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]

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[1] The previous issues of the "Quaterly Report on Inflation" are available on the home page of the National Bank of Hungary.

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Quarterly report on inflation

Summary

The National Bank of Hungary's policy goal is to achieve a sustainable decline in inflation and ultimately price stability. Predictability and moderate interest rates, concomitant with a low inflation environment, are both factors which facilitate long-term, rapid economic growth. Achievement of the inflation target is assisted by an exchange rate regime based on a pre-announced crawling peg. This system promotes the emergence of a nominal path which poses no risk to economic equilibrium, while ensuring convergence of the domestic inflation rate towards the level of Hungary's main trading partners.

The consumer price index continued to follow a downward trend in 2000, with an annual rate of 9.2% recorded in April. Further decline in the CPI was hampered by a number of factors over which monetary policy has no control, such as oil and food price increases, as well as the strengthening US dollar. In spite of the factors hindering disinflation, the Bank' *core inflation index*, which filters out the effect on headline inflation of seasonal foodstuffs, petrol, certain other energy and regulated prices, indicated a marked fall in the rate of inflation (to 7.3% in April 2000). The inflation differential relative to the European Union, as measured by harmonized price indices, has also continued to decline, falling under 7.5% in April. This implies that the increase in imported inflation has not exerted significant cost side inflationary pressure which could have considerably diverted the economy from the disinflation path. Nevertheless, an evaluation of the steady decline in the rate of inflation should also take into account that, due to the system of some backward looking energy price regulations, the effects of international energy price increases take longer to exert inflationary pressure in Hungary than in our main trading partners.

Industrial products prices directly disciplined by the exchange rate experienced smaller increases in 2000 Q1 than the rate at which the forint depreciated. In contrast to the previous year, the slow pace of regulated price increases has also put downward pressure on inflation. By contrast, disinflation in market service prices lost momentum, with inflation even accelerating in respect of some demand-sensitive services. This was partly associated with the faster growth of input costs caused by the deterioration in the terms of trade, and partly with a steady rise in consumer demand. The growing gap between the inflation rates of tradable and non-tradable goods is attributable to the cyclical position of the economy and poses no threat to the sustainability of the exchange rate path, as it is accompanied by a further improvement in competitiveness rather than a deterioration.

The main issue in respect of further disinflation is that rising input prices should not be allowed to generate a cost-price inflationary spiral: the economy should be able to adapt to relative price changes by means of a one-off change in the price level. It should be emphasised that the rise in input prices equally affects the euro area and Hungary's main trading competitors. Consequently there is no deterioration in the country's com-

petitiveness, while the prospective increase in the import account is not expected to pose balance of payments problems. Therefore, the central bank need not adopt a more accommodating exchange rate policy in response to the deteriorating terms of trade. As inflation in euro-area countries is affected by commodity and energy price increases in a similar way as in Hungary, the ECB's interest rate policy will result in a tightening of monetary conditions, which will also be reflected in the National Bank of Hungary's policy decisions.

GDP growth continued to accelerate in 2000 Q1, to an estimated 6.8%. This rapid growth was primarily due to a further pick-up in external demand (exports of goods and services grew 21.1% in real terms), but GDP growth was also boosted by increased domestic absorption (5.7%). In respect of the components of domestic absorption, household consumption has continued to expand markedly (4%). Year-on-year investment spending increased by 11.1%. Better sales possibilities have induced dynamic growth only in respect of stockbuilding, while the growth in fixed capital formation remained subdued. The expansion of imports caused by stronger domestic absorption has been offset by higher export receipts. Hence, robust growth has not yet pushed up the net external financing requirement of the country; external borrowing amounted to 4.6% of GDP, similar to that experienced in the previous year.

The greatest influence on Hungarian economic activity seems to have been exerted by the better cyclical position of Hungary's chief trading partners. The European Union economies, as well as CIS and CEFTA countries, all experienced stronger growth. Data on domestic trade reflect both these favourable tendencies and the capacity expanding effect of new investments. According to customs statistics, export volumes have continued to rise at a rate above 20%, as against an 18% rise in the volume of import demand. However, the 2.3% deterioration in the terms of trade caused by rising world energy and commodity prices entailed adverse changes in net exports calculated in euro terms.

Looking at the components of domestic demand, growth in household consumption (4%) was slightly down on a year earlier, but still exceeds the rate at which incomes are growing. Slower growth of consumer spending is probably due to the slower rise in social benefits. By contrast, consumption funded from credit continued to expand. In parallel with strong borrowing activity, gross household saving has continued to grow weaker. The relative size of gross saving components, namely financial savings and investment, remained broadly unchanged, with a consistently high share of investment and the share of financial savings relative to disposable income below 4%.

Investment demand remained subdued in 2000 Q1, exceeding the figure for a year earlier by as little as 7%. The investment rate in manufacturing rose by a marginal 2.5%, in contrast with the service sector, which reported continuing strong growth. The investment boom seen in 1998 (with a 24% rise in manufacturing) created capacities apparently sufficient even to satisfy the growing number of orders at the beginning of 2000. Against the background of better external cyclical conditions, rising numbers of orders and stronger industrial production, the outlook is for more robust investment activity for the rest of the year. The results of a business cycle survey conducted at the end of the first quarter indicate levels of average capacity utilisation close to the "historical" peak of 1998 Q1. The proportion of companies reporting excess capacities reflects a similar tendency. By contrast, the number of companies reporting capacity shortages has not increased: compared with 8.5% in the second half of 1997, now only 5.1% of manufacturers reported insufficient capacities relative to prospective

demand. This suggests that not even the second half of the year is likely to reach the fast acceleration in investment activity last seen in 1998.

According to budget plans, the government intends to restrict aggregate demand growth by 0.1% of GDP for the year as a whole. In 2000 Q1, the SNA-type primary balance improved by 2.1% of GDP, compared with a year earlier, but the restriction of demand was partly a one-off development caused largely by the base effect of the extremely adverse fiscal position recorded in 1999 Q1. After removing such temporary effects, the demand restricting impact stands at 0.4% of GDP. This better-than-expected position is the result of built-in stabilisers as the faster-than-planned growth and higher inflation tend to push up budget receipts, while expenditures are nominally fixed. Furthermore, the unforeseen expenses in the aftermath of natural disasters were financed via a reallocation of budgetary expenditures. Nevertheless, part of the improvement in the fiscal position due to the higher-than-expected rate of inflation is only temporary as it may necessitate subsequent supplementation of pension expenditures.

As indicated by the weak investment activity, the acceleration in economic growth has not yet been constrained by a shortage of productive capacities. At the same time, utilisation of the potential labour force has continued its upward trend, bringing *the rate of unemployment down to 6.5%.* The rate of *wage inflation* declined to 11.6%. The rate of wage inflation (not to be confused with the wage index computed by the Central Statistical Office; see related discussion in Box, Chapter IV) declined to 11.6%. The difference between the rates of wage growth in the market sector (11.4%) and the public sector (12.1%) decreased as compared to previous years. In certain sectors, in particular in mechanical engineering and the category of *transport, storage, postal services and communication*, the increase in the number of hours worked may also signal a tightening of the labour market. It should be emphasised, however, that in the demand-sensitive service sectors, which are crucial to the rate of inflation, the stronger rate of price increases was coupled with a slowdown in wage growth.

Although the favourable cyclical position of the economy usually entails a rise in external financing, and the deterioration in the terms of trade also tends to push up the current account deficit, the seasonally adjusted value of the first-quarter net external financing requirement of 3.8% was nearly identical to the figure for the average of last year. This moderate need for external funding was partly due to the fact that in 1999, there was a temporary rise in the current account deficit, as a result of the Russian crisis. On the other hand, investments with relatively high import needs expanded at a subdued rate, despite robust economic growth. As the recent rise in foreign trade values based on customs statistics is only recorded in the balance of payment statistics after a delay, the current account deficit conveys an even more favourable picture, with a deficit of EUR 378 million in the first three months, financed predominantly by non-debt-creating net capital inflows (EUR 280 million).

The composition of the net financing requirement has undergone significant changes compared with a year earlier. The private sector's growing need for funds has been offset by a decline in the government's financing requirement. Within the private sector, households' savings position worsened by roughly 2%, while the financing needs of companies remained unchanged, compared with the same period the year earlier. However, the prospective increase in investment activity is likely to give added impetus to the financing requirement of businesses.

The beginning of the year was characterised by an easing of monetary conditions, which returned to levels experienced prior to August 1998. Despite the cut in the pre-announced

monthly rate of devaluation to 0.3% on April 1st, the faster-than-expected drop in the inflation differential between Hungary and the euro area caused the real exchange rate to remain virtually unchanged, simultaneously with a considerable drop in the level of nominal interest rates, resulting in an over 400-basis-point drop in yields between late October and early March. The fall in yields may be attributed to the better general perception of emerging markets, the fall in the premium on interest rates following the dissipation of concerns related to the millennium date change, stronger domestic macroeconomic indicators and growing expectations of an appreciation of the Forint. In order to stabilise monetary conditions, in a statement published on February 28th the Central Bank Council emphasised its commitment to maintaining the narrow-band crawling band regime, as a means of providing an effective nominal anchor for economic agents, which effectively, promotes further disinflation, while reducing the volatility of the real exchange rate. On the basis of a decision passed by the Central Bank Council, the National Bank of Hungary altered some of its policy instruments in a number of steps, in order to enhance the Bank's scope of action in setting interest rates consistently with domestic economic developments. Banks incur additional costs on external borrowing, both in the form of reserve requirements imposed on such funds and additional costs levied on on-balance-sheet open positions. In order to boost the effectiveness of interest rate transmission, the Bank has embarked on auctioning a new three-month instrument.

International capital market developments appeared to facilitate the central bank's sterilisation efforts, when the European Central Bank and the Fed raised their leading rates by 50 basis points as of March, reducing the allure of the forint's interest premium and, thus, that of speculative forint-denominated instruments. In addition to these interest rate hikes, the global dwindling of investor confidence and the growing uncertainty surrounding developed country capital markets were also important factors in the declining demand for riskier assets, including investments in emerging markets. As a result of the rise in the interest rate premium on forint investments, the yield curve was up by 80-100 basis points compared with an early March low.

Both foreign investors and domestic residents have increased their forint-denominated investments recently. The first two months of the year were characterised by strong inflows of interest-sensitive capital, entailing a high demand for conversion and a rapid expansion of the stock of sterilisation instruments. As of March, partly as a result of central bank measures and partly owing to changes in international money markets, there has been a decline in demand for forints, causing the exchange rate to drift from the strong edge of the band on several occasions. In respect of domestic economic agents, households have continued to increase the weight of forint-denominated instruments in their portfolios. Considering the external financing of the corporate sector, there was a rise in the share of foreign currency borrowing. The current regulations on open positions encourage banks to lend in foreign currency terms, financed from external funds, which are cheaper than forint funds as far as the perceived exchange rate risk is low.

