quarter relative to Q3, but remained below the level typical for 1998 (see Chart III-2). At the same time household investment growth remained as strong as earlier in the year, pushing up the overall rate in Q4. Compared with 1998 as a whole, there was a 2% rise in the household investment rate along with a 2.5% fall in the financial savings rate, bringing the overall rate down by half a percentage point.

The tax concessions available last year made a major contribution to the pick-up in investment by encouraging households to postpone construction from 1998 to 1999.

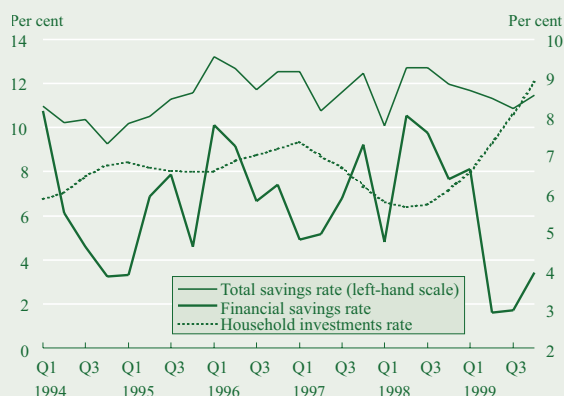
A major factor in the deterioration of households' net financial position in 1999 was the rise in household borrowing activity. Borrowing propensity did not taper off in Q4 either, bringing the value of seasonally adjusted net credit transactions to 1.5% of disposable income (see Chart III-3).

The household borrowing upswing in 1999 coincided with consumption rising at a rate consistently higher than the expansion of operational income (see Chart III-4). As the difference between the two growth rates is not far removed from the borrowing rate, there is good reason to assume close correlation between the rise in borrowing and in consumption.

Apart from precautionary cash stocking linked to the millennium date change, the composition of household financial assets showed no marked change over the final three months compared with Q3.

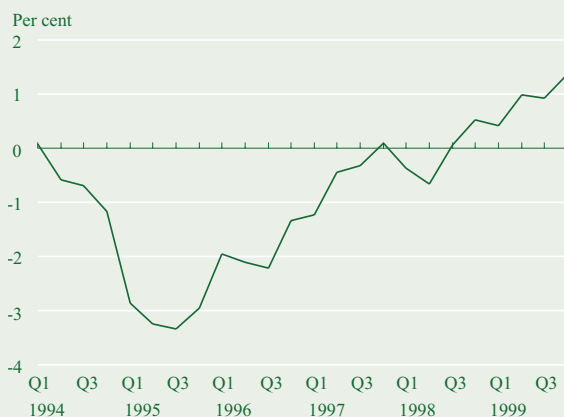
The weight of deposit accounts was brought down by the development of financial institutions, which opened up a number of alternative investment opportunities with returns and risks similar to deposit accounts for the financially well-versed strata of the general public. There were signs of a natural reversal after the temporary advance of safer bank accounts in the aftermath of

Chart III-2 Changes in household saving rates and its components*



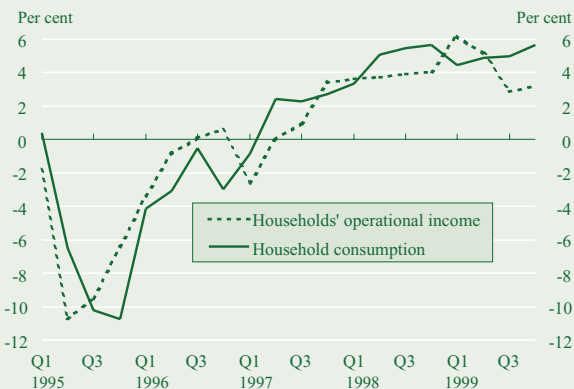
* Seasonally adjusted data as a percentage of disposable operational income.

Chart III-3 Net borrowing by households*



* Seasonally adjusted data as a percentage of disposable operational income.

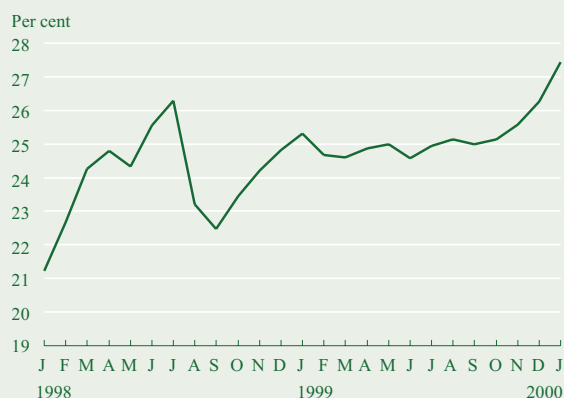
Chart III-4 Real growth rate of household consumption and operational incomes (Percentage changes relative to the same quarter a year earlier)



¹ All savings rates mentioned in this section are operational categories and are seasonally adjusted.

Chart III-5 Proportion of non-bank investments in household net financial savings

(Three-month moving average)



* Savings = change in stock – exchange rate revaluation – other change in volume.

Chart III-6 Household net financial wealth as a percentage of trend disposable income

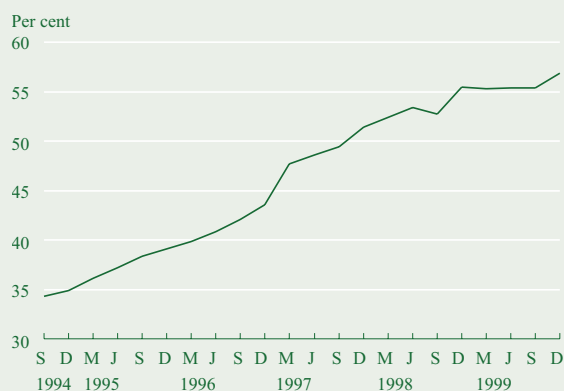
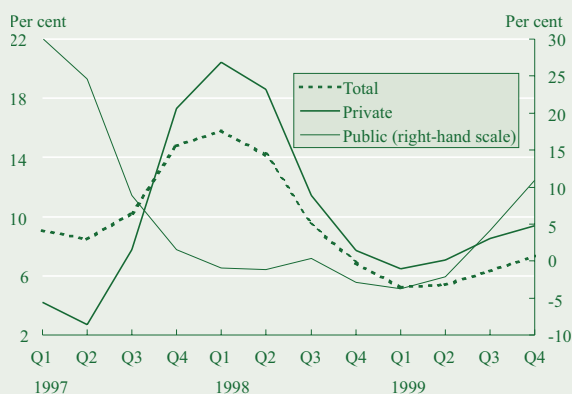


Chart III-7 Changes in fixed investment*



* Annualised growth rates.

the capital market crisis in August 1998 (see Chart III-5). This recovery in the demand for alternative investment opportunities was primarily due to the rising importance of investment trusts, pension funds and insurance companies, as equity investments continued to fall in the second half of 1999.

The increase of household net financial savings in Q4 caused a rise in the ratio of financial wealth to household incomes (see Chart III-6).

In addition to the increase in operational savings, the rise in exchange rate revaluations due to the capital market recovery also played a key role in the improvement of households' net financing capacity over the final three months. The financial wealth to income ratio remained flat in the course of 1999 as a result of improved borrowing opportunities for households, breaking the upward trend of previous years. As this ratio still appears low in international comparison, the rising trend is expected to resume over the long term. Nevertheless, in the short run, low household sector debt makes it difficult to accurately project the near-term path of this index.

2 Investment

2.1 Fixed investment

Whole-economy investment grew by 8.1% in 1999 Q4 compared with the same quarter a year earlier, representing an approximately 4-percentage-point improvement over the previous quarter. However, in addition to a genuine improvement, this positive trend owed a great deal to the impact of the low base point: following the exceptionally robust growth of 1998 Q3, the fourth quarter of 1998 saw exceptionally low activity, indicating the onset of a slump. Allowing for the base effect, both the latest statistics and company surveys indicate that the increase in external demand and domestic demand (supported by a steady rise in consumption), starting in the second half of 1999, both acted as a powerful driving force behind investment.

While the Q3 upturn in investment activity could only be seen in the changes in seasonally adjusted annualized indices, Q4 year-on-year indicators also seemed to indicate the conclusion of the trend prevalent since late 1998. Furthermore, the business outlook seems to support the presumption that the upturn beginning in the second half of 1999 will continue over 2000 and stabilise the annual growth rate around 10–12% (see Chart III-7).

An analysis of investment projects in terms of income holders shows that, similar to Q3, there was dynamic activity in sectors dominated by private investment.

Although the pace of growth naturally did not match up to the 1998 peak, and, as a result of the strong base effect, the fact that year-on-year indices sometimes fail to give an accurate measure of the improvement, the QI–IV cumulative growth of 6.6% (including a 7.7% rise in manufacturing investment) was considerably higher than the corresponding average for Western Europe. Strengthening investment is also supported by evidence from

manufacturing company surveys². The participants in the economy have a more favourable overall perception of the economic environment, including their own position, than in the previous half, and improved sales prospects are expected to boost investment (at least this is the outlook implied by expectations). Furthermore, the financing of investment projects seems to be provided for in light of corporate sector profitability.

There were signs of a recovery in certain services (accommodation, catering and retailing). Investment activity in the haulage and telecommunications sectors reflected the cancellation of public road construction projects, which – with proposed financing from government guaranteed loans – would have increased the private sector investment rate.

Among the sectors dominated by private investment, agriculture continues to face the gravest difficulties. In addition to insufficient demand, this sector is burdened by structural and profitability problems that prevent any sound investment activity from progressing.

In Q4 1999, home-building investment, the largest building block of all household investment, continued to reflect the feed-through of the weak performance of 1998, as a result of households having postponed building projects to 1999 in anticipation of the new VAT-refund regulations, which came into effect on January 1, 1999. Only in Q4 did the number of completed homes reach the level for the previous year, falling short by about 5 percentage points for the year as a whole. However, there were signs of an upturn in housing investment from 1999 Q2, shown by the jump in building permits issued over the year (representing an annual rise of 30% compared with a year earlier). The recovery is expected to continue in 2000, having received further impetus from the new subsidy system, which essentially gives preference to new home building or purchasing projects.

Within the category of household investment, productive investment, land and real estate purchases are playing an increasing role, which could be interpreted in terms of households transferring part of their previously accumulated financial savings into real assets.

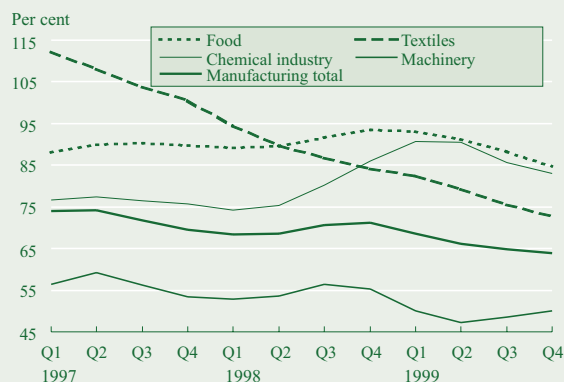
As regards public investment dominated sectors, there are strong fluctuations in the growth rates across the four quarters of 1999. Short-base annualised indices for the end of 1999 clearly point to an easing of the previous government policy which curbed public investment.