Main macroeconomic indicators

	1998				1999				2000
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	Growth rate (at constant prices) Changes over the same period of the previous year (%)								
GDP*	4.4	4.9	5.4	4.7	3.5	3.9	4.5	5.9	6.8
Of which: domestic absorption	3.7	8.3	10.7	8.1	5.4	4.3	2.4	5.0	5.7
– final consumption	2.9	4.0	4.7	4.8	4.6	4.4	4.3	3.8	3.6
= household consumption	3.7	5.0	5.6	5.2	4.5	5.0	4.5	4.4	4.0
– investment	5.9	19.5	26.8	15.8	7.6	4.0	-1.6	7.6	11.1
= fixed investment	8.6	14.5	20.3	9.8	6.4	6.8	4.2	8.1	7.0
Export (GDP)	29.0	17.6	13.9	9.7	9.5	9.8	13.6	18.9	21.1
Import (GDP)	25.9	25.0	25.2	16.4	12.9	10.2	9.3	16.6	18.3
Real effective exchange rate index**									
On CPI basis	–3.0	–1.2	2.1	4.3	2.9	0.4	–3.6	–5.9	–3.0
On PPI basis	0.6	2.5	5.2	7.2	5.5	2.3	–1.7	–6.9	–6.6
On unit labor cost basis (on value-added basis)	–0.3	3.2	4.8	7.2	6.4	4.0	5.0	3.7	6.4
On unit labor cost basis (on gross output basis)	5.9	8.5	9.2	10.0	7.5	4.8	5.6	6.5	9.9
Deficit	*As a percentage of GDP*								
General government deficit (cash flow basis)***	–7.6	–2.8	–4.4	–4.9	–10.1	–5.0	–2.7	–1.0	–4.0
General government primary balance***	2.6	1.4	2.7	0.1	–0.2	0.3	3.7	3.5	3.3
	EUR billions								
Current account balance	–0.4	–0.5	–0.4	–0.8	–0.5	–0.6	–0.1	–0.8	–0.4
Foreign direct investment (net)	0.4	0.5	0.2	0.4	0.3	0.3	0.3	0.7	0.2
Savings rate**** (%)	8.3	11.7	11.9	10.5	8.5	6.1	7.0	8.4	6.6
Unemployment rate + (%)	8.1	8.0	7.7	7.4	7.1	7.0	7.0	6.8	6.4
Wage inflation ++ (Same period a year earlier = 100 %)	n/a	n/a	n/a	n/a	16.3	14.6	14.8	12.9	11.6
Net average per capita income in real terms+++ (Same period a year earlier = 100 %)	3.2	3.2	4.3	4.3	5.0	5.0	3.6	3.8	2.1

* These entries are partially based on Bank estimates, which may differ from data published by the Central Statistical Offi ce. Recent data on foreign trade and consumption have been revised as a result of a methodology change, consisting of the separation of business travel and the revision of the handling 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 (**not** including the revaluation total due to exchange rate changes and other factors).

+ Based on the labour-market survey of the Central Statistical office according to ILOstandards; number of unemployed people as a percentage of the active population; seasonally adjusted data..

++ The Bank's own wage inflation index; see related text in Box, Chapter IV. As there is no methodology consistent with the current one for calculating an index for the period prior to 1999, no data are published for the previous year.

+++ National Bank estimate of net earnings of employees in companies employing at least five people and for the entire government sector, taking into account the effect of income tax changes.

Main monetary indicators

	1998				1999				2000
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	Changes over the same period of the previous year (%)								
Inflation (CPI)**	16.4	14.2	12.5	10.3	9.3	9.1	10.9	11.2	9.6
Producer price index**	13.5	11.6	10.4	7.1	4.9	4.5	4.8	8.2	9.9
Devaluation rate of the forint's central parity	12.9	12.2	11.4	10.3	9.4	8.4	7.5	6.5	5.9
	*Real growth of monetary aggregates** *Changes over the same period of the previous year (%)*								
M0	1.7	3.3	3.7	5.8	8.5	7.9	3.9	11.5	6.2
M1	6.7	9.1	7.9	6.1	7.1	6.3	5.6	6.8	6.9
M3	2.3	4.0	4.6	4.4	8.0	7.1	5.0	4.3	5.0
M4	10.0	9.8	9.4	9.4	9.1	9.0	7.7	6.9	6.6
	*Real growth of loans extended by credit institutions*** *Changes over the same period of the previous year (%)*								
Corporate sector, foreign + domestic*	13.1	14.5	16.4	11.2	13.4	10.8	7.0	13.4	17.3
Corporate sector, domestic	14.5	15.5	15.6	9.9	11.0	7.2	3.5	11.3	15.8
Household	–11.4	–2.4	2.4	0.8	11.6	14.0	17.8	20.4	28.0
	*Interest rates (%)***								
Reverse repo/one month deposit***	18.75	18.00	18.00	16.75	16.00	15.25	14.75	14.25	11.25
90-day Treasury bill	18.65	17.33	19.06	16.10	15.68	14.74	14.07	12.44	10.63
12-month Treasury bill	18.70	17.32	18.96	15.88	15.61	14.77	14.17	12.33	10.42
3-year Treasury bond	17.42	16.31	18.00	14.18	14.01	14.03	13.45	10.75	9.09
Budapest Stock Exchange (BUX)	8,656	7,806	4,571	6,308	5,490	6,486	6,747	8,819	11,000
Interest rate premium (bsp)****	364	363	674	533	531	551	551	426	309
	Conversion								
Conversion, EUR millions	2,253	850	–1,996	–175	313	239	1,211	1,043	1,466
Banking sector net foreign borrowing,† EUR millions*	854	231	–617	–158	7	–173	151	312	707
Corporate sector net borrowing, †† EUR millions*	384	–24	209	579	109	753	390	316	–199

* 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 respect of government securities, reference yields of the State Debt Management Centre.
*** The maturity of the reverse deposit facility was reduced from one month to two weeks as of January 8, 1999.
**** Interest rate premium: excess yield on three-month T-bill investment over the devaluation rate and foreign interest rates. The current devaluation rate was modified upon official announcement of the change.
† Excluding privatisation revenues.
†† Including inter-company loans.

I. Inflation

The twelve-month consumer price index stood at 9.2% in April, two percentage points down on the end of 1999 (11.2%). The core inflation index computed by the National Bank, which excludes the effects of changes in seasonal foodstuff prices, as well as certain energy and regulated prices, has reflected a stronger disinflation trend: the index stood at 7.3% in April, following a steady decline over the past 12 months *(see Chart I-1)*.

Inflation in the euro area has recently gained momentum, with the euro-area harmonised price index (MUICP) rising from last year's average rate of 1.1% to 2% this year. As a combined result of the decline in domestic inflation and the acceleration of foreign inflation, convergence has speeded up, bringing down the inflation differential between Hungary and the euro area – measured in terms of a domestic indicator comparable with the MUICP – below the nearly 8.5% average recorded last year to under 7% during March and April 2000 *(see Chart I-2)*.

The Bank regards core inflation indices as the main measures of inflationary processes relevant for monetary policy. The unbroken trend of disinflation reflected by such indices suggests that the factors behind the temporary halt in the decline of the consumer price index last year and its stagnation since then are essentially not related to changes in aggregate demand and supply. The slower decline in consumer prices is due to the impact of increases in world oil prices and a reversal of the earlier downward trend in unprocessed foodstuff prices. At the same time, there is no evidence that the sharper price increases in these categories have caused cost-side inflationary pressure and pushed up the rate of inflation in other categories as well.

Disinflation in internationally-traded products, called *industrial products*, has continued and even gained momentum relative to the nominal exchange rate. By contrast, there has been a jump in *food price* inflation; this increase, however, has been completely confined to the category of *unprocessed foodstuffs,* which is a noteworthy and positive development in respect of long-term disinflation. With regard to *processed foodstuffs*, there have been signs of a slowdown in inflation. Disinflation in *market services*, which are crucial for the long-term inflation trend, seems to have broken, along with an apparent rise in the price index for *demand-sensitive* market services. The cost-push from rising energy and food prices on the prices in this category is not negligible. In addition, stronger demand in the wake of households' rising real income has also pushed up prices in this category. In view of the fact that the trend of wage increases with respect to these activities has continued to lose much of its momentum, the Bank considers the higher rate of inflation to be a phe-

Chart I-1 **Consumer price index and core inflation indices**

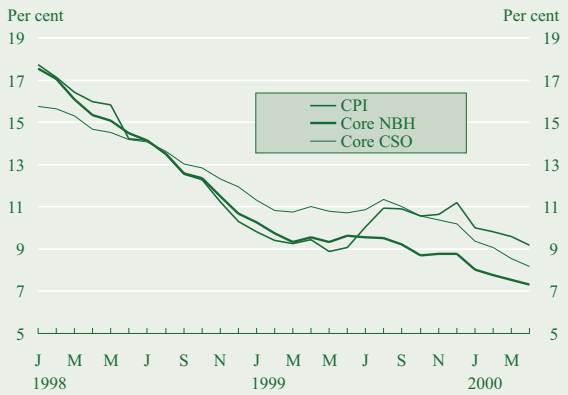
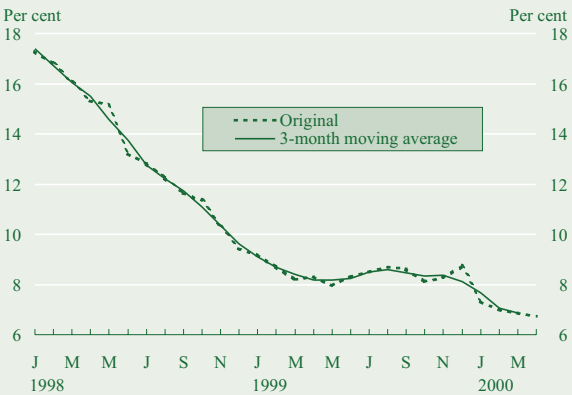


Chart I-2 **Inflation differential vis-à-vis the euro area, measured in terms of harmonised price indices ***



* Difference in percentage points. Euro-area inflation is measured by the official harmonised consumer price index (MUICP), published by Eurostat. For comparability, Hungarian inflation is measured with an indicator which is consistent with the MUICP in terms of the consumer basket, and thus excludes goods and services not included in the MUICP (in 1999 and 2000, such items included pharmaceuticals, medical products, owner-occupied housing, health and educational services, as well as gambling). This index covers 90% of the original domestic consumer basket. For a more detailed discussion on the topic, see Box I-1.)

Box I-1 How is inflation convergence towards the euro area measured?

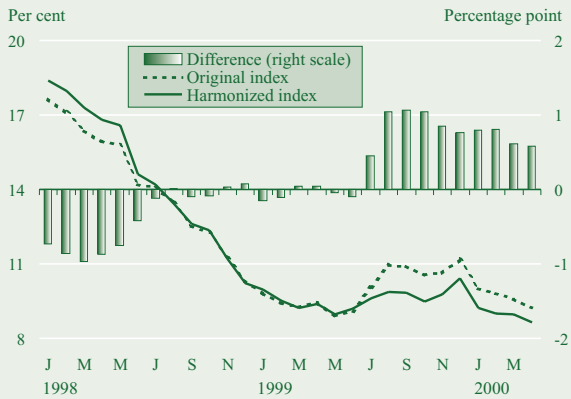
Within the context of European integration, the objective of the National Bank's monetary policy – a sustainable reduction of inflation – means narrowing the inflation differential between Hungary and the euro area. Evaluating the success of such convergence in inflation rates is only feasible using comparably defined and computed price indices.

The official measure of euro-area inflation is the Monetary Union Harmonised Index of Consumer Prices (MUICP), published by Eurostat, the statistics organisation of the European Union. The MUICP is a weighted average of the national harmonised indices of consumer prices (HICPs), computed by the statistical offices of the member states. There is also a harmonised consumer price index, aggregated on the basis of similar principles, referring to the entire European Union (EICP). The methodology of compiling harmonised consumer price indices at the national level is determined by a number of European directives and guidelines produced in the course of the ongoing harmonisation process for price statistics compilation procedures launched in 1992. Harmonisation typically affects the types of goods and services covered by the price index, as well as data collection and compilation methods. In other words, the objective is not the selection of one common consumer basket, but a pattern based on the same principles, which allows for differences between national consumption habits. Hence, national harmonised price indices can differ – and indeed frequently do – from the initial consumer price indices of the individual countries. Whether the harmonised index has replaced or merely supplemented the original index varies from country to country.

Hungary is also obliged by law to construct a harmonised consumer price index. Since the Central Statistical Office currently does not publish such an index, the National Bank of Hungary, which – under a provisional arrangement and exclusively as a means of measuring inflation convergence – computes a harmonised price index for the Hungarian economy, using the data provided by the Statistical Office and a methodology that is reasonably consistent with that used for the MUICP. Consistency is ensured by harmonising the categories of goods and services covered by the index with the HICP principles. In 2000, this means the exclusion of the price indices for the categories of *owner-occupied housing* and *gambling* (compared with the former practice of excluding pharmaceuticals, medical products, health and beauty services). In harmony with Eurostat procedures, no 12-month index is to be constructed on the newly included categories.[2] As far as the categories measured with 12-month price indices are concerned, the composition of the Hungarian HICP, computed by the Bank for 2000, covers nearly 90% of the original price index. Thus, due to the relatively high rates of inflation for the goods excluded, there remains a considerable difference of nearly 1 percentage point between the original price index and the Bank's harmonised price index at the level of 12-month price indices in 2000 as well. In terms of the inflation differential relative to the euro area, by convention it is measured as the simple *difference* between the 12-month harmonised indices (MUICP and Hungarian HICP) that is taken, even though it would be more accurate to use their *ratio*, which would remove the distortion caused by the scale effect. Nevertheless, relevant data suggest that so far this has had only a negligible numerical impact.

Chart I-3 **Official consumer price index published by the Central Statistical Office and the harmonised price index computed by the National Bank of Hungary**

Same period a year earlier = 100, difference in percentage points



nomenon concomitant with the cyclical position of the economy, thus posing no threat to the sustainability of the exchange rate path *(see Chart I-3)*.

Regulated price inflation, which falls outside the scope of monetary policy, has remained subdued of late, reflecting the Government's anti-inflationary commitment. Due to the longer-term impact of one-off price hikes in January, the 12-month rate of inflation of centrally controlled prices sank to 10.2% by April, which is consistent with the Government's inflation path of 6% for the year as a whole.

[1] See related studies in issue 7/1999 of the Statistical Review, a periodical of the Central Statistical Office.

[2] See Extended coverage and earlier release dates for the HICP, Eurostat Memo, No. 2/2000 (February 18, 2000).

Box I-2 Inflation convergence towards the euro area by product categories

As was noted above, the convergence of the Hungarian index towards the Monetary Union index of consumer prices (MUICP) has been unbroken.

An analysis of the individual product categories can provide additional information on how the inflation differential between Hungary and the euro area is developing, as breaking down the differential between the average inflation rates into the differentials between the constituent parts may help pinpoint the individual categories which facilitate or, on the contrary, hamper the convergence manifested in the aggregate indices. In the latter case, it can be examined how inflation in the category concerned is being affected by monetary policy. On the other hand, in terms of both goods and factor mobility, the domestic economy has achieved such a high level of integration into the euro zone that it is likely to exhibit identical responses to *shocks* that are *exogenous* to both regions. An examination of inflation convergence by individual product category may reveal if this is the case.

The data show that the category comprising what our *Reports* call industrial goods and household energy products (including articles of clothing, furnishings, household equipment, household energy, goods for recreation) exhibits a clear trend of inflation convergence. Also, the transport category has converged recently, though to a lesser extent *(see Chart I-4)*. By contrast, the inflation differential for food, alcohol and tobacco prices, as well as communication prices has been flat to rising *(see Chart I-5)*.

The inference that monetary policy can draw from this is that inflation convergence has solid foundations and is comprehensive, since the divergence from corresponding rates in the euro area is due to temporary factors or factors falling outside the scope of monetary control.

One of such factors is that the *food* price deflation experienced in Hungary in 1998 did not occur (or occurred later and to a less extent) in the euro area, and its correction – as discussed in previous *Reports* – is now manifested in terms of diverging rates of inflation. As far as the remaining categories are concerned, the effects of *regulation* are passed on in the form of inflation divergence: in respect of alcohol and tobacco prices, regulation has involved a rise in tax content, implemented in the framework of EU harmonisation.

The inflation divergence observed in respect of *communication* prices can be attributed to the fact that the drop in service prices in some Western countries following deregulation was not so significant in Hungary (prices for communication activities in the euro area have been *falling* by 3-5% annually for a long time).

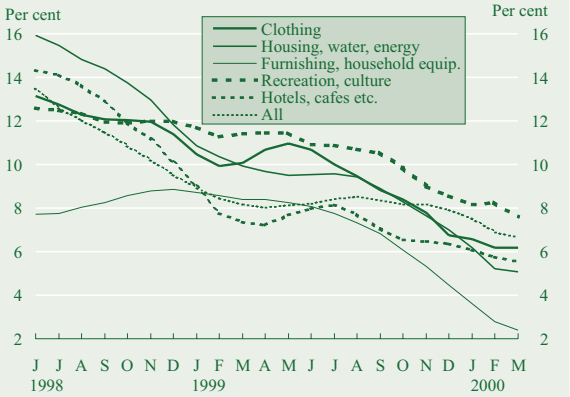
It may also be of significance that, unlike the MUICP, the Hungarian domestic price index does not include the prices of telecommunication *devices* (such as fixed line telephones, mobile telephones, fax machines, etc.), the price level of which – similar to that of all new goods – is likely to steadily decrease in Hungary as well.

The lesson for monetary policy is that the design of the domestic consumer price index (not to mention the effects of deregulation on prices) should by no means be ignored from the aspect of Hungary's inflation convergence and ultimate EMU membership.

At the same time, the inflation differential for communication prices had also declined substantially by 2000, due primarily to a drop in the domestic twelve-month communication price index (of telephone and postal services). It is also important for monetary policy that the inflation differential in *transport* prices (especially when measured as a quotient) is steadily decreasing. This means that the exogenous oil price shock has elicited the same response from the two economies, as it has not affected the general trend of inflation convergence.

Chart I-4 **Inflation convergence by product categories: converging main categories** *

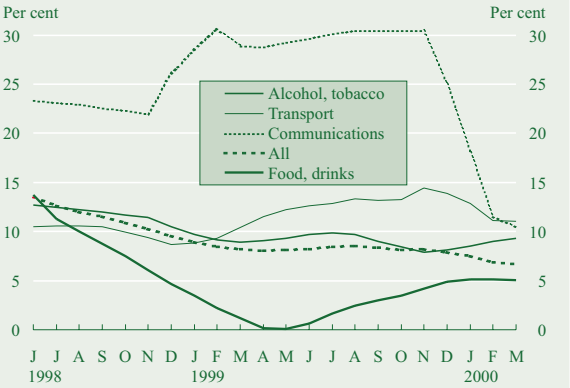
Difference between twelve-month indices, in percentage points



* NBH estimates: the 160 categories contained in the domestic consumer price index have been divided among the 12 main MUICP categories. Then the euro-area rates have been deducted from the twelve-month inflation rates of the main categories constructed with domestic weights. Three-month central moving averages. The same applies for Chart I-5.

Chart I-5 **Inflation convergence by product categories: diverging main categories**

Difference between twelve-month indices, in percentage points



1 Imported inflation

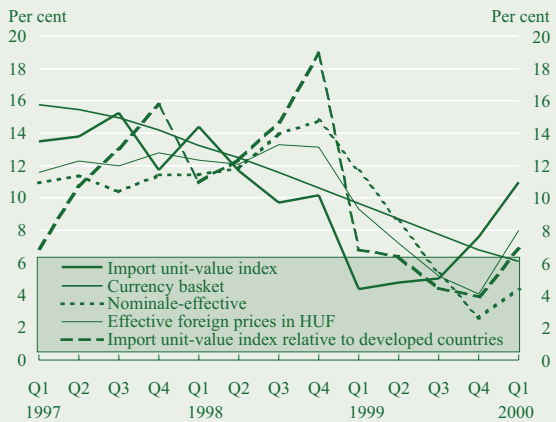
Table I-1 **Changes in world prices in 1999–2000***
Compared to the 1995 average

Per cent

	1999				2000
	Q1	Q2	Q3	Q4	Jan.–Feb.
Commodities excluding energy	75.7	74.5	75.1	78.0	79.5
Foodstuffs	78.9	73.9	72.0	72.5	74.6
Beverages	79.0	73.4	65.3	74.9	68.6
Agricultural raw materials	75.6	75.7	77.1	80.3	80.9
Metals	68.2	72.0	78.5	81.7	87.3
Crude oil	68.5	95.1	120.1	137.8	152.1

Source: IMF IFS
* World prices in dollars terms.

Chart I-6 **Import prices and exchange rate indices**



The global price trends seen in the second half of 1999 continued in 2000 Q1: commodity prices, excluding energy, and crude oil prices continued to rise. Nevertheless, the pace of price increases seems to have lost some momentum. Compared with a 4% rise in commodity price indices and a 15% rise in oil prices over 1999 Q4, they were only up by 2% and 10%, respectively, in the first quarter this year. As far as raw materials are concerned, there was a nearly 7% upsurge in metal prices, and food prices, which had been falling a year earlier, also increased by 2% (*see Table I-1).*

As a result of the 6–13% decline in food and beverage prices and the 7–28% rise in agricultural raw material and metal prices, relative to the equivalent period a year earlier, commodity prices excluding energy were up by 5%. The supply-restricting behaviour of OPEC and the drop in the level of reserves caused a 126% jump in the price of crude oil relative to the low base in 1999 Q1.

The *import unit price index* rose to 10.9% in 2000 Q1, from 7.6% in 1999 Q4, outstripping the forint's pre-announced rate of devaluation by nearly 5%. A comparison with the nominal effective exchange rate index yields an even larger difference of 6.6%. A quarter-on-quarter comparison shows that the growth in the import unit price index lost momentum in the first quarter (down from 16.1% in 1999 Q4 to 9.9%).[3]

As a new development, 2000 Q1 also produced a rise in the imported inflation index based on effective foreign prices, up from 4.1% in 1999 Q1 to 8%. Thus, the increasing pressure of imported inflation can also be attributed to inflation affecting our chief trading partners. The price of machinery imports from developed countries, which had put downward pressure on imported inflation in the past, was slightly above the pre-announced rate of devaluation.

Prices in this category rose by 6.8% compared with the same period a year earlier. As before, sharp increases in energy import prices caused the overall import price index from Central and Eastern Europe to jump by 39%.

Looking at individual product categories, energy import prices rose by 86%. Price increases in food, beverage, tobacco, as well as machinery and transport equipment imports amounted to 5–6% (5.7% and 5.2%, respectively). Processed goods and raw material import prices were up by 9.1% and 11.4%, respectively. Hence, the strengthening of imported inflation can be equally attributed to the effect of energy and raw material price increases and the general inflation trends experienced by our chief trading partners *(see Chart I-6).*

As noted in the Bank's March *Report*, the rapid pace of energy price increases and the weakening of the euro also caused a rise in the twelve-month consumer price index of euro-area countries, Hungary's most important trading partners. In March the rate was up to 2.1% from 1.2% in December, pushing the index over the 2% ceiling set by the European Central Bank for the first

[3] Short-base indices are calculated from seasonally adjusted trend-cycle data.

time since the establishment of the Economic and Monetary Union. Seven of the eleven member countries reported inflation rates in excess of 2%, with Ireland reporting the highest rate at 4.6%.

In April, however, falling oil prices caused euro-area consumer price inflation to return below the threshold of 2% (1.9%), which is more in line with expectations.