2.2 Inventory investment

The analysis of manufacturing stocks investment is assisted by inventory statistics as well as output and sales data published quarterly by the Central Statistical Office. These data indicate a continuation of the previous tendencies in the course of Q3 and Q4 of 1999. Accordingly, the manufacturing stocks to sales ratio continued to fall both in terms of the category of finished goods of the company's own production and input stocks, consisting mostly of raw materials.

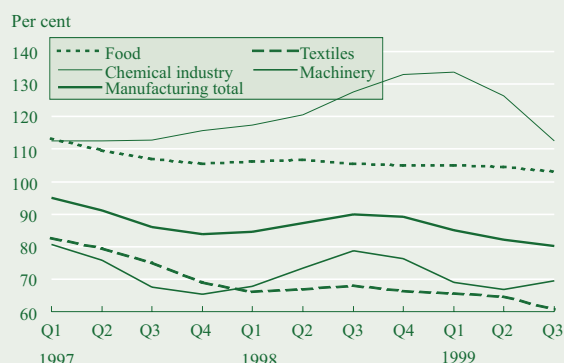
² Top-100 business cycle index, Ecostat, 25 January 2000. Situation and Short-term Outlook for Manufacturing and Construction Enterprises in January 2000, Kopint-Datorg, Business Reports, January 2000.

Chart III-8 Output inventories to sales ratios*



* The ratios were constructed by dividing end-of-quarter stocks figures by the average of monthly sales figures in the given quarter. The ratios were constructed from seasonally adjusted data. The inventory data for 1999 Q4 were estimated with the method described in the June Report.

Chart III-9 Input inventories to sales ratios*



* The ratios were constructed by dividing end-of-quarter stocks figures by the average of monthly sales figures of the given quarter. The ratios were constructed from

Table III-4 Budget deficit (GDP %)*

	Per cent									
	1998					1999				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Preliminary
1 General government balance excluding privatisation	-8.8	-0.7	-3.2	-3.1	-3.7	-9.0	-2.5	-1.5	0.4	-2.8
2 Primary balance (excluding NBH)	1.4	3.8	3.2	2.8	2.9	1.0	3.0	4.1	5.6	3.6
3 Interest balance	-10.7	-6.2	-6.5	-5.5	-7.0	-9.7	-6.3	-5.9	-5.2	-6.6
4 Balance of NBH payment and subsidy	0.5	1.7	0.1	-0.5	0.4	-0.3	0.8	0.3	-0.1	0.2
5 Balance of segregated funds excl. privatisation	0.4	0.4	0.0	-0.3	0.1	-0.9	-0.1	0.0	-0.4	-0.3
6 Balance of Social Security funds excl. privatisation	-1.2	-1.3	-1.5	0.1	-0.9	-2.2	-1.1	-1.2	-0.4	-1.2
7 Balance of local authorities excl. privatisation	2.0	-1.2	0.3	-1.6	-0.3	2.1	-1.2	0.0	-0.7	0.0
8 Primary balance of local authorities	1.9	-1.6	1.0	-2.7	-0.5	1.9	-1.4	0.7	-1.6	-0.2
9 General government balance excluding privatisation	-7.6	-2.8	-4.4	-4.9	-4.8	-10.1	-5.0	-2.7	-1.1	-4.4
10 Primary balance included in 9	2.6	1.4	2.7	0.1	1.6	-0.2	0.3	3.7	3.3	1.9
11 Accrual-based deficit of general government	-5.5	-3.9	-4.5	-4.8	-4.6	-8.2	-5.8	-2.9	-2.4	-4.6
12 Accrual-based primary balance	2.6	1.4	2.7	1.2	1.9	-0.2	0.3	3.7	2.4	1.7
13 Deficit correction by credit transactions	-1.4	-0.5	-0.3	-0.8	-0.8	0.2	-0.1	-0.1	-0.3	-0.1
14 Deficit of Privatisation and State Holding Company	-0.8	-1.3	-0.3	-0.5	-0.7	-0.3	-0.5	-0.8	-1.3	-0.8
15 SNA financing requirement 15=11+13+14	-7.8	-5.7	-5.1	-6.0	-6.1	-8.3	-6.4	-3.7	-4.0	-5.5
16 SNA primary balance 16=12+13+14	0.3	-0.3	2.1	-0.1	0.5	-0.2	-0.3	2.8	0.8	0.8
17 Effect of the pension reform	0.1	0.3	0.4	0.4	0.3	0.5	0.5	0.4	0.6	0.5
18 Demand effect (changes in lines 16 and 17)	0.5	0.1	-0.2	-0.7	-1.1	-0.5	-0.7	-1.1	-0.5	-0.5

* Figures for the end of 1998 do not include the HUF 132 billion transferred to Postabank or the effect of HUF 50 billion transferred to the Hungarian Privatisation and State Holding Company.

Recent data for individual manufacturing industries broadly confirm, or, in certain cases, slightly modify, the picture outlined in our previous Reports. Reflecting the boom starting in mid-1999, the *textile industry* saw the beginning of a downward trend in the proportion of output and input stocks to sales. The proportion of stocks in machine *manufacturing* continued to rise and appeared to extend to input stocks as well for the first time since mid-1998. Against the background of the end-1999 pick-up in machinery sales, this reflects an upward trend in expectations. In the second half of 1999, there was a spectacular turnaround in the *chemical industry* cycle, with the former slump replaced by robust sales growth, overtaking the rate for machine manufacturing on a quarter-on-quarter basis by late 1999. As a result, chemical industry stocks accumulated during the slump began to dwindle over 1999 Q3 and Q4, bringing down the stocks to sales ratio (see Chart III-8; III-9).

3 The fiscal stance

While there is a wide range of preliminary data available on the government's fiscal position, only estimates are available for the balance of local authorities, which account for nearly one-fourth of consolidated expenditures³. On the basis of the information available, the general government tightened aggregate demand by 0.4% of GDP for the year as a whole, but the fiscal stance showed strong quarterly variations. This was because the timing of fiscal developments changed considerably compared with a year earlier.

The SNA-based primary balance of the general government appeared significantly less sound in Q1 than in the previous year, but turned up markedly over Q4. While in 1998 the primary budget surplus was largely in place by the end of Q3, nearly half of the (estimated) annual primary surplus for 1999 emerged during Q4 (see Table III-4).

The divergence between 1998 and 1999 in terms of the timing of fiscal developments was due to the following factors:

- The faster-than-expected decline of inflation and slower economic growth over the first half of 1999

³ Estimates for local authority expenditures seem particularly uncertain, partly given the outstanding weight of the final quarter and partly the strong variations in investment spending, which is more strongly determined by the financial position of local authorities than by their current expenditures. The extent of fiscal policy tightening also depends on the accuracy of local government estimates, as 0.3% of the 0.4% GDP-proportional tightening comes from estimated improvement in the primary balance of local authorities.

triggered a deterioration in the general government balance due to a fall in expected tax revenues (e.g. VAT). To curtail the deficit, the government promptly implemented a 1.9% freeze on a wide range of expenditures. Simultaneously with the effects of this HUF 40 billion savings coming into play, tax revenues started to increase as well.

- The timing for annual agricultural subsidies also underwent significant changes. While 1999 Q1 and Q4 accounted for 37% and 10% of annual spending, respectively, the corresponding ratios for the same quarters of 1998 were one-sixth and one-third respectively.
- The timing of pension payments was balanced over 1999, by contrast with the trend of previous years⁴. This considerably limits sub-annual comparability with the previous year, as in the third quarter of 1998, the base period, a retroactive rise took place. (While the unpaid rise made a relatively favourable impact on the deficit during the first half of 1998, the rise in Q3 spoiled it in large measure.)

Table III-5 shows quarterly changes in the real values of the three components determining net VAT receipts.

After VAT refunding continued at a high rate during Q1, similar to the previous year, there were signs of steady moderation in subsequent quarters. At the same time, receipts of VAT levied on home goods and services gradually increased by contrast with the markedly low levels of late 1998 and early 1999. The positive impact of these two factors was somewhat dampened by the drop⁵ in the VAT revenues on imports over Q1-Q3. However, this unfavourable trend seemed to reverse in the final quarter.

Revenues from personal income tax expanded at a rate hardly exceeding the 7% growth of the wage bill in real terms for the year as a whole, implying a very low rise in the tax burden. Preliminary data indicate that receipts from social security contributions fell by 3% in real terms as a result of two opposing influences. On the one hand, the 7% increase in real wages put upward pressure on revenues, while on the other hand, the revenue-decreasing effect of the pension reform and the reduction of social security rates in 1999, along with the temporary halt in the collection of payments outstanding⁶, put much stronger downward pressure on overall receipts in real terms.

Public spending in real terms had been projected on the assumption of an average annual inflation rate of 10.5%. As the actual rate came in 0.5% below the projection, earmarked expenditures, *ceteris paribus*, would have increased by the same percentage in real terms. However, in addition to slower inflation, tax revenues were also curtailed by sluggish economic growth, which would have further increased the deficit, if spending had

Table III-5 Changes in the real value of VAT
(Relative to the same period a year earlier)

	Per cent									
	1998					1999				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year
Domestic VAT revenues	4.8	4.2	3.0	-4.8	1.1	1.1	6.6	9.1	8.7	6.5
Import VAT revenues*	15.5	18.7	16.7	8.8	14.3	-0.2	-1.4	-1.1	11.7	2.7
VAT refund**	7.5	8.4	11.9	10.7	9.6	8.9	3.2	-0.7	3.3	3.6
Net VAT revenues	11.8	13.8	7.3	-5.2	5.8	-8.6	1.9	8.4	17.0	5.4

* Adjusted by customs surety.

** Based on estimated accrual-based settlement.

⁴ Of the past few years, 1997 was the only other year characterised by the same tendency.

⁵ Around 3.5% of the considerable Q3 drop in real terms can be accounted for by the impact of the appreciation of the real exchange rate relative to the base period on the accounting base of the VAT revenues from imports.

⁶ As of 1999, the collection of contributions became the responsibility of the Tax and Financial Control Administration. Although conducive to efficiency over the long term, this resulted in a slowdown in collections of outstanding payments, as the first six months was taken up by sorting out debts.