In March, the United States reported an unexpectedly sharp rise in the consumer price index. The 3.7% increase in the twelve-month index – the highest rate in a long time – was mostly due to rapid oil price increases. At the same time, the April drop on the previous month in other indicators, such as the rate of manufacturing capacity utilisation or retail turnover, reflects the fact that there is no need to fear that inflationary pressure will strengthen (in the course of April, both the producer and the consumer price indices declined to 3.7% and 3%, respectively).

From its 5.6% low in April 1999, the twelve-month consumer price index in Poland began to accelerate and has been in the double-digit range since January of this year. Although inflation slowed somewhat in March to 10.3%, it was still higher than analysts' forecasts. In the Czech Republic, even against a background of stronger economic activity and high oil prices, consumer price inflation rose to a rate of merely 3.8% in March, up from 3.2% last year. The favourable development of food and clothing prices was one of the factors in the subdued rate of price inflation *(see Table I-2)*.

2 Components of changes in consumer prices

Similar to last year, the pace of disinflation was slowed by the rise in fuel prices and the acceleration of food price inflation over the first quarter of 2000. Moreover, the past few months have also witnessed the addition of demand-sensitive components of market services to the factors hampering disinflation *(see Tables I-3 and I-4)*.

Monetary policy is primarily able to influence market-determined price inflation, with special regard to industrial goods and market services.

Although regulated price inflation and market-determined price inflation are linked via inflation expectations and cost-side inflationary pressure, monetary policy instruments primarily have control over the latter group by influencing the nominal path of the exchange rate and aggregate demand.

The rate of inflation for prices typically determined by market forces remained around the average seen in the second half of 1999 (8.7%).

This, however, was partly due to the rise in fuel and non-regulated household energy prices. Together these pushed up the market sector price index by nearly 2 percentage points in the period from February to April.

The market sector price index excluding fuel and energy prices has been steadily declining since the end of 1999, in con-

Table I-2 **International inflation data, 1999-2000**
Relative to the same period a year earlier

Per cent

	September 1999		December 1999		March 2000	
	Producer	Consumer	Producer	Consumer	Producer	Consumer
	Price changes					
United States	3.2	2.6	3.0	2.7	4.5	3.7
Japan	–1.1	–0.2	–1.5	–1.1	n/a	–0.6
Germany	–0.5	0.7	1.0	1.2	n/a	2.1
Czech Republic	1.5	1.2	3.2	2.5	5.1	3.8
Poland	6.2	8.0	7.1	9.8	7.4	10.3
Hungary	4.8	10.5	6.9	11.2	9.9	9.6
EU–11	1.3	1.2	4.0	1.7	6.2	2.1
EU–15	1.5	1.3	n/a	2.1	n/a	1.9

Source: Global Data Watch, figures for 2000 provided by J.P Morgan.

Table I-3 **Inflation rates of various components ***
Relative to the same month a year earlier

Per cent

	Weight in CPI	1999		2000			
		Aver-age	Dec.	Jan.	Feb.	March	April
Consumer Price Index (CPI)	**100.0**	**10.0**	**11.2**	**10.0**	**9.8**	**9.6**	**9.2**
Of which:							
Industrial products, food, alcohol, excluding tobacco and petrol	29.6	8.8	6.9	6.1	6.1	5.6	5.1
Petrol	4.9	18.7	37.8	30.7	32.4	36.7	29.7
Non-regulated energy	1.3	11.7	16.5	13.4	12.1	12.7	17.3
Food	19.1	1.7	5.4	5.7	5.4	5.6	6.3
Regulated prices	18.0	16.6	17.6	13.9	12.6	10.9	10.2
Market services	17.6	12.5	11.0	10.8	10.3	10.3	10.4
Alcohol and tobacco	9.4	11.5	10.6	10.9	11.9	11.7	11.5
Core inflation	89.9	9.3	8.8	8.1	7.8	7.5	7.3
Depreciation of the nominal effective exchange rate		7.0	2.7	4.2	5.0	4.1	5.4
Pre-announced nominal devaluation of the forint		8.4	6.7	6.4	6.2	6.0	5.4

* The categories of items used as a basis for the consumer price index differs from those used by the CSO. See previous Reports for 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

Per cent

	Weight in CPI	1999				Dec. 1999/ Dec. 1998.	2000	
		Q1	Q2	Q3	Q4		Q1	April
		Quarterly average, relataive to previous quarter					Relataive to 1999 Q4	
Consumer Price Index (CPI)	**100.0**	**–1.8**	**–0.4**	**1.5**	**0.2**	**0.9**	**–1.0**	**–1.6**
Categories causing a rise in the rate of inflation								
Food	19.1	–0.9	–0.9	0.6	0.7	0.2	0.3	0.4
Alcohol and tobacco	9.4	–0.2	–0.1	0.0	–0.1	–0.3	0.1	0.1
Non-regulated household energy	1.3	0.0	0.0	0.0	0.1	0.2	0.0	0.0
Petrol	4.9	0.0	0.4	0.4	0.4	1.6	0.1	0.0
Categories offsetting the rise in the rate of inflation								
Regulated prices	18.0	–0.1	0.2	0.6	–0.2	0.7	–1.0	–1.4
Industrial products	29.6	–0.3	0.0	–0.3	–0.4	–1.0	–0.4	–0.6
Market services	17.6	–0.3	0.0	0.0	–0.2	–0.6	–0.1	–0.2

* Due to rounding, figures do not always add up accurately.

***Chart I-7* Consumer price index and its main components** Relative to same period a year earlier)

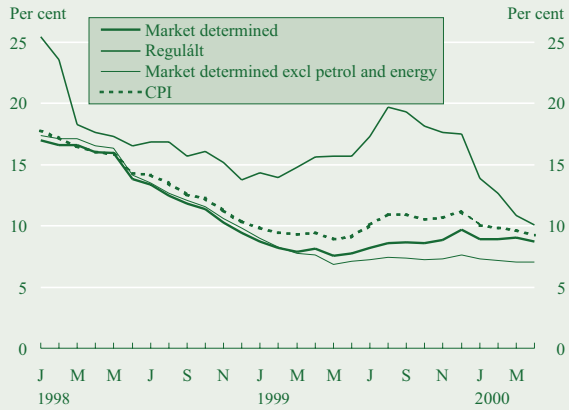


***Chart I-8* Market determined price inflation and its components** Twelve-month indices

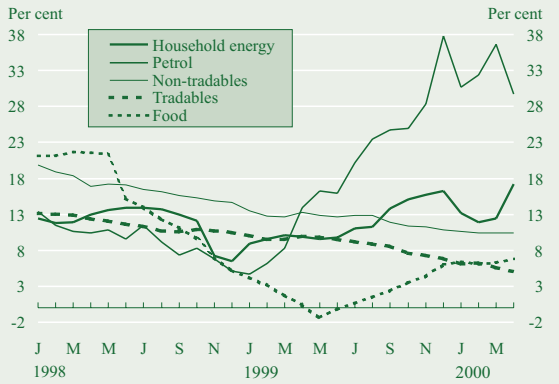


***Chart I-9* Twelve-month relative rate of inflation of industrial goods**

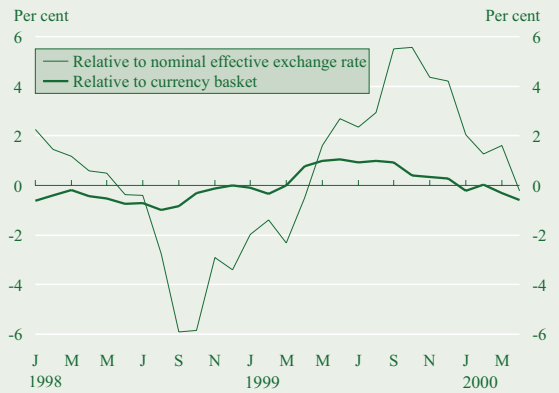


***Chart I-10* Changes in price levels for food and its main categories** Relative to the same period a year earlier

trast with the index including the effect of such prices *(see Chart I-7)*.

The market category is dominated by the group of internationally-traded goods, called *industrial goods*. Monetary policy exerts direct influence over prices in this category by determining the nominal exchange rate path, that is, via imported inflation. Underlining the long-term nature of the anchor role played by the exchange rate, the rate of industrial goods price inflation relative to the twelve-month depreciation rate of the forint's central parity has been fluctuating within the ±1% range for a long period. Although movements within such a narrow range are not regarded as being statistically significant, the recent period has witnessed a narrowing and subsequent negative turn in the inflation differential, i.e. stronger disinflation in industrial goods prices. Within the category of industrial goods, attention should be given to the fact that *durables* prices seem to be decreasing at a somewhat slower pace. This may be attributed to the demand effect of the first-quarter jump in retail sales volume growth (by 22%), an inference apparently contradicted by the fact that the sales boom in mid-1999 did not entail any changes in the rate of inflation. This question may be answered as further data become available in coming months. *Non-durable goods price disinflation has been uninterrupted, even gathering pace since February*, bringing the twelve-month overall rate of industrial goods price inflation down to approximately 5% *(see Chart I-8)*.

Foodstuffs account for the second largest group within the sector of market-determined prices. The twelve-month rate of inflation for this category, which exhibited a steady upward trend over the second half of 1999, seems to have stabilised around 6% at the turn of 1999/2000. As pointed out in the March *Report*, this may well be a temporary development. Latest data indicate that food price inflation has picked up again, although at a slower pace than last year, edging close to 7% in April. However, this year's trend differs from last year's in two aspects. First, the resumption of the rise in the 12-month price index partly reflects the effect of the low base early last year, when food prices were falling. Second, unlike in 1999, the stronger rate of inflation affecting food prices as a whole over recent months seems to be confined to *non-processed foodstuffs*, leaving the rate of inflation for processed foodstuffs unaffected. The acceleration in non-processed foodstuff price inflation comes as no surprise, as it is part of the correction of the deflationary trend seen in 1998. Data indicate that the price increases beginning in mid-1999 have only recouped about three-quarters of the deflation-induced drop in the price level. As noted in the March *Report*, price changes in the category of *processed* foodstuffs are determined partly by unprocessed foodstuffs prices and partly by industrial goods prices. Data from recent months seem to indicate that inflation in this category tends to resemble industrial goods price inflation. This, however, can only be confirmed as information from forthcoming months becomes available (*see Charts I-9 and I-10*).

The decline in the price inflation of *market services*, which account for nearly one-quarter of the private sector, has slowed over recent months with the twelve-month index still hovering just above single-digit range. Prices in this category are only indirectly affected by the path of the nominal exchange rate, via industrial goods prices, i.e. via relative prices. The cost-push from

wages and energy prices has also put significant inflationary pressure on inflation for a number of services. There has been a rise in market service price inflation relative to industrial goods price inflation. Recent data confirm that this tendency is continuing, pushing this inflation differential to over 5 percentage points in April, a difference last seen in 1998, alongside much higher overall inflation. Technically speaking, the widening of the differential can be attributed to the fact that industrial goods prices tend to decline at a faster pace than service prices, similar to the trend last year. From an economics aspect, the question is to what extent the high relative market service price inflation is associated with *demand*-side or *supply*-side pressures, i.e. cost-side pressures (*see Chart I-11*).

An analysis of the components of the market services category in the manner described in the March *Report* shows that the high average rate of inflation in market services is primarily attributable to energy-intensive (transport) and demand-sensitive services. Since world energy price shocks, exogenous to monetary policy, are responsible for the inflation in the former group, our focus at the moment is on the demand-sensitive group. In this respect, the Bank's latest data highlight some new phenomena. As noted in the March *Report*, although the inflation rate for this group exceeds the average rate for market services, there is no sign of any acceleration in this "excess" inflation. Data for the last two months clarify the picture in as much as following several months when the difference was flat to falling, it has now jumped nearly one percentage point. While it is not clear yet if this is just a one-off divergence or the beginning of a trend, it is worthwhile to examine the demand-sensitive category as a means of pinpointing the potential consequences for monetary policy (*see Chart I-12*).

An analysis of the components of demand-sensitive services shows that the highest price increases were recorded in labour-intensive *personal services* (repairs, health and beauty services), accounting for nearly two-thirds of the sector, as well as labour-intensive *catering* requiring significant food input (including restaurant, canteen and buffet catering), accounting for nearly 30% of the demand-sensitive group. By contrast, although high, the price index of *cultural* services (including sports and recreation, cinema, theatre, etc.) shows no definite upward trend. On the whole, the relative rise of market service price inflation reflects "genuine" developments, partly associated with changes in aggregate demand and supply and not merely with methodological problems. At the same time, relevance of this phenomenon for monetary policy seems to be mitigated by the fact that, in addition to the demand impact, exogenous energy and food price shocks have also contributed to the rise in the price of some of the services involved *(see Chart I-13)*.

Goods on which *excise* duties are levied belong to the category where prices are subject to central influence or direct control. The special form of taxation for these goods sets them apart from goods with prices determined purely by market forces. Alcohol and tobacco account for 9% of consumer spending. Regulation tends to have a most powerful impact on such prices at the beginning of the year, when excise duty rises are usually implemented. The year-on-year inflation rate amounted to 11.5%. Within the category of alcoholic beverages, there has been a 7% rise in the excise duty content of beer and spirits prices. As far as

***Chart I-11* Difference between the twelve-month inflation rates of industrial goods and market services**

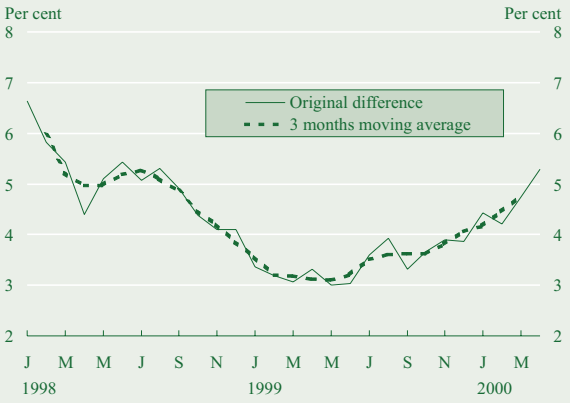
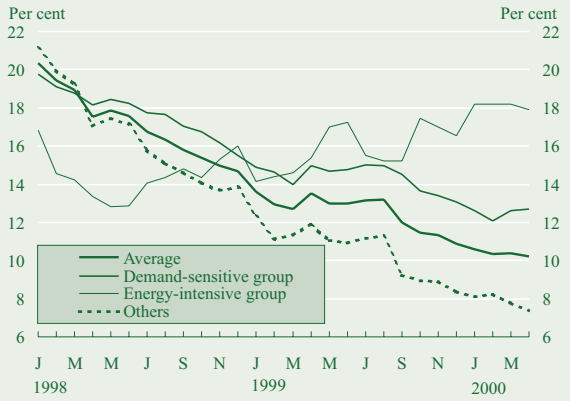
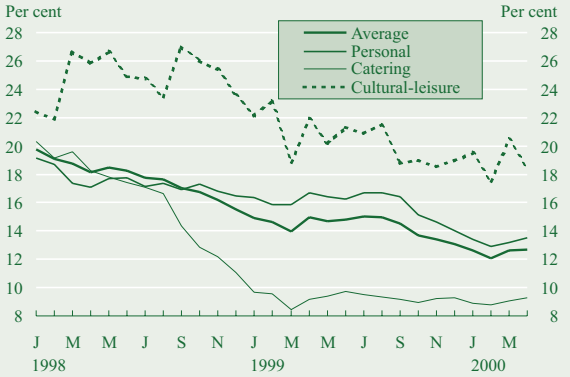


Chart I-12* Inflation rates in market services
Relative to the same period a year earlier



* 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 haulage services (2%) are the energy intensive services. Other items not included in 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-13* Inflation in certain groups of demand-sensitive market services
Relative to the same period a year earlier



* *Personal* services include repair services, laundry and cleaning services, beauty and health services, educational and (unsubsidised) domestic travel services. *Catering services* cover restaurant and canteen catering, as well as buffet services. *Cultural services* include entertainment and sports.

Chart I-14 **Average price level of fuel and non-regulated energy**

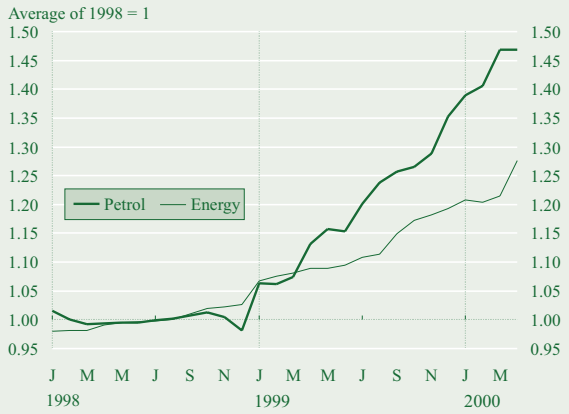
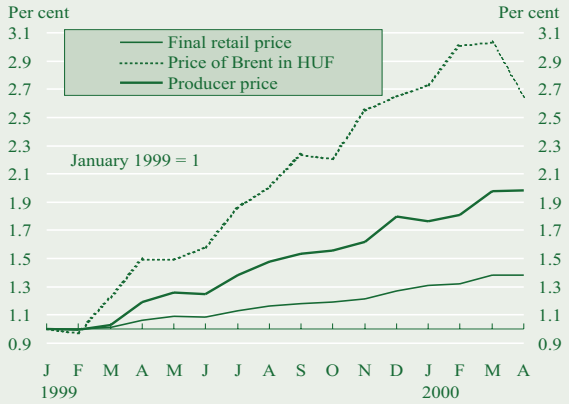


Chart I-15 **Domestic average price level for petrol and the world price for oil***



* The estimate is based on the fuel price index published by the Central Statistical Office and the estimate for average domestic petrol prices. The producer price is an estimate obtained by deducting the excise duty from the net consumer price (excluding VAT).

Table I-5 **Centrally regulated or influenced prices ***
Year-on-year and four-month (in 2000) growth rates **

Per cent

	Weight in 2000	Year-on-year price indices				Four-month price indices		Difference in per cent
		2000				1999	2000	1999–2000
		Jan.	Feb.	March	Apr.			
Controlled prices	**17.99**	**13.9**	**12.6**	**10.9**	**10.2**	**12.2**	**5.2**	**–7.0**
Household energy	**7.29**	**6.2**	**6.1**	**5.1**	**5.3**	**4.6**	**3.7**	**–1.0**
Of which:								
Central and district heating	1.84	5.6	5.4	5.8	6.3	2.9	3.2	0.4
Electricity	3.29	10.2	10.1	7.4	7.4	9.0	6.3	–2.6
Gas supplied through pripes	2.16	1.0	1.0	1.0	1.1	0.0	0.0	0.0
Pharmaceuticals, medical products	**1.70**	**55.4**	**57.4**	**42.9**	**43.4**	**12.8**	**3.1**	**–9.8**
Services	**9.00**	**11.7**	**9.3**	**8.8**	**7.4**	**18.0**	**6.8**	**–11.2**
Of which:								
Housing	2.48	16.2	15.5	13.7	12.9	13.0	10.6	–2.3
Transport	1.89	5.9	5.8	6.3	6.1	13.4	6.1	–7.3
Telecommunications	3.78	11.5	6.7	6.6	6.1	25.3	6.1	–19.2

* Television subscription fees, carrying a 0.66% weight in the consumer price index, have been divided into a centrally regulated portion (0.31%) and a market subscription fee (0.36%). Regulated prices include only the former component, which has not changed since last year.

** Due to rounding, sums do not always add up accurately.

tobacco is concerned, the excise duty content rose by 15%, in line with the requirement set by EU harmonisation calling for the prevailing 40% rate to be raised to 57%. This alone pushed consumer prices up by 6%, which was mostly passed on to retail prices. Import prices also show a more marked rise than last year. Inflation for this product group continues to be higher than for industrial goods, owing to excise duty regulations, and this trend is expected to continue. As of 2000, excise duty is also levied on wine. The sections of the Excise Act on the compulsory payment of excise duties, amounting to 5 forints per litre of wine, will come into force in August. This, however, is not expected to have a major impact on prices tracked by consumer statistics, on account of the high share of the black market in satisfying consumer demand.

The market-determined segment of the consumer basket includes *fuel for vehicles* (petrol, diesel) and *household energy with non-regulated prices* (such as coal, briquette, coke, firewood and butane gas[4]). Similar to late 1999, fuel prices soared during the first quarter. The customary changes in taxation early in the year have also put upward pressure on prices. In January 2000, a tax valorisation of 7% was set for unleaded and leaded petrol. The value of the excise duty on 95-octane petrol rose from HUF 87 to HUF 92.2. Together with the 25% VAT, tax content accounts for nearly 60% of the consumer price (which does not exceed the ratio typical of EU countries). The tax valorisation early in the year – assuming all other costs constant – caused 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. However, from February, rising world prices for oil and the stronger dollar started to exert an upward pressure once again (*see Charts I-14 and I-15*).

In order to appreciate the slowdown in this year's inflation rate relative to last year's in the regulated category it is more appropriate to use an index measuring the price increase "added" in the particular year concerned rather than year-on-year changes in the price level.[5] This is because the former excludes the inflationary pressure exerted by the price measures of the period between May and December in 1999. The data currently available on the first four months of 2000 reflect a 7-percentage-point drop in centrally controlled price inflation. This alone reduced the rate of inflation by 1.3 percentage points *(see Table I-5)*.

The currently planned price measures would cause year-on-year inflation in the regulated category to rise to around 7.4% in the second half of the year. If household energy prices incorporate the bulk of the rise in costs, this would entail a roughly 10% rate of inflation in the category of regulated prices, which would push up the headline consumer price index by at least 0.6 percentage points.

It also seems worthwhile to consider the changes in *centrally controlled service prices* also in a breakdown according to price determiners, in order to be able to appreciate the actual efficiency of the Government's anti-inflationary policy. It should be

[4] As of 2000, heating oil is excluded from the consumer basket.

[5] See final three columns of Table I-5.

noted that the Government only has indirect influence over non-centrally regulated prices. The March *Report*[6] studied the rather heterogeneous group of regulated services as divided into *centrally* controlled, *locally* controlled and "*mixed*" – not fitting in either categories in terms of aggregate statistics – sub-groups. Apparently, the generally subdued rate of inflation in regulated service prices prevailing since January 2000 can be attributed to the declining price level of centrally controlled prices (including telephone subscription fees, postal services and gambling) being offset by the steady upward trend in locally controlled prices (including rent, refuse disposal and local public transport charges). Prices classified as belonging to the "mixed" category (including water supply and sewage charges, long-distance and other travel) were also up, although increases in this sub-group slowed towards the end of the period. On the whole, service prices under central and mixed control appeared to rise at a clearly subdued rate (*see Charts I-16 and I-17*).