Table III-6 Changes in selected public expenditures in real terms*
(Relative to the same period a year earlier**)

	Per cent							
	1998				1999			
	Q1	H1	Q1-Q3	Year	Q1	H1	Q1-Q3	Preliminary
Wage and contribution spending	1.5	-0.5	3.8	0.7	-3.2	-0.4	-2.0	-3.7
Purchase of goods and services	-2.2	-8.4	-2.7	1.1	-0.5	-1.8	-2.4	3.6
Consumer price subsidies	3.9	1.3	4.0	3.5	-6.9	-6.9	-8.7	-8.1
Gross public consumption	0.5	-3.2	1.4	1.2	-4.1	-3.2	-4.2	-3.3
Pensions (including disability benefits)	4.7	5.4	8.4	9.2	6.9	6.9	4.3	4.1
Sick-pay	-4.9	-4.4	-2.0	0.1	1.5	1.7	1.4	2.4
Social benefits (central budget)	-0.8	-1.4	-2.3	-2.8	-15.9	-1.1	-2.6	0.0
Social benefits (local authorities)	26.0	28.9	30.2	26.1	16.1	-0.2	-2.4	-2.9
Household transfers	4.1	4.8	6.7	7.0	2.1	4.5	2.2	2.7
Investment (central budget)	-4.5	12.6	0.7	-12.4	-10.4	-12.4	-3.8	6.1
Investment (local authorities)	35.1	70.9	9.7	10.7	-8.0	-19.2	-9.2	7.6
Gross investment expenditure	33.5	40.2	5.7	-1.0	-9.0	-16.3	-6.9	6.6

* Source: Public sector statistics, therefore this differs from Central Statistical Office figures.

** Using the price indices for public consumption and investment.

Table III-7 Main macroeconomic indices of the euro area, I
(Changes over a year earlier; seasonally adjusted data)

	Per cent					
	1998		1999			
	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP	2.6	1.9	1.7	1.7	2.2	
Domestic absorption	3.5	3.0	2.7	2.6	2.4	
Private consumption	3.3	3.0	2.8	2.4	2.4	
Public consumption	1.2	1.2	1.5	1.2	1.6	
Gross fixed capital formation	4.8	3.5	3.4	4.9	4.2	
Stockbuilding*	0.3	0.3	0	0	-0.2	
Exports	4.5	1.8	0.1	1.3	4.4	
Imports	7.6	5.2	2.9	3.9	5.2	
Net exports*	-0.8	-1.0	-0.9	-0.8	-0.1	
New car registration**	7.4	6.3	7.1	8.4	6.3	-0.6
Retail sales**	2.8	2.9	2.5	2.2	1.9	

* As a contribution to real GDP in percentage points.

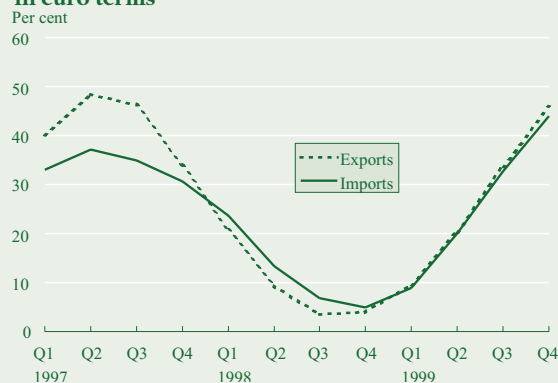
** Seasonally unadjusted data.

Table III-8 Main macroeconomic indices of the euro area, II
(Changes over the previous quarter; seasonally adjusted data)

	Per cent			
	1998	1999		
	Q4	Q1	Q2	Q3
Real GDP	0.8	2.0	2.0	3.6
Domestic absorption	2.4	3.2	1.6	2.4
Private consumption	2.4	2.8	1.2	2.8
Public consumption	-0.4	5.3	-0.4	2.0
Gross fixed capital formation	1.2	7.4	1.6	6.1
Stockbuilding*	0.8	-1.2	0.8	-1.2
Exports	-2.8	0.0	9.1	12.6
Imports	2.4	2.8	7.8	7.8
Net exports*	-1.6	-0.8	0.4	1.6

* As a contribution to real GDP in percentage points.

Chart III-10 Export and import trends based on customs statistics, annualised quarterly growth rates in euro terms



not been curbed via a 1.9% freeze affecting 40% of government expenditures⁷.

The freeze was mainly targeted at gross public and benefits-in-kind spending, which continued to fall in real terms throughout the year, resulting in a higher-than-projected 3% lay-off rate, that is, permanent savings. In addition, the fall in the labour-related burden resulted in savings in public spending as well. Allowing for fact that the freeze only had an indirect, restricted impact⁸, overall household transfers basically did not exceed the projected level in real terms. Expansion slowed in Q3, causing the annual growth rate to fall significantly below the same period a year earlier. (The reason for the fluctuations in the growth rate during the year, notably the difference in the timing of pension payments, was noted above.)

During the first three quarters of 1999, gross investment⁹ spending by the public sector fell significantly compared with the previous year, with this tendency being reversed only in Q4 on account of the base effect¹⁰.

The cancellation of priority investments was offset by budget institutions overfulfilling their investment spending targets for 1998, producing an increase of over 20% in real terms (see Table III-6).

4 External demand

Preliminary data indicate that in 1999 Q4 external economic conditions continued to improve compared with the previous quarter. Business and consumer confidence indices for the euro area reflected buoyant activity in Q4. GDP data available for the first three quarters depicts a similar pick-up (see Table III-7; III-8).

⁷ The freeze affected largely 48% of primary expenditures, leaving only household transfers (pensions, family allowances) and open-end benefits unaffected. Furthermore, local government spending was affected only indirectly, that is, proportionately to central support (personal income tax transfers).

⁸ This was basically effected through tightening local government resources.

⁹ Receipts from asset sales not subtracted.

¹⁰ In 1998 Q4 investment spending lagged behind the usually very high rate. By contrast, the figure for 1999 Q4 came close to normal seasonality and was outstanding only compared to the low base.

In the case of the CEFTA countries, a similar upswing is to be expected, with accelerating economic growth over Q4 in all member countries, with the exception of Romania. In the case of CIS countries, Russian GDP showed dynamic growth in the second half owing to favourable world prices for oil and commodities.

Against the background of the steady improvement in external business conditions, export and import growth gathered pace in Q4. Export and import values increased at a similar rate, causing a deterioration¹¹ in the seasonally adjusted, and is, trend balance of trade in Q4. At the same time, export volumes expanded at a considerably faster pace than import volumes. The difference between the value and volume indices in terms of the credit and debit side of the trade balance can be explained by the steady rise in energy prices over 1999, which caused the growth of the import unit value index to considerably diverge from that of exports over Q4.

The deterioration in the balance of trade was essentially due to the faster expansion of goods-for-processing imports to exports, with other foreign trade items showing no negative developments. The latter effect was showcased by the balance-of-payments trade balance, which remained unchanged during the past year, and even slightly improved during Q4 (see *Chart III-10; III-11; III-12*).

In 1999 Q4 exports and imports accounted for EUR 7,017 million and EUR 7,746 million respectively. Consequently, the balance of payments deficit was recorded at EUR 729 million, EUR 126 million higher than the deficit for a year earlier.

The country structure of exports reflected the increasing recovery of economic activity. According to short-base indices, exports to CEFTA countries grew at the fastest pace (see *Chart III-14*), indicating the recovery of this area from the early-1999 slump. Hungarian exports to the advanced economies continued to expand at a rapid pace (see *Chart III-13*) in terms of short-base rates, with particular regard to the EMU area. Exports to CIS countries stayed flat following the minor gain in the previous quarter (see *Chart III-15*).

An analysis of the composition of exports shows that it was durables exports that continued to grow at the fastest pace, although slightly less rapidly than estimated in the December *Report*. Previous *Reports* have already highlighted the phenomenon that rather than slowing down during the phase of weaker activity in the EU, durables exports slightly picked up in late 1998 and early 1999, whereas the stronger activity in late 1999 had no significant impact on the growth rate in this category. Hence, Hungarian exporters seem to have fairly stable contacts and are not really sensitive to changes in external economic conditions.

Investments goods exports were also up, coinciding with the substantial acceleration of investment in durable capital goods in the euro area over the second half of 1999. The growth rate of intermediate and durable consumer goods again did not change considerably, although their rate of growth was positive and

Chart III-11 Trade balance according to customs statistics in euro terms

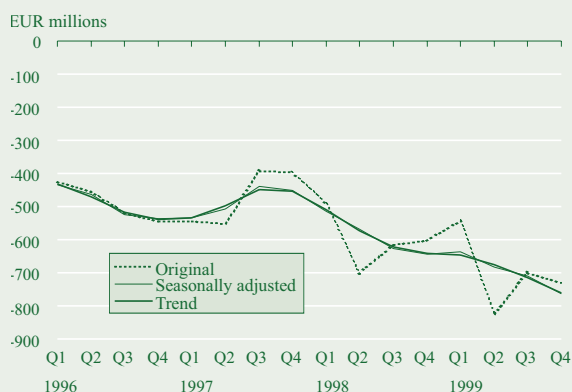


Chart III-12 Volume of exports and imports, annualised quarterly growth rate of the trend