Chart I-16 **Price levels of regulated energy and services prices**

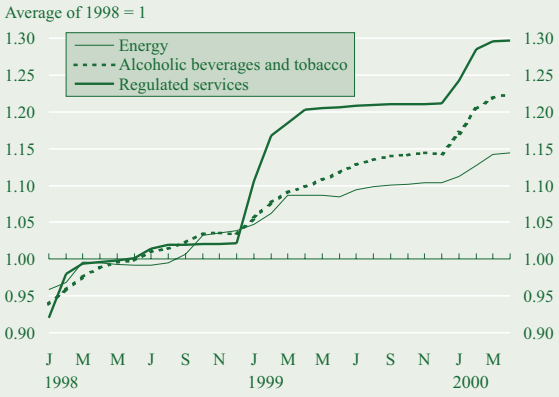
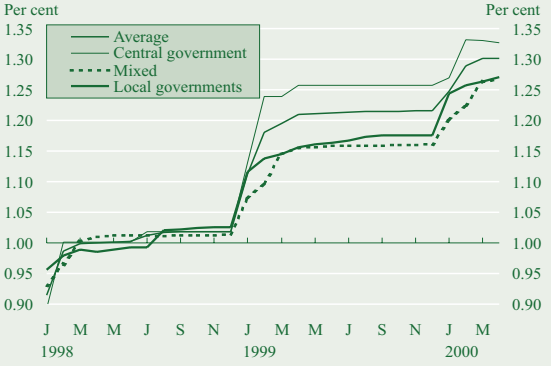


Chart I-17 **Breakdown of regulated services price levels according to price determiners**

1998 = 1



[6] This *Report*'s breakdown excludes television subscription charges from the category of regulated service prices.

II. Monetary policy

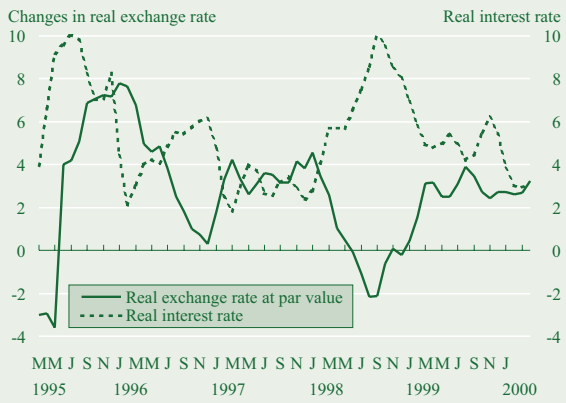
1 Monetary conditions and changes in the interest rate and the exchange rate

Against a background of buoyant external activity, the Hungarian economy has continued to expand vigorously, with real GDP growth reaching 6.8% in 2000 Q1. Although this robust growth has entailed an increase in the external financing requirement, this was not such as would have exceeded the cyclically reasonable rate, thanks to the fact that growth has continued to be spurred by strengthening export activity. In parallel with a steady decline in the core inflation index, the twelve-month consumer price index has also returned to the downward path seen prior to July 1999, resulting in a continuation of inflation convergence, with euro-area inflation also rising slightly.

Monetary conditions have stabilised at the level seen early in the year. The cut in the devaluation rate announced in December of 1999 became effective on April 1, 2000, bringing the monthly devaluation rate down to 0.3%, representing a 3.66% rate of devaluation for the year as a whole. Against the background of a 2% rate of expected equilibrium real appreciation and foreign inflation in the range of 1–2%, this devaluation rate is in line with the Government's forecast for inflation in 2000. The acceleration of foreign inflation caused the inflation differential between Hungary and the euro area to decline more quickly than expected, resulting in a temporary drop in the rate of CPI-based real appreciation (see the chapter on competitiveness). This is partly attributed to temporary factors, as the price control system in Hungary prevents energy price increases from feeding through to the rate of inflation as fast as experienced by Hungary's trading partners *(see Chart II-1)*.

The 400-basis-point fall in yields, which started in the autumn of 1999 and affected the whole length of the yield curve, pushed the level of real interest rates down to 3% by early March 2000. This fall in yields may be equally attributed to the better overall perception of emerging markets, the decline in the premium on interest rates in the wake of the passing of uncertainties surrounding the millennium date change, stronger domestic macroeconomic indicators and the emerging expectations of an appreciation of the forint. In order to stabilise monetary conditions, in a statement published on February 28th the Central Bank Council emphasised its commitment to maintaining the narrow-band crawling band devaluation regime, as a means of providing an effective nominal anchor for economic agents. This regime not only promotes the further decline in inflation, but also restricts

Chart II-1 **Monetary conditions***



* The chart shows real interest rates calculated as a ratio of the yields on three-month Treasury bills and the rate of inflation (annualised and seasonally adjusted) over the preceding three months. The real exchange rate index, representing monetary conditions, is not identical with the competitiveness indices presented later. The real exchange rate here is presented as the ratio of the exchange rate changes and the rate of inflation (annualised and seasonally adjusted) over the past three months.

***Box: II-1* Changes in the central bank's monetary instruments**

Introduction of three-month bills

Starting from March 22, 2000, the National Bank of Hungary is issuing non-interest-bearing bills, qualified as government securities, with a term of three months. This relatively long-term facility, supplementing the existing instruments of monetary management, is expected to contribute to the stabilisation of money and capital market returns and to give the Bank greater leeway in setting two-week deposit rates without adversely affecting market deposit and lending rates. Based on its terms, the bill is also available to non-bank capital market participants. Thanks to the reduced risk and costs involved, it is also hoped that this new instrument will assist the Bank in achieving its monetary policy objectives more effectively.

Changes in the reserve requirement

The National Bank of Hungary is planning to adopt a new set of rules on reserve requirements as of July 1, 2000. The changes have equal bearing on the required reserve base, the types of assets accepted for meeting the requirement, as well as the nominal reserve ratio.

Under the terms of the regulation effective from July 1, 2000:

– there is a reserve requirement on 50% of all foreign exchange deposit liabilities with maturities of less than one year;
– 50% of the stock of vault cash is accepted for meeting reserve requirements;
– the nominal reserve ratio has been reduced from 12% to 11%.

These changes will entail a reduction in the loss on forint liabilities, while at the same time, by imposing a reserve requirement on all short-term foreign exchange liabilities, there will be a certain amount of income loss incurred on such liabilities. As it is not the goal of the Bank to raise the costs on short-term foreign currency liabilities and thus induce creditworthy customers to borrow abroad, the compensation rate on the reserves required on (domestic and foreign) deposit liabilities is set on a gradually increasing scale, which will eventually be 1.5 percentage-point higher than the compensation on the reserve requirement on forint deposit liabilities. The interest rate paid by the Bank in the first stage is 0.5 percentage points higher than that on the reserve requirement on forint deposit liabilities.

These changes are aimed at creating a reserve management system conducive to competitiveness, while doing away with structural disproportions stemming from collecting deposit liabilities of different types. The objective is to approach the reserve requirement ratio of the European Central Bank, in order to facilitate the forthcoming transition and distribute harmonisation costs over a longer period. It is not banks that will benefit by the improvement in competitiveness between financial institutions, but economic agents and individuals, due to wider availability of cheaper funds. This will affect small and medium-sized firms in particular, as they have only limited access to funds in foreign exchange.

Regulating the on-balance-sheet open position

Due to the fact that the on-balance-sheet long forint position held by the banking system has exceeded the level considered optimal by the Bank, the regulations establishing the amount of interest payable on mandatory reserves have been revised. Thus, as of July 1, 2000, the amount of interest payable is reduced by the product of on-balance-sheet forint open position in excess of 30% of their own funds, the reserve ratio and the correction factor. This change imposes additional cost on the opening of on-balance-sheet long forint positions.

the volatility of the real exchange rate. At the same time, the Central Bank Council authorised the National Bank of Hungary to alter some of its monetary policy instruments, and this has taken place in several steps.

The restructuring of monetary management instruments as discussed above is aimed at giving the Bank greater room for manoeuvre in setting domestic interest rates, while ensuring that no substantial rise in sterilisation costs is incurred. Initially the Bank intervened verbally, warning banks to expect additional costs on maintaining on-balance-sheet open positions when preparing their financial plans. However, as the banking system showed considerable reluctance to exercise self-restraint, the measures outlined above are to become effective on July 1st. The March 10th announcement of the new three-month instrument is part of this new package of measures.

The days following the announcement witnessed a considerable correction in market returns, and following the first auctions, the yields on government securities soon adjusted to the yields established at the auction. In the period between March

Chart II-2 **Central bank interest rates and short-term market yields: three-month and one-year benchmark yields, average auction yields on three-month NBH bills, two-week central bank deposit rates**

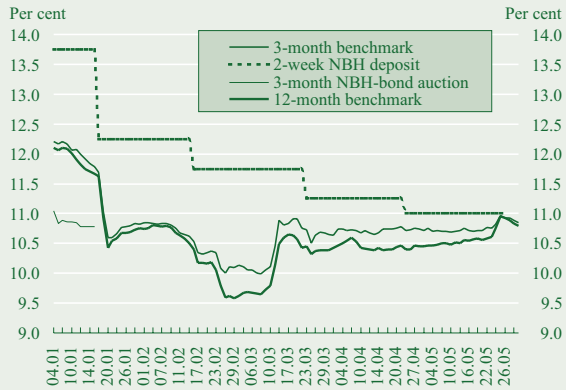
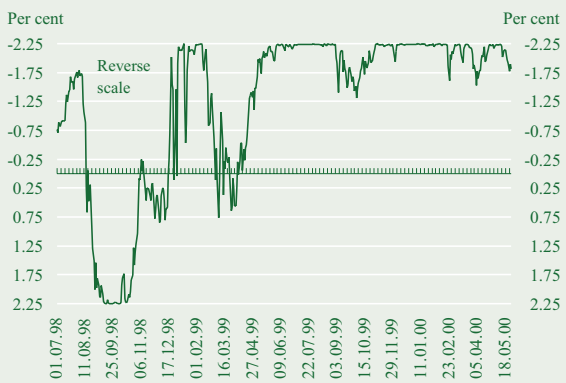


Chart II-3 **Interest premium on three-month Treasury bills**

Chart II-4 **Intra-band position of the forint**



and June, the Bank reduced the interest rate on the two-week deposit facility from 11.75% to 11% in two steps, as a means of raising the average terms of maturity associated with the stock of sterilisation instruments.

The central bank's attempt to tighten monetary policy seemed to receive backing from developments in international capital markets. In the period after March, the European Central Bank (ECB) implemented two 25-basis-point hikes in its leading rate on March 16th and April 27th, and the Fed, which functions as the central bank in the US, raised its leading rate by 50 basis points on May 16th. These hikes appeared to put downward pressure on the interest premium on the forint, and consequently the allure of speculative forint assets. In addition to the international interest rate increases, events in the capital markets of the advanced economies also had an impact on the demand for forint investments. This was because there was a simultaneous halt in the rise of trading prices at the leading stock markets of the developed economies, followed by a fall in stock exchange indices from April on. These events resulted in a loss of global investor confidence and a decline in the demand for riskier assets, including investments in emerging markets. These international capital market developments also assisted the National Bank in its efforts to stop the decline in real interest rates *(see Charts II-2 and II-3)*.

As a matter of course, the weakening demand for forint instruments has also affected the nominal exchange rate. In contrast with the period until the second half of February, when considerable capital inflows held the exchange rate at the strong edge of the trading band almost continually, the verbal intervention on February 18th caused the rate to drift away and not to return for longer intervals during the period under review (see *Chart II-4*).

The efficiency of transmission between market and commercial bank interest rates is proven by the fact that the drop in market yields at the beginning of the year fed through, although with some delay, to commercial bank rates, bringing the spreads back to the former equilibrium level. However, the saving position held by households and companies over the past few months appears to support the claim expressed in the Bank's earlier reports that the economy's cyclical position and changes in the financial sector have a more powerful influence over the decisions of economic agents than real interest rates. Household borrowing has continued to be buoyant despite the widening interest rate margin, while monetary aggregates indicate a continuation of the disintermediation process seen over the last few years, which was only temporarily interrupted by the Russian crisis in 1998. In spite of the robust economic growth, a pick-up in corporate sector investment demand failed to materialise in the first quarter, primarily due to the less-than-full capacity utilisation by businesses.

1.1 The monetary base

In April 2000, the value of narrow money was up by 16.7% on a year earlier, which is consistent with the rate of strong economic growth and inflation. In the course of the first quarter, the central bank bought foreign currency in the inter-bank foreign exchange market worth over HUF 370 billion as a means of ensuring the maintenance of the announced exchange rate path during a period of strong demand for forints in the economy. The excess liquidity generated by this intervention in the exchange market was

sterilised by the central bank using the appropriate instruments, which accounts for the dramatic rise in the stock of sterilisation instruments during the first few months of the year. Simultaneously, there was a sharp rise in the central bank's net foreign exchange assets, also associated with this intervention, more specifically, the rise in foreign exchange reserves (*see Table II-1 and Chart II-5).*

1.2 Components of intervention forint demand

Intervention foreign currency purchases by the National Bank in 2000 Q1 amounted to HUF 374 billion. This level of intervention was last seen in the first three months of 1998. Central bank conversion in January, amounting to HUF 200 billion, was especially notable, with speculation on the appreciation of the forint of a similar order last seen in March and April 1998.

Over the first quarter, the balance of payments current account deficit, adjusted by foreign direct investment inflows, reduced the demand for forints by merely HUF 33 billion, due to the improvement in the current account and direct investment inflows that were in line with expectations. By contrast, financial investments by foreign residents induced considerable central bank intervention, on account of the first-quarter rise of HUF 143 billion in non domestic residents' government security holdings, together with a further capital inflow of HUF 85 billion into the equity market. Furthermore, domestic companies seeking funds through direct foreign currency borrowing contributed to the central bank's intervention in foreign exchange markets by HUF 11 billion.

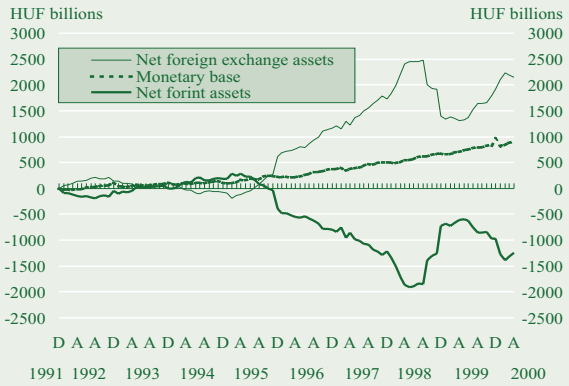
The demand for forint conversion in the first quarter was stimulated both by changes in the banks' total open position and their derivatives transactions. As a result of speculation on the appreciation of the forint, the neutral open position at the beginning of the year had been replaced by a short foreign exchange position amounting to HUF 32 billion by late March, prompting central bank intervention of the same extent. This total open position involved on-balance-sheet short foreign exchange positions, up by over HUF 100 billion, which was enabled by the emergence of long foreign exchange futures positions. The build-up of these derivative positions accounted for HUF 75 billion in first-quarter demand for forint conversion *(see Table II-2).*

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

HUF billions

	2000				
	Initial	Jan.	Feb.	March	April
I Monetary base (II + III)	1,439.0	1,318.5	1,332.5	1,373.5	1,398.4
Notes and coin	955.9	822.4	815.2	836.3	860.3
Reserves	483.1	496.1	517.3	537.2	538.1
II Net forint assets (b + c + d – a)	101.1	–208.8	–325.4	–248.6	–171.9
a) Sterilisation instruments	619.3	816.4	999.9	884.2	865.6
b) Credit to financial institutions	120.3	117.5	157.7	117.1	112.5
c) Net claims against the government	517.9	422.8	458.8	443.3	470.5
Of which: KESZ (–)	193.4	295.5	249.6	267.5	246.8
government securities(+)	401.2	401.2	393.4	393.4	393.5
other (+)	310.1	317.1	315.0	317.4	323.9
d) Other	82.2	67.3	58.0	75.2	110.7
III Net foreign exchange assets	1,337.9	1,527.3	1,657.9	1,622.1	1,570.3
Net foreign	504.4	694.0	796.1	700.7	777.6
Claims	3,269.1	3,472.7	3,563.0	3,476.6	3,592.3
Liabilities	2,764.7	2,778.7	2,766.9	2,775.9	2,814.7
Net domestic	833.4	833.3	861.8	921.4	792.7
Claims	1,550.4	1,497.4	1,505.0	1,569.9	1,440.1
Liabilities	717.0	664.1	643.2	648.5	647.4

Chart II-5 **Monetary base and its components***



* The chart displays cumulative values; Dec. 1991 = 0.

Table II-2 **Components of the demand for forints**

HUF billions

	1998 total	2000			
		January	February	March	Q1
A Conversion	**806.9**	201.3	139.6	33.1	374.0
a) Intervention in interbank foreign exchange market	**707.7**	208.9	139.6	25.7	374.2
b) NBH purchases from budget	**99.2**	–7.6	0.0	7.4	–0.2
Sources of conversion (I+ ...+ VIII)	**806.9**	201.3	139.6	33.1	374.0
I Current account balance corrected with net foreign interest payments (1+2)	**–424.5**	–14.1	–38.0	–28.2	–80.4
1 Current account balance	**–497.8**	–19.6	–40.0	–37.2	–96.9
2 Net foreign interest payments by NBH	**73.3**	5.5	2.0	9.0	16.5
II Foreign direct investment	**407.5**	12.3	17.4	33.9	63.6
III Intervention due to commercial banks*	**–11.5**	63.8	–25.7	–5.1	33.0
IV Effect of derivatives**	**–58.2**	29.6	79.4	–33.9	75.1
V Intervention due to domestic foreign exchange deposits	**–1.6**	–2.7	4.0	–8.7	–7.4
VI Net portfolio investments (1+2)	**649.9**	147.7	106.7	20.9	275.3
1 Government securities	**152.3**	53.7	64.1	25.1	142.9
2 Equity***	**497.6**	94.0	42.6	–4.2	132.4
VII Corporate foreign exchange (1+2) = (a+b)	**237.1**	–33.9	–7.0	51.9	11.0
1 Domestic	**154.3**	26.9	18.0	32.1	77.0
2 Foreign	**82.7**	–60.8	–25.0	19.8	–66.0
a) Short-term	**–73.6**	–10.3	–25.7	3.3	–32.8
b) Long-term	**310.7**	–23.6	18.7	48.6	43.7
VIII Capital transfers	**8.2**	–1.4	2.8	2.4	3.8
B Interest rate-sensitive (III.+IV.+V.+VI./1+VII.)	**318.1**	110.5	114.8	29.2	254.5
C Speculative (B.-V.-VII./b)	**9.0**	136.8	92.0	–10.7	218.2

* Conversion effect due to the change in commercial banks' total open position, i.e. the portion of open positions not hedged by derivative transactions.
** Conversion effect of the change in the volume of futures contracts. With these two items the negative sign indicates the winding up of long forint positions built up earlier.
*** As the balance-of-payments statistics on equities purchases by foreigners are rather unreliable, the entries in this row were calculated on the basis of the residual principle.

***Box: II-2* Transactions by the banking system in the foreign exchange markets in 2000 Q2**

Following the Christmas of 1999 commercial banks began to speculate strongly on the appreciation of the forint. Speculation was engaged in on such a large scale that the central bank management had to seek both formal and informal ways to restrict it. As a first step, the Bank met with commercial bank executives, and indeed, the period following the consultation on February 18th saw a clear decline in both the on-balance-sheet and the total open position. From the end of March, the winding up of open positions gained further momentum. Since then, the total open position has been fluctuating around zero, simultaneously with a decline in futures positions.

While in the period from December to February the build-up of on-balance-sheet open positions in the banking sector was accompanied by a rise in domestic stock exchange contracts, by March the latter was no longer able to keep pace with the increase in open positions. After this point, banks were only able to meet their additional hedging requirements either outside the stock exchange or outside the domestic markets. When the need for hedging declined as a result of the reduction in the on-balance-sheet position, it was these non-domestic or non-stock market forward contracts that were the first to be wound up. Domestic stock market contracts did not start to decrease until the final third of May. This was because banks sought to neutralise their positions by adjusting their on-balance-sheet positions to the stock of forward contracts. Thus, the approximately neutral total position arising at the end of April was the balance of much higher on-balance-sheet and forward positions than the total neutral position last summer. The month of May witnessed another opening of positions (amounting to approximately HUF 30 billion), primarily due to the closing of forward positions. The latter continues to have no effect on domestic forward-exchange contracts, the value of which has remained firmly in the HUF 90–100 billion range since February *(see Chart II-6)*.

***Chart II-6* Total on-balance-sheet and off-balance-sheet open foreign exchange position of the banking system**

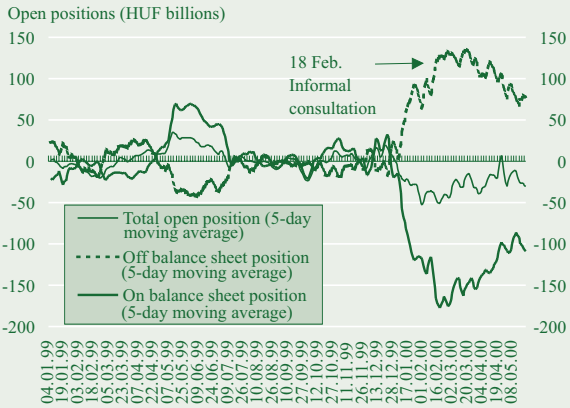
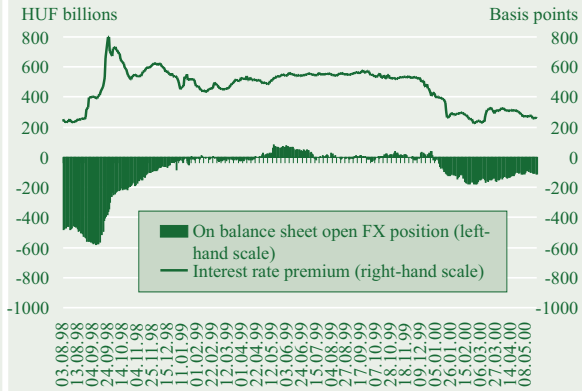


***Chart II-7* On-balance-sheet foreign-exchange open position of the banking sector and interest premium on HUF financial assets**



Nevertheless, the National Bank's verbal intervention was not the only factor at work in the adjustment of positions starting in late March. At that time, investors started to display a greater degree of risk aversion. The fall in the NASDAQ index on April 3rd marked the beginning of a tendency by investors to review their risk exposure and rearrange their portfolios. This period was marked by expectations of interest rate hikes by the Fed and the ECB. The aforementioned factors made the premium on the returns of forint-denominated assets less alluring to investors. The interest rate premium on the forint rose from 2.25% in late February to 3.2% on April 3rd, which proved to be only temporary jump, as there has since been a sharp downturn (to 2.6% on May 17th). Changes in the expectations relating to forint instruments is reflected in the clear decline in non-Hungarian residents' government security holdings by the end of the period *(see Chart II-7)*.

2 Yield curve, interest rate and inflation expectations

The March *Report* tracks events and their implications in the government security market through to mid-February. In the three months since then the yield curve has first shifted downwards and later upwards, and is now standing at a position 50 basis points above that recorded in mid-February.