Chart III-13 Exports to developed countries

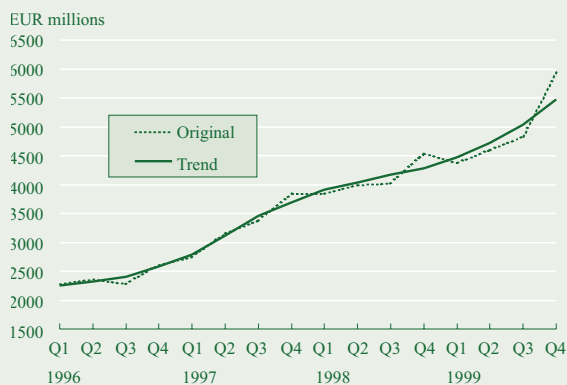
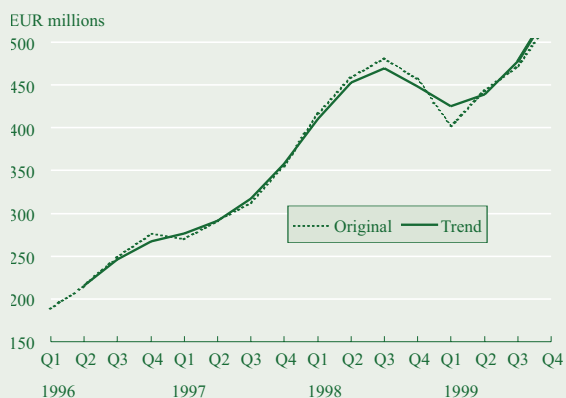
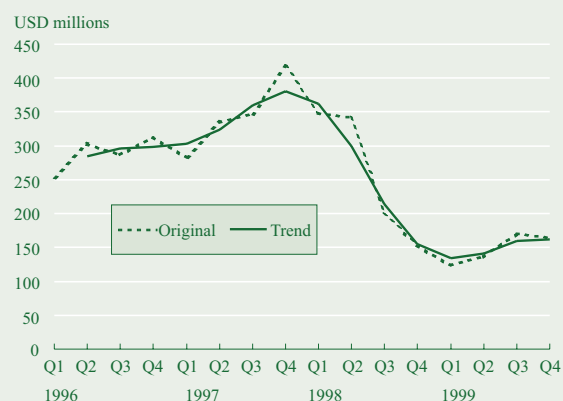
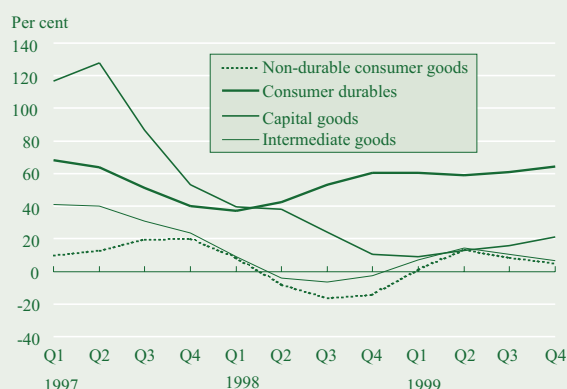
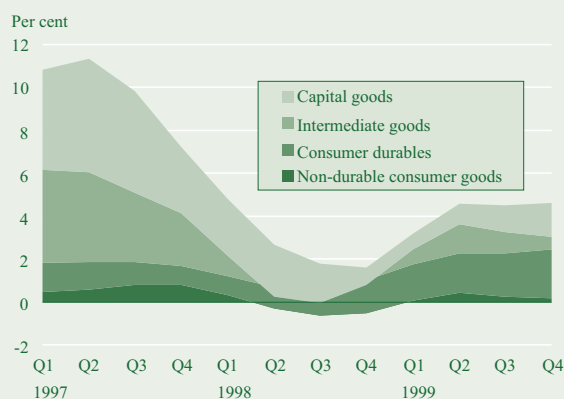
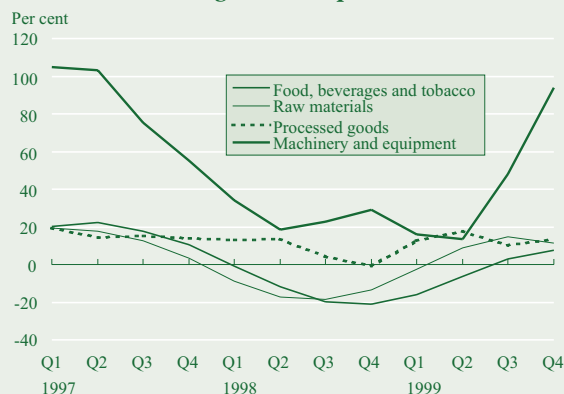


Chart III-14 Exports to the CEFTA area



¹¹ As import levels exceed those of exports, the balance deteriorates when gross values increase at the same rate.

Chart III-15 Exports to CIS countries**Chart III-16 Annualised quarterly growth rates of the trend in different export categories (EUR)****Chart III-17 Contribution of different product categories to the growth of trend exports****Chart III-18 Annualised quarterly growth rates of the trend in SITC-5 categories of exports**

slightly slowing compared to the previous quarter (see Chart III-16).

An analysis of the contribution of the various products to export growth shows that durables continue to top the list, with investment goods also up slightly in Q4 (see Chart III-17).

The SITC breakdown of exports (Chart III-18) also provides further details about the state of exports. The chart shows that machinery export growth rose dramatically by the latter half of the year to a level last experienced in 1997. In addition to buoyant activity in the EU, this was also due to the effect of investment projects undertaken in 1998 beginning to show. Exports of products from the other categories changed at a relatively balanced and, with the exception of commodities, moderately rising rate.

An analysis of the breakdown of imports (see Chart III-19) shows that investment goods imports rose at the fastest pace, but the growth of durable goods was also picking up. In contrast, intermediate goods and non-durables declined slightly. The pick-up in investment imports is a welcome sign as it tends to improve output prospects, expanding the future investment potential of the economy.

The sharp rise in durables imports cannot be interpreted in such straightforward terms, as it cannot be clearly defined what proportion is used for personal consumption and what is used as real productive assets¹². If instead of growth rates, comparison is made between the varying degrees of contribution made by the different product categories to import growth (see Chart III-20), it can be seen that the greatest impetus was provided by intermediate and investment goods, with durables and non-durables playing a relatively minor role. Hence, the increase in imports was due to the expansion of productive capacities, rather than excessive consumer spending.

The balance of services over Q4 followed an upward trend both in the category of tourism and other services. Following a slight decline and subsequent slump related to the conflict in Yugoslavia early in the year, tourism started to revive somewhat, broadly simultaneously with the pick-up of other services.

A factor at work in the slightly downward trend of tourism (see Chart III-21) since late 1997 is the fall of household foreign exchange account balances, also included with the travel entry, while the recent economic and political turbulence in the Eastern European area (the Russian economic crisis and the latest war in Yugoslavia) also played a role. The recovery in Q4 was primarily linked to higher receipts, but there are yet no sufficient data available to justify statements about the beginning of a lasting improvement.

Other services followed a downward trend early in the year, with signs of some improvement appearing from Q3. The balances for nearly all service items showed an improvement in Q4 against both the same quarter in 1998 and the seasonally adjusted data for 1999. At the same time, the (cumulative) annual level de-

¹² In terms of the above classification, investment goods and consumer durables are treated as separate categories. However, as this methodology is not empirically unambiguous, care should be taken when analysing the various developments. For instance, purchasing a car is an act of consumption for households, but an investment for a business enterprise.

teriorated compared to 1998, with particular regard to construction and assembly, haulage and forwarding.

The value of service transactions as a whole deteriorated by EUR 280 million in 1999 relative to 1998. Most of the decline occurred over the first half, with the signs of recovery surfacing from Q3 and becoming even more pronounced in Q4 (see Chart III-22).

Chart III-19 Annualised quarterly growth rates of the trend in different import categories (EUR)

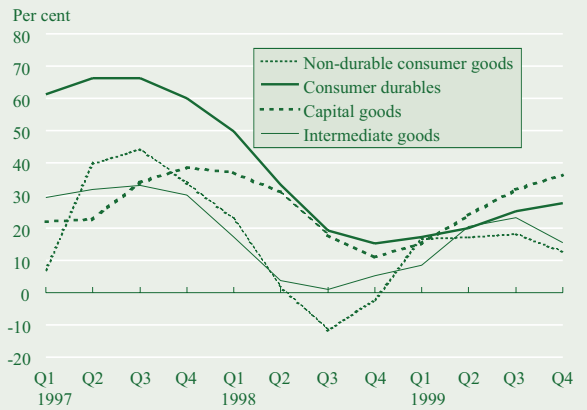


Chart III-20 Contribution of different product categories to the growth of trend imports

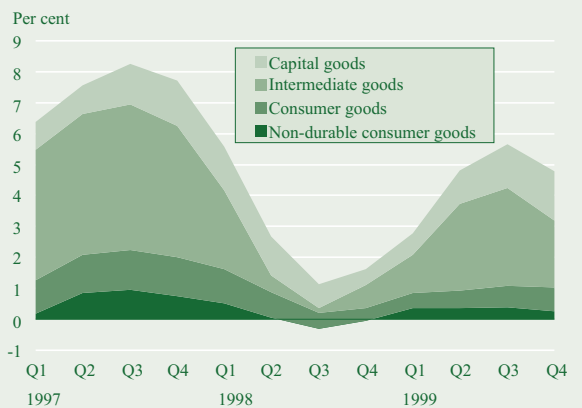


Chart III-21 Travel balance

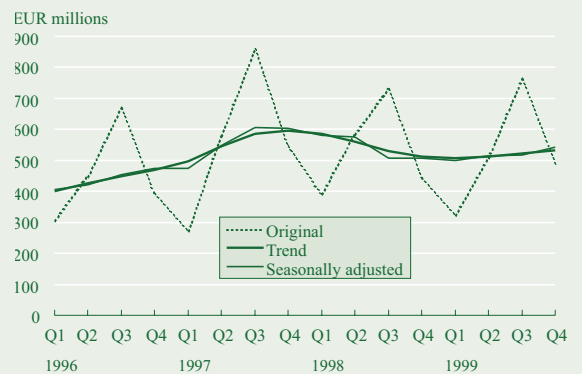
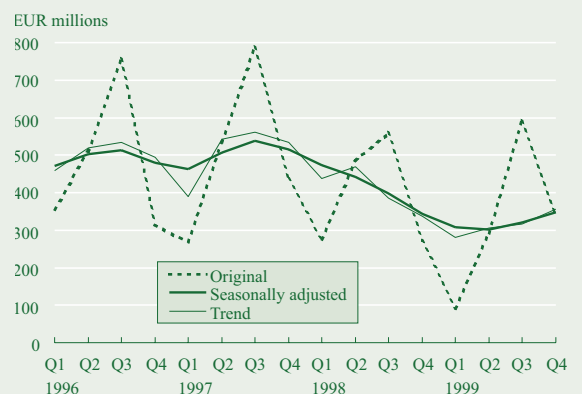


Chart III-22 Services balance



IV. Supply

1. The labour market

During the fourth quarter of 1999 labour market indicators continued to follow the earlier trend. The expansion of employment exceeded the steady decline in unemployment and the over-1-percentage-point rise to 53.4% in the participation rate relative to the same period of the previous year marked a return to levels last seen in 1994. The factors in the improvement of labour market indicators also include demographic developments. Nevertheless, in the Bank's view the sharp rise in the proportion of young people of working age accounts for no more than one-third of the rise in the participation and employment rates and the decrease of the unemployment rate relative to 1998.

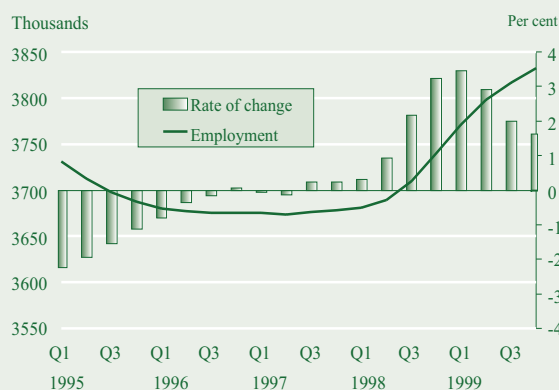
In light of the figures for Q4 the uncertainties surrounding the unemployment rate in 1999 Q3 have been resolved: Bank data indicate that although the fall in the rate of unemployment slowed down in mid-1999, it did not stop falling. The peak figure of nearly 500,000 from 1993 has nearly halved,¹ while the number of employed persons has expanded by around 200,000 since the trough in 1996 and 1997. Following two years of buoyant economic activity it comes as no surprise that unemployment is declining at a slower pace since at times like these it is typically relatively disadvantaged areas and groups with relatively disadvantageous labour market properties which are affected by unemployment over the frictional rate. A deterioration of the composition of unemployment can hamper the decline of unemployment.

1.1 Employment

The household labour force survey of the Central Statistical Office shows that, considering the 1990s as a whole, the fastest growth of employment was observed in 1999. The number of employed people approached the figures for 1992 and 1993, the initial years surveyed (in spite of a simultaneous decline in the population of the 15–74 age group over the last several years). The expansion in employment, which was exceptionally fast in early 1999, has since been corrected downwards in accordance with Bank expectations. The employment rate calculated for the 15–74 age group in accordance with international standards approached 50% in 1999 Q4 and came close to 70% in the case of the 20–54 age group, the backbone of the labour force (see Chart IV-1).

¹ Note, however, that the number of registered unemployed people has not decreased to such a great extent.

Chart IV-1 Changes in the number of employed people and the rate of the change



* The rate of the changes in the number of unemployed people is given in terms of quarter-on-quarter annualised indices, calculated from the trend series constructed from seasonally adjusted data (right-hand scale).

Structural changes in employment are essential information from the perspective of monetary policy. As the individual labour groups are not perfect substitutes for each other, cross-sectional data may be a useful source of information indicating relative labour market tightness, in spite of the still significant unemployment and inactivity rates. As far as individual *age groups* are concerned, 1999 saw a sharp rise in employment in the 55–59 age group – presumably due to the rise in the retirement age. There was also a significant increase in the 25–29 and 40–54 age groups. In addition to the favourable demographic effects in the late nineties, another factor at work was the “genuine” improvement of labour force utilisation in Hungary. Looking at the *regional* breakdown, despite rising employment rates in all seven statistical areas, the improvement has not caused these areas to converge, as the central and western areas of Hungary also experienced a sharp rise in employment, even though the rates in these areas have been better than the countrywide average for a long time. This poses the threat of bottlenecks appearing, since while high employment areas are running out of labour reserves, expansion has not shifted to the areas with lower labour force utilisation. Of the relatively disadvantageous areas, the Észak-Alföld region seems to be the only one catching up with the employment growth of the more advantageous areas.

According to the institutional employment statistics compiled by the Central Statistical Office on the basis of surveying businesses employing over five people, as well as budgetary and non-profit institutions, employment expanded at a considerable pace last year. It is of particular interest that the nearly 1% aggregate rise in the number of employed persons occurred as the result of the clear-cut contraction of the public sector and the expansion of the market sector. By 1999 Q4, the drop of over 4% in the public sector labour force relative to the same period of 1998 affected all main areas, mostly with respect to manual labour. The simultaneous 2.5% rise in the market sector was remarkable and reflected a continuation of the tendencies noted in the last *Report*, especially in manufacturing (machines: 9.7%, metal processing: 5.4%), construction (5.5%) as well as certain market services, such as retail and repairs (12.1%) and real estate and business services (3.1%). As regards white-collar labour, numbers rose considerably in the fields of transport and storage, postal and telecommunications services (3.2%). If the latter increase is related to the stronger activity and the sharp rise of wage indices measured for telecommunications, this poses a threat of further tightening.

1.2 Unemployment

As pointed out in the December *Report*, there was some “fog” obscuring the data for the continuation of the decline in unemployment. Labour market data for 1999 Q4 seem to have lifted this fog. The decline of unemployment seems to be continuing without interruption, with the rate sinking below 7% in terms of seasonally adjusted data for the year-end. The factors at work behind the nearly 0.9-percentage-point annual fall relative to 1998 include both demographic changes and the effects of government regulation as well as cyclical factors. The increase in the share of the

Chart IV-2 Unemployment rate

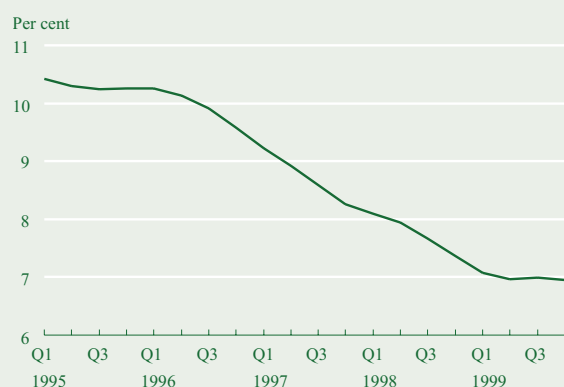


Table IV-1 Sectoral breakdown of wage inflation*

(Relative to the same period a year earlier)

	Per cent				
	1998	1999			
	Q1-Q4	H1	Q3	Q4	Q1-Q4
Agriculture, fishing	16.5	14.9	13.5	9.2	13.1
Mining	11.3	16.0	13.8	11.3	14.2
Manufacturing	17.8	15.4	15.3	14.0	15.0
Electricity, gas, heat and water supply	19.3	16.0	17.1	12.7	15.5
Construction	16.2	12.2	13.4	12.2	12.5
Retail, maintenance of road vehicles, repairs	16.9	14.1	13.2	10.3	12.9
Accommodation services, catering	13.2	13.4	12.7	12.9	13.1
Transport, storage, postal services and telecommunications	21.4	14.2	18.1	17.2	15.9
Financial activities	25.9	18.0	17.1	11.8	16.2
Real estate and business services	30.4	19.4	16.0	14.1	17.2
Public administration, social security and defence	18.0	21.6	17.2	24.2	21.2
Education	21.4	20.8	18.3	18.6	19.7
Health and social care	16.2	14.1	12.6	16.7	14.4
Other services	15.8	12.4	11.6	15.7	13.0
Whole-economy total	18.7	16.3	15.5	15.4	15.9

* With respect to businesses, the data apply to those employing more than 10 people in 1998 and to those with more than 5 employees from 1999. Annual indices calculated by the National Bank of Hungary from seasonally adjusted wage data for 1998 and from comparably structured original data from 1999 Q1.

Table IV-2 Changes in wage inflation in certain priority sectors*

(Relative to the same period a year earlier)

	Per cent			
	1999			
	H1	Q3	Q4	Q1-Q4
Whole economy	16.3	15.5	15.4	15.9
Private sector	15.3	15.4	13.2	14.8
Manufacturing	15.4	15.3	14.0	15.0
Retail	14.1	13.2	10.3	12.9
Other private services	16.0	16.8	14.7	15.9
Public sector	19.5	16.3	21.3	19.2

* Annual indices calculated by the Bank from comparably structured original data.

25–39 age group, which is a major presence in the labour market, accounts for only one seventh of the fall: of the 0.9-percentage-point fall, 0.7 percent was generated by “genuine” developments, reflecting the changes of demand and supply. The demand-side factor is clearly the rise in employment intentions as a result of a pick-up in business activity. On the supply side, the increase of the retirement age offers an explanation for the fact that the fall in unemployment was taking place simultaneously with a rising participation rate for the 55–59 age group.

Likewise, other labour market indicators of the movements determining unemployment did not show any change compared to the preceding period. The seasonally adjusted *rate of registered unemployment*, based on administrative data collected by public employment agencies, has been fluctuating around 9.7% since early 1999.

The reported *massive lay-offs* and the *number of registered vacancies* is also on the rise, but this does not imply any change in labour demand or supply, being merely a sign of labour market volatility, given the robust rise in the number of employed people, that is, the number of *filled vacancies* during the period in question.

The pace at which the unemployment rate is declining has slowed relative to the preceding years (*see Chart IV-2*). This comes as no surprise given the fact that a pick-up in labour demand always appears to reduce unemployment for those with better employment potential first. Even though the aggregate data do not usually provide clear evidence, it seems likely that the recent robust expansion of employment took place simultaneously with a rise in the number of unemployed people with less attractive labour market qualities, namely unskilled workers and those from disadvantaged areas, etc. In addition, the fall in unemployment is not caused by greater numbers *leaving*, but rather by smaller numbers *entering* unemployment. This implies that within the unemployed group, the share of people out of work for a short time and, therefore, more likely to return soon, is falling simultaneously with the rising proportion of people out of work for a longer time. This “deterioration” in the composition of the unemployed labour force may hamper, or even prevent a further fall in unemployment.

1.3 Earnings growth

Wage data collected by the Central Statistical Office as part of the institutional labour statistics showed a 16.1% gross increase for 1999 Q4 compared with the same period a year earlier. Taking inflation into account, this corresponds to *gross real earnings growth* of approximately 4.8%. According to the CSO data, whole-economy average gross earnings growth is based on relatively higher public sector (22%) and lower private sector (13.6%) indices. According to the Bank's *wage inflation* indicator, which filters out the distorting effects on wage indices of the composition of employment (*see Table IV-1; IV-2*), the annual whole-economy earnings growth average (15.4%) remained basically the same in Q4 as in the preceding three months. This can be attributed to a fall in wage inflation within the competitive

sphere (13.2%) and – on account of certain distorting effects – to its increase within the public sector (21.3%).

The sharp rise in wage inflation within the public sector is attributed to *payments* received on an *irregular* basis (such as bonuses, merit pay, etc.) being deferred from the end of 1998 until 1999 Q1. As pointed out in the *June Report*, this distorts the earnings index of the public sector for the end of 1999 upwards and for early 2000 downwards. According to Bank calculations made at the time and suitable only for the purpose of illustrating the phenomenon, the areas of the public sector most affected were administration, social security, defence and education. On the basis of earlier calculations, it is possible to determine to what extent the one-off change in the order of irregular payments distorted the wage indices for 1999 Q4. Bank data imply that this effect caused the earnings index for administration, social security and defence to rise by approximately 3.6% and that of education by 8.2% in 1999 Q4. All in all, the correction of the earnings index for these two areas – the health care area being unaffected – reduces the original public sector index rate from 21.5% to 17.4%. The overall effect of the deferment of late 1998 payments, illustrated by *Table IV-3*, distorts public sector earnings growth for 1998 downwards and for last year upwards.

The data also indicate that owing to the high number of public sector employees this also causes a significant distortion in the index for *whole-economy* earnings growth. This has far-reaching implications on two accounts. Firstly, unadjusted indices may create the impression that, in contrast to falling inflation rates, public sector wage outflow is increasing rather than decreasing, in other words, the public sector is not accommodating in nominal terms to disinflation. Secondly, as nearly 30% of employees registered by institutional statistics work in the public sector, unadjusted wage data can lead to major distortions in household earnings estimates. As pointed out in the *June Report*, assuming a certain degree of forward-looking expectations, the reason for this distortion is that household consumption and savings choices are not exclusively shaped by the magnitude of actual earnings, but also by expectations of forthcoming amounts on an irregular basis. Therefore, earnings should not necessarily be accounted for the time of their technical receipt, but for the period when they have the greatest impact on demand.

The considerable fall in the *private sector* wage inflation index by 1999 Q4 reflects the continuation of earlier tendencies. The rate of *manufacturing* wage inflation continued to decline. The decrease in average wage inflation in the service sector was most pronounced with respect to *retail and vehicle maintenance*, where the index approached the single-digit range. There was also a drop in the index for *other services*, excluding retail, with special regard to transport, storage, postal and telecommunications services. As noted in the *December Report*, it was labour market bottlenecks that were mostly at work behind the Q3 upsurge of the earnings index, particularly in the rapidly expanding *telecommunications* area.

The shortage, primarily of white-collar labour, is reflected in both the rising numbers and higher earnings rates of over 3% and approximately 24%, respectively, in 1999 Q4 compared with the previous quarter.

Table IV-3 Public sector original earnings indices and earnings indices adjusted for the effect of deferred wages*
(Relative to the same period a year earlier)

		Per cent						
		1998		1999				
		Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4
Public sector	CSO original	12.1	18.1	20.6	17.7	16.8	21.5	19.1
	NBH data	21.5	20.4	16.1	17.7	16.8	17.4	17.0
Private sector		16.9	18.3	14.5	14.7	14.8	12.8	14.2
Whole economy	CSO original	15.6	18.3	16.3	15.5	15.4	15.3	15.6
	NBH data	18.2	18.9	15.0	15.5	15.4	14.1	15.0

* The adjustment is based on original twelve-month gross earnings indices, that is, not on wage inflation indices, in accordance with the method described in the *June Report*. The indices for 1998 are for over 10 employees, and those for 1999 are for over 5 employees. The slight discrepancy with the figures published in the *June Report* are due to further improvements in methodology. The revision is merely hypothetical and, short of detailed information, primarily serves the purpose of highlighting the implications of the phenomenon!

Chart IV-3 Average capacity utilisation in the manufacturing industry*



* Seasonally adjusted data. Source of base data: Kopint-Datorg.

2 Capacity utilisation

In 1999 Q4, the decline in average capacity utilisation² in the manufacturing industry slowly continued in terms of the seasonally adjusted data, rising from the Q2 low to nearly the level for the previous year (see Chart IV-3). This increase went hand in hand with a further expansion of manufacturing output and 7.7% growth in investment. Although in Hungary there is no information available on changes in capacity utilisation over one complete business cycle, the available data clearly show that despite the rise in average capacity utilisation over the past two quarters, it has not reached the level for the period 1996–1999 or the exceptionally high level for late 1997 and early 1998.

The growth of average capacity utilisation is due to the permanently low occurrence of capacity shortages over 1999 as a whole and the declining proportion of firms reporting excess capacities.

The pick-up in average capacity utilisation and the expected continuation of output growth have siphoned off excess capacities, which appeared considerable compared to the orders for the coming year. By sectoral breakdown, particularly firms in the construction materials and food industries are reporting above-average excess capacities³ relative to prospective demand.

The quality and state of capacities are a cause for concern in the construction industry, as well as metal base materials and goods manufacturing.

The proportion of companies facing a shortage of capacities did not significantly change in Q4, when mostly large companies also producing for export reported outstanding tightness relative to prospective demand.

3 Competitiveness

In 1999 Q4, the nominal effective exchange rate depreciated at a rate 4.5% lower than the official devaluation rate⁴ as a result of the steady weakening of the EUR/USD cross rate and the weak position of the forint within the intervention band in 1998 Q4, in the aftermath of the Russian crisis. For the year as a whole, this contributed to the appreciation of the various real exchange rates. Nevertheless, indices varied owing to differing price, wage and output developments. All in all, domestic competitiveness improved sufficiently even in terms of the contradictory messages conveyed by the indices.

² Apart from a few exceptions, large multinational companies with manufacturing operations in Hungary were not among the sources surveyed. (The Situation and Short-Term Prospects of Manufacturing and Construction Industry Enterprises in January 2000, a quarterly survey on the business cycle, by Kopint-Datorg, January 2000).

³ Staff-weighted breakdown.

⁴ The discrepancy between the nominal effective exchange rate index and the depreciation relative to the basket applied by the National Bank of Hungary arises from the differing structures of the two indices. From 2000, the index is linked to a basket that contains 100% euros, which is expected to mitigate this discrepancy. See Box for more details.

The CPI-based real exchange rate (see Chart IV-4) continued to appreciate, but at a somewhat slower pace (in Q4, the rate was up hardly over 1% relative to the previous quarter). Nevertheless, for the year as a whole, real appreciation was relatively high (around 6%). This was, as noted above, partly because the exchange rate depreciating at a significantly lower rate than the pre-announced devaluation rate and partly because of the temporary slowdown in the decline of inflation due to changes in the consumer price subsidy system (see December Report). Nevertheless, neither effect is expected to harm competitiveness, since the former process is considered temporary, and the latter, making no change in the situation of producers, had no considerable impact on competitiveness by definition.⁵ All in all, consumer-price-based real appreciation, considerably higher than the Bank's idea of an equilibrium rate of appreciation (of 2–3% for the year as a whole), is regarded as only temporary and is not expected to affect competitiveness to an extent requiring a monetary policy response.

The manufacturing-based real exchange rate also appreciated considerably even after the removal of cross-exchange-rate effects and the fluctuations of the forint within the band (by around 3.5% against the official central parity), and the appreciation based on the market nominal effective exchange rate was even higher. As this real exchange rate is not expected to follow a long-term trend, the question is to what extent a rise of the aforementioned order reflects a deterioration in manufacturing competitiveness. The temporary acceleration of manufacturing price inflation could be attributed to the upsurge in chemical industry prices, which in turn is due to the nearly two-and-a-half-fold rise in oil prices relative to 1998 Q4. In the technical sense, the appreciation of the manufacturing real exchange rate reflects a composition-related effect. As the chemical industry represents a larger chunk in the sales profile of home producers than in Hungary's main trading partners, even if it is similar to that abroad, a rise in chemical goods prices will lead to the appreciation of the real exchange rate. Nevertheless, appreciation of the manufacturing-based real exchange rate gives an appropriate picture of the problem that as Hungarian economy requires more energy input than its main trading rivals, a rise in oil prices will – *ceteris paribus* – have an adverse effect on external competitiveness. At the same time, the risk is not substantial, as for the energy requirement of industries (e.g. machinery and transport equipment, etc.) which produce the bulk of exports it is not typical. The risk is more significant for small and medium-sized enterprises, which supply the domestic and Eastern European markets.

In contrast with price-based indicators, the unit labour cost-based index (see Chart IV-5) has depreciated to a considerable extent (the annual rate of depreciation was nearly 5% in Q4, and taking into account the movements of the nominal effective exchange rate relative to the official parity, the index depreciated by over 9% against the central parity within the band). The improvement in the trend of the index net of intra-band exchange rate shifts was of an extent not witnessed since 1995. This im-

Chart IV-4 Real effective exchange rate of the forint based on consumer and wholesale prices in manufacturing

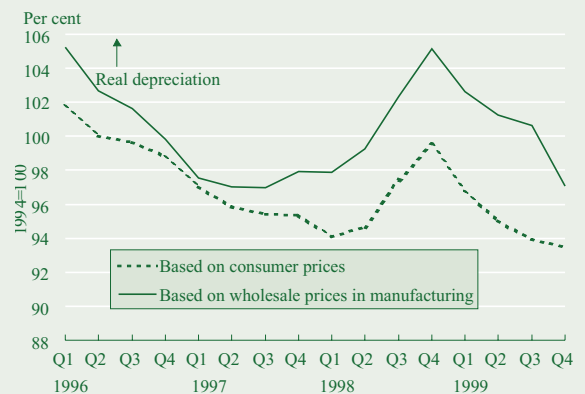
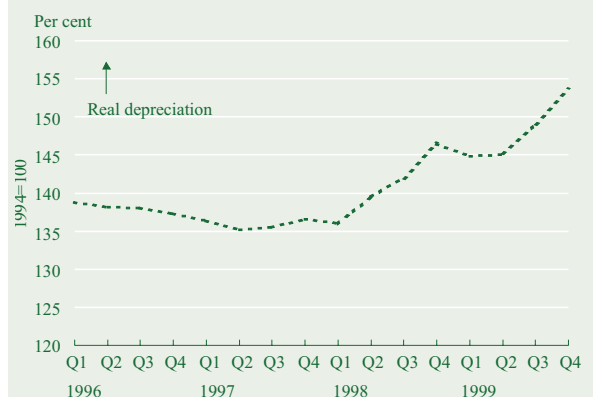


Chart IV-5 Real effective exchange rate of the forint based on unit labour costs in manufacturing



⁵ Naturally, a change in consumer demand can also influence the position of domestic producers. However, this effect is rather indirect, and in the case of goods with very low price elasticity (pharmaceuticals) it is not of significant magnitude, as the income effect considerably counteracts the substitution effect.

provement was basically due to the pick-up of manufacturing output growth, taking place in the second half of the year. The question is what this substantial improvement implies in terms of manufacturing competitiveness. Whereas in the case of price-based indices there is some information available as to what extent the changes in the index are endogenous, in other words, how far they reflect an improvement in competitiveness, the situation is much more complex with respect to the unit labour cost-based index.⁶ In a somewhat simplified view, the index could be said to possess a sort of endogenous movement, which causes it to improve temporarily when there is a positive technological shock. However, as soon as economic agents have made the optimum adjustment to the improved competitive conditions – in terms of capital and labour – the index reverts to its original level, i.e. deteriorates. Thus, when there is a positive shock, the improvement in the index reflects the opportunity to increase profits and output, while in the adjustment phase, the deterioration of the index reflects the utilisation of these opportunities for profit. Naturally, in the real world, it is not one single positive shock, but a series of positive and negative shocks that affect agents, therefore it is quite difficult to pinpoint the actual phase and position of the index at any moment. Nevertheless, in view of the dynamic growth of exports, the rising share of companies with an international competitive edge and the strengthening role played by the high-tech-laden foreign capital inflow, it can be concluded that the depreciating trend of the index reflects improving profit prospects caused by positive technological shocks.

⁶ For a discussion of the interpretation of the various indices see Mihály András Kovács (1998): "The Information Content of Different Real Exchange Rate Indicators", NBH Working Paper Series 8/1998.

The impact of the currency basket swap on the competitiveness of domestic producers

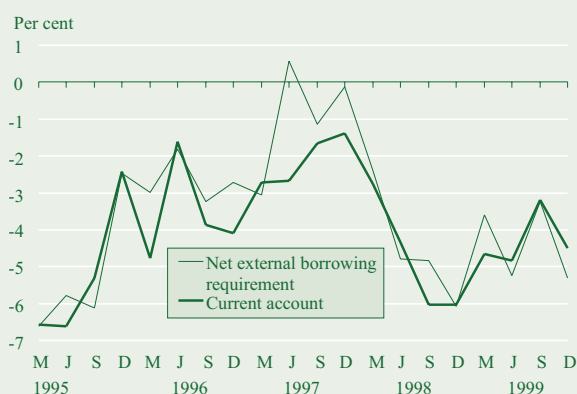
The forint's official currency basket consists 100% of euros as of 1 January 2000, as opposed to the former composition of 70% euros and 30% dollars. The National Bank of Hungary regards this change as conducive to competitiveness and exchange rate policy over the long term. The point is that the 100%-euro basket is structured more closely to the nominal effective exchange rate index, the measure of competitiveness.

The ideal arrangement would be for monetary policy to apply a basket that reflects the structure of foreign trade competitiveness, since that is the true measure of competitiveness and the external balance. As this would require a basket with a large number of currencies, simplification is in order. Bank estimates indicate⁷ that the basket which describes the nominal effective exchange rate most accurately contains about 90–100% euros, the remaining part being dollars. Consequently, the new 100%-euro basket resembles the structure of the nominal effective exchange rate index much more closely than did the previous one. This also implies that transitory cross rate movements will “interfere with” the Bank's exchange rate policy objectives to a much lesser extent. It is estimated that while a 10% change in the USD/EUR cross rate would have caused a nearly 2–3% discrepancy between the nominal effective exchange rate index and the basket exchange rate, with the new basket, the same discrepancy would be as low as 0–1%. Note, however, that the potential discrepancy is now of a contrary direction, that is, while a 10% weakening in the euro used to appreciate the nominal effective exchange rate index against the official basket, the same movement will now cause the index to depreciate relative to the official basket.

⁷ For a detailed discussion of issues connected with the currency basket, see Zoltán M. Jakab (1998): “Deriving an Optimal Currency Basket for Hungary”, NBH Working Paper Series, 12/1998.

V. External equilibrium

Chart V-1 Seasonally adjusted net financing requirement and current account deficit as a percentage



* The net financing requirement denotes the economy's saving-investment balance, which in turn defines a theoretical current account balance.

1 Net savings position

At the beginning of 1999, the internal and external balance were both a cause for concern. Soon, however, the positive changes in economic fundamentals gave rise to a more optimistic outlook. Changes in the structure of incomes and consumption paved the way for steady economic growth. The corporate sector showed considerable flexibility in adapting to external conditions, and the general government continuously adjusted its financing requirement downwards as the year progressed. The final quarter saw an expansion of domestic demand, but the increase of the country's financing requirement was essentially due to the strong outflow of profit transfers in December. Hence the external position is similar to that of 1998 for the year as a whole (see Chart V-1).

According to the seasonally adjusted index for Q4, the external financing requirement of the economy was approximately 5.3% of GDP.

In 1999, the saving behaviour of the different sectors was marked by unusual seasonality due to transitory factors and the rapidly changing economic environment (deteriorating and subsequently improving external conditions, natural disasters).

The general government financing requirement remained virtually unchanged for the year as a whole, but quarterly levels showed great volatility. The value for Q1 was exceptionally high, partly as a result of transitory deficit-boosting effects (such as the unusual timing of agricultural subsidies at the beginning of the year). Subsequent developments over the rest of the year appeared to hold down the deficit (there was no need for the large-scale subsidies customary at the year-end), and the measures taken to curb spending (cut-backs in public consumption and accumulation) and the pick-up of economic activity also put downward pressure on the deficit. By contrast to 1998, there was no need to curb investment spending relative to the seasonally adjusted level in Q4, therefore the GDP-proportional (inflation-adjusted) deficit index remained under 1%. Apart from seasonal variations, the average annual rate of inflation-adjusted income centralisation continued to decline (from 13.7% in 1998 to 12.8%).

Business conditions for the corporate sector improved for the year as a whole. Profits increased and there was a restructuring of incomes towards the sector. The quarterly values of the GDP-proportional disposable income differed from the usual seasonality. Net corporate borrowing was below the usual level in the first half of 1999, because the government's income and capital transfers boosted companies' available resources, and the

large-scale profit repatriation by non-residents, prevalent in the first half of 1998, did not take place. In addition, the growth of corporate investment slowed down. However, over the rest of 1999, and with particular regard to the final quarter, company resources were no longer increased by government transfers, and there was also a decline in central subsidies and an increase in non-resident profit repatriation. Continuing strong domestic demand and the upswing in external demand had a positive impact on firms' expectations in Q4, reflected in stronger investment and borrowing activity. Business cycle surveys indicate that an ever widening circle of economic participants has confidence in improving growth and profit prospects, which in turn may give further impetus to corporate investment and the borrowing requirement. At the same time, this effect may be counterbalanced by a prospective rise in the share of proprietary incomes in GDP.

Household financial savings remained subdued for the year as a whole. There was a slight increase in Q3 and Q4, but as a percentage of GDP, savings fell short of the average for preceding years. The deterioration in households' net financing position during the year can only partially be regarded as a correction of the exceptionally high financial savings rate recorded in 1998. Rising employment, long-term expansion of real incomes and strong business activity all boost households' confidence in an overall upturn in living conditions. As a result, similar to the trend in 1999, people are stepping up consumption and investment at a faster pace than disposable incomes are growing. This all may diminish safety reserves, increase borrowing and, consequently, hold down household net financing capacity (see Table V-1).

Table V-1 Inflation-adjusted saving and investment by sectors as a percentage of GDP*

	1998					1999					Per cent
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	
Gross domestic product	100	100	100	100	100	100	100	100	100	100	
+ net income transfers	-3.1	-5.3	-3.3	-4.1	-4.0	-2.1	-4.0	-2.5	-4.5	-3.3	
+ unrequited transfers	1.8	2.1	2.6	2.1	2.2	1.6	1.8	2.3	1.9	1.9	
Disposable income	98.7	96.9	99.4	97.9	98.2	99.5	97.9	99.7	97.4	98.6	
- households	76.2	68.3	71.1	68.5	70.7	76.6	69.4	70.4	67.7	70.7	
- corporate sector	9.0	15.7	14.2	15.3	13.8	12.2	17.3	15.9	14.3	15.0	
- public sector	13.4	12.9	14.0	14.2	13.7	10.7	11.2	13.4	15.3	12.8	
Final consumption	79.3	71.0	72.7	68.6	72.5	78.9	72.3	72.5	69.4	73.0	
- private consumption	68.7	60.8	62.4	58.9	62.3	67.8	62.0	62.6	59.6	62.7	
- public consumption	10.6	10.2	10.3	9.7	10.2	11.1	10.3	9.9	9.8	10.2	
Gross savings**	19.4	25.9	26.6	26.4	25.7	20.6	25.5	27.2	27.9	25.6	
- households	7.5	7.5	8.7	9.6	8.4	8.8	7.4	7.8	8.1	8.0	
- corporate sector	9.0	15.7	14.2	15.3	13.8	12.2	17.3	15.9	14.3	15.0	
- public sector	2.8	2.7	3.7	4.5	3.5	-0.4	0.9	3.5	5.5	2.6	
Net capital transfers											
- households	0.5	0.5	0.5	0.3	0.4	0.4	0.2	0.3	0.4	0.4	
- corporate sector	1.0	0.8	0.9	1.9	1.2	1.0	1.0	1.1	0.5	0.9	
- public sector	-1.5	-1.3	-1.4	-2.2	-1.6	-1.4	-1.2	-1.4	-0.9	-1.2	
Investment	23.5	31.1	29.1	34.1	29.9	25.7	31.3	28.2	33.4	29.9	
- household investment	5.3	2.8	3.4	5.0	4.1	5.1	5.5	5.8	5.4	5.5	
- corporate investment and inventories	15.9	24.9	22.0	24.2	22.1	18.3	22.5	20.1	22.7	21.1	
- public investment	2.3	3.4	3.7	4.9	3.7	2.3	3.2	2.4	5.3	3.4	
Net foreign financing requirement	-4.2	-5.2	-2.5	-4.8	-4.2	-5.1	-5.8	-1.0	-5.5	-4.3	
Financing capacity of households	2.7	5.1	5.8	4.9	4.7	4.1	2.0	2.4	3.1	2.9	
Corporate sector financing requirement	-5.9	-8.3	-6.9	-7.0	-7.1	-5.1	-4.3	-3.1	-7.9	-5.2	
Public sector financing requirement	-1.0	-2.0	-1.5	-2.7	-1.9	-4.1	-3.6	-0.3	-0.7	-2.0	

Notes: Bank estimates. Due to rounding, the total of individual entries may differ from the total presented in the table.

* Indicators approximate the accruals concept. Savings do not contain forint effects from exchange rate changes on household deposit and credit portfolios. Interest expenditure in the general government balance (GFS deficit less proceeds of privatisation) is presented using the accruals concept.

** Gross savings = disposable income (gross, that is, including the value for depreciation in the given year) less final consumption. Disposable income includes the sum of the gross domestic product for the given period and the balance of the income transfers and unrequited transfers to non-residents and from non-residents to Hungary (according to balance-of-payments statistics).

Table V-2 The current account

	EUR millions					
	1998			1999		
	Q1-Q3	Q4	Q1-Q4	Q1-Q3	Q4	Q1-Q4
1. Goods	-1,403	-676	-2,080	-1,441	-615	-2,056
Credit (exports)	13,356	5,091	18,447	14,565	5,955	20,519
Debit (imports)	14,760	5,767	20,527	16,006	6,569	22,575
2. Services	1,319	272	1,591	972	342	1,314
Travel, net	1,700	441	2,141	1,588	490	2,078
Other services, net	-382	-168	-550	-616	-149	-764
3. Incomes	-1,192	-470	-1,662	-953	-603	-1,556
on debt, net	-663	-153	-816	-549	-150	-700
on non-debt, net	-529	-317	-846	-404	-453	-857
4. Current transfers	72	58	130	225	103	328
Current account (1+2+3+4)	-1,205	-816	-2,020	-1,198	-773	-1,970

Chart V-2 The current account

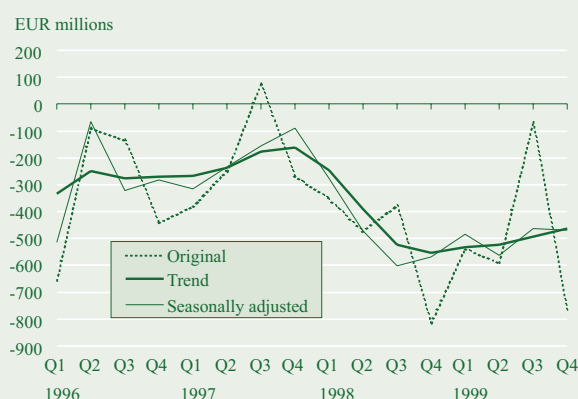


Table V-3 Financing the current account

	EUR millions					
	1998			1999		
	Q1-Q3	Q4	Q1-Q4	Q1-Q3	Q4	Q1-Q4
(1) Current account deficit	1,205	816	2,020	1,198	773	1,970
(2) Total financing – non-debt (=2b.2+2c.1) – debt (=2a+2b.1+2c.2)	990	833	1,823	1,534	642	2,176
(2a) Public sector (=2a.1+2a.2)	-687	204	-484	-623	-399	-1,023
(2a.1) Debt transactions – of which: government securities	-432	709	276	649	570	1,219
(2a.2) International reserves	402	394	795	189	412	601
(2b) Private sector (=2b.1+2b.2)	144	378	522	-288	-10	-298
(2b.1) Equity transactions – Credit institutions – Corporate and other sectors	206	247	453	902	240	1,141
(2b.2) Debt transactions – Credit institutions – Corporate and other sectors	-13	6	-7	5	178	182
(2c) Direct investment (=2c.1+2c.2)	219	241	460	897	62	959
(2c.1) Equity capital – in Hungary – Abroad	446	20	467	363	82	445
(2c.2) Intercompany loans – in Hungary – abroad	482	-164	318	-18	135	116
(3) Capital account NEO (=1-2-3)	-36	184	148	381	-53	329
	1,025	362	1,387	893	720	1,612
(2c.1) Equity capital – in Hungary – Abroad	639	208	848	920	412	1,332
(2c.2) Intercompany loans – in Hungary – abroad	955	305	1,260	1,053	515	1,567
	-315	-97	-412	-133	-102	-235
	385	154	539	-27	307	280
	365	190	555	-13	295	282
	21	-37	-16	-15	12	-2
(3) Capital account	167	3	170	-38	69	31
NEO (=1-2-3)	49	-21	28	-299	62	-237

2 Current account and its financing

In 1999 Q4 the current account¹ deficit was EUR 773 million, marking a small improvement against the EUR 816 million deficit of 1998 Q4. The balance of goods and services improved by EUR 130 million, and that of current transfers by EUR 40 million (see Table V-2), while the incomes balance – with special regard to incomes from non-debt creating investment – declined.

Changes in the components of the current account for the year as a whole were contrary to the developments in Q4: the balance of real economy transactions – basically as a result of the lower surplus to services – was approximately EUR 250 million down on 1998, while the deficit to the incomes and current transfers balances fell by some EUR 300 million. Hence the improvement on current account for the year amounted to only EUR 50 million (see Chart V-2).

The current account deficit in Q4 was offset up to approximately EUR 650 million by non-debt net capital inflows (see Table V-3). Although the net value of equity transactions linked to foreign direct investment was high in proportion to the elapsed time period (EUR 412 million, that is, 31% of total annual inflow), net equity transactions within portfolio investment in Q4 only accounted for one-fifth (EUR 240 million) of net annual inflow. For the year as a whole, non-debt creating net capital inflow amounted to approximately EUR 2.5 billion, not only offsetting, but – in contrast to 1998 – greatly exceeding the current account deficit.

On the whole, debt-creating capital movements nearly fully offset one another in Q4. Both the private and public sectors showed some degree of net borrowing, alongside the strong inflow of intercompany loans in the quarter. On the other hand, international reserves were boosted by the Bank's intervention foreign exchange purchases and commercial banks' investments in Bank deposit facilities. This approximately EUR 1 billion increment offset the effects of the EUR 410 million government security purchases, the over EUR 300 million net intercompany loans as well as other net financing transactions. For 1999 as a whole, debt-creating capital inflows led to an increase of EUR 300 million in assets (a fall in liabilities), also due to the fact that international reserves (EUR 2.2 billion), increased at a higher rate than the net borrowing through all credit channels, as a part

¹ There have been changes in the methodology of the balance of payments statistics going back to 1995, these, however, do not affect the balance of the current account for 1998 or 1999. In terms of the change, transactions on household foreign exchange accounts were reclassified from current transfers to travel. The revisions for 1995 extended to the over-the-year entries for travel (causing no changes in the annual balance, but in the monthly balances, which in turn affected the sub-annual entries in the current account). In the balances for 1998 and 1999, the credit and debit entries to travel were revised by the addition of an item earlier recorded as reverse entry (which obviously made no change in the balance). Finally, there was another rearrangement on the financial account (due to revisions) affecting the entries for intercompany loans, other investments and errors and omissions (again with zero net effect). For further information on the revisions visit the Bank's Website (www.mnb.hu).

of the sovereign borrowing in 1999 also found its way into the reserves.

The capital account, which includes unrequited capital transfers as well as transactions in non-produced and non-financial assets, showed a sizeable surplus in Q4 (with much larger credit and debit volumes than last year), but exhibited a low balance for 1999 as a whole.

3 The international investment position

The net international investment position is the balance of Hungary's total foreign assets less its total foreign liabilities: thus it represents net external debt in the broadest sense, comprising both debt and non-debt elements. This indicator is of key importance as its transactions-based change is equal to the joint balance of the current account and the capital account.

In the category of *non-debt* foreign assets, direct investment abroad by Hungarian residents in excess of intercompany loans rose from EUR 1.2 billion to EUR 1.4 billion (see Table V-4). At the same time, portfolio equity investment abroad continued to be relatively subdued, below EUR 100 million both at the end of Q3 and Q4 and showing a slightly falling trend. Non-residents' direct investments in Hungary (net of intercompany loans) grew from EUR 15.3 billion to 16.2 billion, equalling about 35% of GDP. The strong year-end surge in stock prices at the Budapest Stock Exchange boosted non-resident portfolio equity holdings (while the net inflow through this channel was not particularly high), with values rising from EUR 3.1 billion in Q3 to EUR 4.3 billion at year-end. This brings the non-debt investment position to EUR -19.1 billion at the end of 1999 Q4, representing the balance of EUR 20.5 billion in foreign liabilities and EUR 1.5 billion in foreign assets. Compared to September 1999 and December 1998, net non-debt foreign liabilities increased by EUR 2 billion and 4.5 billion, respectively.

The *debt*-type net investment position remained unchanged (EUR -11.2 billion) compared to Q3, based on a rise of EUR 2.4 billion in both foreign assets and liabilities. In the assets category, the EUR 1.3 billion increase in international reserves (taking the value to EUR 10.9 billion at the end of the quarter) was exceptionally large, but other investments also grew by nearly EUR 1 billion. Other liabilities also rose substantially, by EUR 1.4 billion, and the increment on portfolio investments was also considerable. For instance, the stock of government securities held by foreigners rose from EUR 1.3 billion at the beginning of the quarter to EUR 1.7 billion.

Forint-denominated government securities and debt-type investments excluding intercompany loans comprise gross and net foreign debt as officially published by the National Bank of Hungary. While the former rose from EUR 22.6 billion to EUR 24.4 billion (that is, 53% of GDP²) during the quarter, net foreign debt fell from EUR 7.5 billion to EUR 6.8 billion (merely 15% of GDP). *Ta-*

Table V-4 International investment position

	EUR billion		
	1998	1999	
	Dec.	Sept.	Dec.
Net international investment position (=1-2)	-25.6	-28.3	-30.3
- non-debt(=1a.1+1b.1-2a.1-2b.1)	-14.6	-17.1	-19.1
- debt(=1a.2+1b.2+1c+1d-2a.2-2b.2-2c)	-11.0	-11.2	-11.2
(1) Foreign assets(=1a+...+1d)	13.4	16.8	19.2
(1a) Direct investment abroad	1.1	1.7	1.6
(1a.1) Equity capital	1.0	1.2	1.4
(1a.2) Other capital (intercompany loans)	0.1	0.4	0.2
(1b) Portfolio investment	0.3	0.9	1.2
(1b.1) Equity securities	0.1	0.1	0.1
(1b.2) Debt securities	0.2	0.8	1.2
(1c) Other investment	4.1	4.6	5.6
(1d) International reserves	8.0	9.6	10.9
(2) Foreign liabilities(=2a+...+2d)	39.0	45.1	49.5
(2a) Direct investment in Hungary	15.9	18.1	19.1
(2a.1) Equity capital	13.7	15.3	16.2
(2a.2) Other capital (intercompany loans)	2.2	2.8	2.9
(2b) Portfolio investment	12.5	14.9	16.9
(2b.1) Equity securities	2.0	3.1	4.3
(2b.2) Debt securities	10.5	11.8	12.6
(2c) Other liabilities	10.7	12.1	13.5
MEMORANDUM ITEMS			
(M) Government securities held by foreigners	1.1	1.3	1.7
Gross foreign debt* (=2b.2+2c-M)	20.1	22.6	24.4
Net foreign debt* (=2b.2+2c-M-1b.2-1c-1d)	7.9	7.5	6.8

* Excluding government securities held by foreigners and intercompany loans.

² The GDP figure is based on the Bank's own preliminary calculations.

Table V-5 Composition of foreign debt* by sectors

	1998		Sept. 1999		Dec. 1999	
	EUR billion	%	EUR billion	%	EUR billion	%
(1) Gross foreign debt (=1a+1b)	20.1	100.0	22.6	100.0	24.4	100.0
(1a) Public sector	11.3	56.0	12.7	56.3	13.4	54.9
– National Bank of Hungary	10.0	49.7	9.5	42.2	9.8	40.0
– Government	1.3	6.3	3.2	14.1	3.7	15.0
(1b) Private sector	8.9	44.0	9.9	43.7	11.0	45.1
– Credit institutions	4.7	23.3	4.8	21.1	5.5	22.6
– Enterprises and other sectors	4.2	20.8	5.1	22.6	5.5	22.4
(2) Net foreign debt (=2a+2b)	7.9	100.0	7.5	100.0	6.8	100.0
(2a) Public sector	2.8	35.5	2.1	27.9	1.2	17.9
– National Bank of Hungary	2.0	25.1	–0.6	–8.5	–2.0	–29.1
– Government	0.8	10.5	2.7	36.4	3.2	46.9
(2b) Private sector	5.1	64.5	5.4	72.1	5.6	82.1
– Credit institutions	1.9	23.5	1.8	24.2	2.0	28.8
– Enterprises and other sectors	3.2	41.0	3.6	47.8	3.6	53.3

* Excluding government securities held by foreigners and intercompany loans.

ble V-5 shows that the public sector is responsible only for 18% (EUR 1.2 billion) of the net foreign debt, in contrast with the 28% and 35% in the previous quarter and at the end of 1998, respectively. As regards gross foreign debt, the public sector is still dominant (with 55%).

In Q4 there was a sovereign issue of EUR 400 million for 2000, prompted not so much by financial necessity, but by the favourable terms (99.8% issue price, EURIBOR+54 basis-point yield on the first EUR 300-million issue, and 99.9% price, EURIBOR+52 basis-point yield on the additional issue of EUR 100 million).

The total of the non-debt and debt type positions shows a change in net international investment position from EUR –28.3 billion in Q3 to EUR –30.3 billion (the latter amounts to 66% of GDP). Looking at the type of investment, it was exclusively the change in the non-debt type net investment position that led to the EUR 2 billion change, since the debt-type net investment position remained the same as a quarter earlier. The significant difference between financing transactions and the changes in stock in connection with the international investment position could be largely attributed to the fact that in 1999 non-euro denominated instruments still played a major role in the foreign assets and liabilities of the different sectors of the economy, thus the effects of cross exchange rates magnified the effect of the transactions (because of the weakening of the euro). As far as the Bank and the government are concerned, the effect of cross rates on the net position will be negligible from 2000, as the forint's currency basket now includes 100% euros as of January 1, and the Bank and the State Debt Management Agency are changing the foreign exchange structure of their net positions in accordance with the new basket, thereby limiting the impact of exchange rate changes. The private sector is only partially expected to hedge its foreign positions, which implies that the change in the sector's net foreign debt in euro terms will continue to be influenced by cross rate changes.