The dramatic decrease in yields, first observed last autumn, continued until March 10th. From mid-February, zero coupon bond yields fell by another 50-100 basis points, depending on the remaining time to maturity, causing the yield curve to become slightly steeper. In the period from October to March the fall in

yields amounted to 400-500 basis points, depending on the time to maturity *(see Chart II-8)*.

The ongoing decline in returns seems to be rooted in the factors pinpointed in the March *Report,* namely the drop in the risk premium on the forint and a higher likelihood of appreciation. The moderation of the risk premium seems to be at least partly due to an improvement in the international perception[1] of emerging market risk.

March 10th was a turning point in the history of Hungarian yields, marking the date when the central bank announced its intention to auction a three-month instrument on a weekly basis as a means of stabilising short-term market yields. This announcement was construed by market participants as signalling the central bank's intention of raising short-term interest rates. Consequently, the three-month benchmark yield rose by 77 basis points over the two working days following the announcement, hand in hand with a similar rise in longer-term yields. However, the exact level of short-term interest rates regarded as acceptable by the central bank was only driven home to the market after the first auction had taken place. After the first auction, the three-month benchmark rates stabilised at around 10.7–10.8 %, which is partly attributable to the central bank's insistence on keeping the average yields established in the course of the auctions at this level. By contrast, two-week deposit rates were cut on two occasions (by 50 basis points on March 23rd and 25 basis points on April 25th) as a means of making the three-month NBH bills more attractive and also increasing the average time to maturity of the stock of sterilisation instruments *(see Chart II-2)*.

Despite the higher interest rate level, foreign residents' government security holdings expanded at a much slower pace than in February, and even began to contract in April and May *(see Chart II-10)*. In late May the stock of such securities approached the level existing in mid-February, but the portion of government securities with shorter than one year to maturity was down by HUF 50 billion on the value for February. The lengthening of the average time to maturity of the government stock portfolio held by non-domestic residents reflects the decline of market participants' expectations of the imminent widening of the band and appreciation of the forint, prevalent during the first two months of the year. After mid-March the central bank only had to intervene at the strong edge of the band to a negligible extent, simultaneously with the forint occasionally drifting from the strong edge of the band by as much as 30–40 basis points.

The success of the central bank's attempt to raise the level of domestic interest rates without an increase in capital inflows owed a great deal to external effects. First, the ECB and the Fed also increased their relevant rates considerably over the period under review. Second, flagging global investor confidence and growing uncertainty about capital markets in developed countries were also among the factors at work. The most conspicuous symptom of the trend was the sharp fall in the NASDAQ index, reflecting the performance of the American high-tech sector. Between November 1999 and March 2000 the NASDAQ Composite index climbed at a steady pace, growing by roughly 70%. By a cu-

***Chart II-8* Zero-coupon bond yield curves**

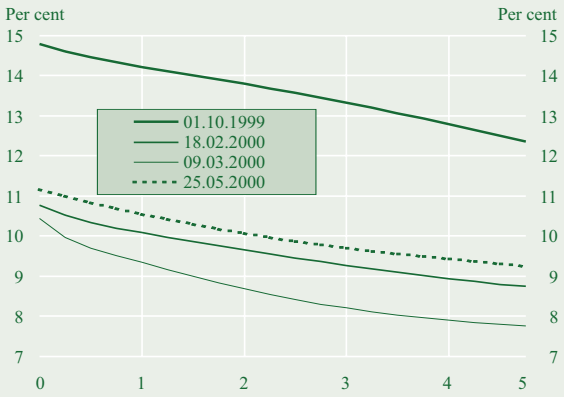


***Chart II-9* One-year spot rates and implied one-year rates one, two and three years ahead**

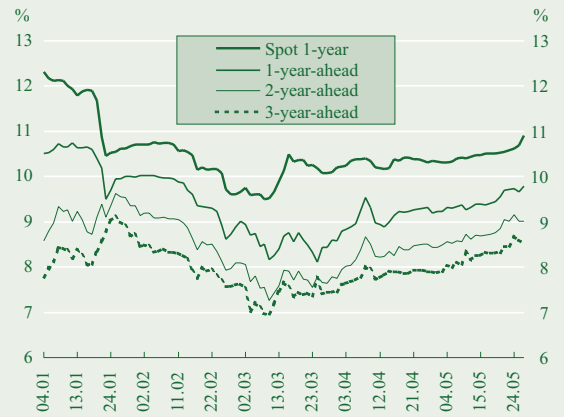
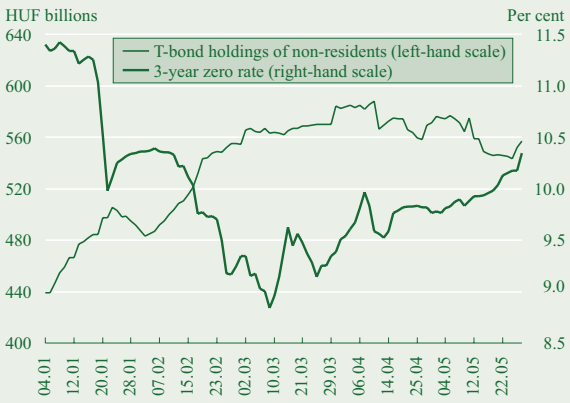


***Chart II-10* Government stock held by foreign residents, as registered by KELER, and three-year zero-coupon bond yields**



[1] Between mid-February and March 10th, there was an approximately 100-basis-point drop in the spread above the US Treasury bond yields of the EMBI+ bond portfolio index, compiled by J.P. Morgan as an indicator of emerging country risk.

Chart II-11 **Emerging market risk premia and the new economy**

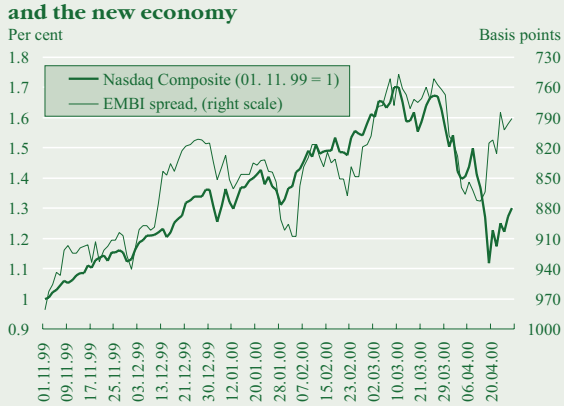


Chart II-12 **Reuters survey of macroeconomic analysts' inflation expectations**
(year-on-year inflation in December)

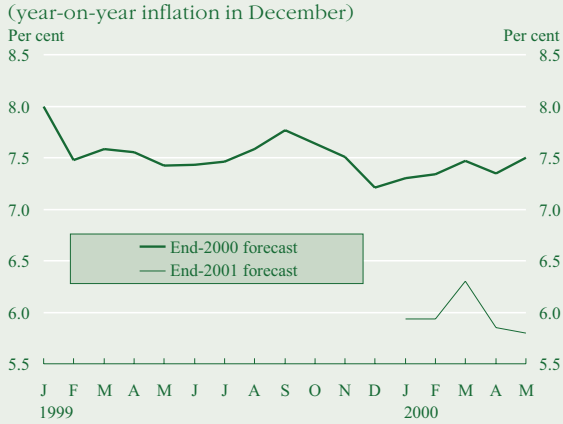


Chart II-13 **Commercial bank rates and market yields**

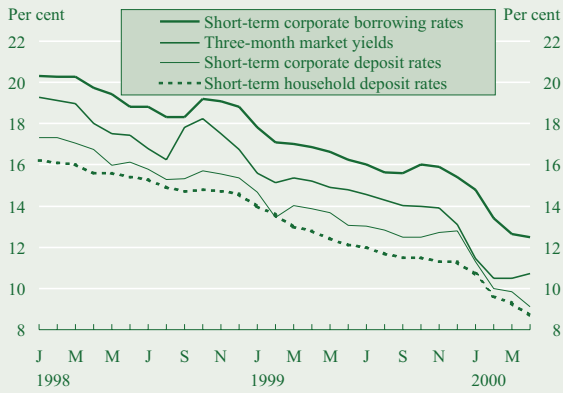
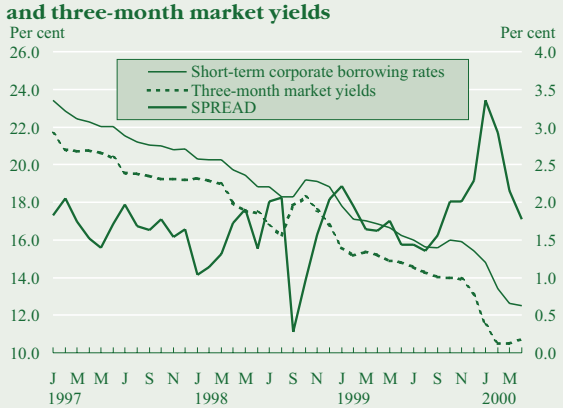


Chart II-14 **Short-term corporate borrowing rates and three-month market yields**



rious coincidence, it hit an all-time peak exactly on March 10th (the day the auctioning of the National Bank bills was announced). However, later in March the index dropped, plunging by as much as 35% by March 24th compared with its earlier peak. The uncertainty surrounding the US capital market apparently had an adverse impact on the risk premium on the emerging markets as well. This is implied by the over 100 basis point rise in the EMBI spread, reflecting emerging country risk, which occurred in the aftermath of the fall in the NASDAQ index. Contagion seems to have worked in a reverse direction this time, with an advanced economy's capital market being the source of uncertainty and emerging markets becoming the victims *(see Chart II-11)*.

The favourable news on Hungarian economic fundamentals (the January and March balance of payments current account deficits announced in March and May respectively turning out much lower than anticipated by the market, industrial production gathering pace and the fiscal deficit being kept under control) has failed to counterbalance the impact of weakening global investor confidence.

For the period from March to May the Reuters survey of domestic inflation expectations shows no significant rise in either this year's or next year's CPI inflation expectations *(see Chart II-12)*.

This implies that the central bank has successfully halted the decline in domestic real interest rates, and even achieved a slight rise. However, this was partly the result of external effects: first, the rise in short-term euro and dollar interest rates and second, the contagion to emerging markets of the increased uncertainty caused by the weakening of the US capital market and the resulting increase in the required risk premia.

3 Interest rate policy of commercial banks

Commercial bank interest rates in 2000 Q1 appeared to be consistent with the expectations described in the National Bank's March *Report*, notably that banking sector lending and deposit rates followed, with a certain lag, the decrease in market yields beginning in the final quarter of 1999 *(see Chart II-13)*. By April, the spread between rates on credit for the corporate sector and market yields, as well as between market yields and household deposit rates, had returned to the earlier equilibrium rate *(see Chart II-14)*. According to the chart, displaying the path of short-term interest rates, corporate deposit rates responded most quickly to the fall in market yields. The stability of the spreads seen over the past three years proves the effectiveness of the transmission mechanism between market and commercial bank rates. Spreads have only temporarily diverged from the long-term equilibrium level and that only on two extraordinary occasions: first in the aftermath of the Russian crisis and then at the time of the downturn in yields in late 1999 and early 2000. The persistently low spread levels now prevailing reflect the sharp competition amongst commercial banks and, in respect of deposit rates, the effect of disintermediation.

Although there were certain adjustments in household deposit rates to the changes in market yields in the first quarter, the current level of deposit rates cuts deeply into the profitability of the household operations of commercial banks, which have em-

barked on an aggressive campaign for funds from individuals over the past few years. Investing strongly in the establishment of branch networks and implementing information technology development projects are sapping the earnings in this line of financial services. As an increasing number of banks are attempting to offset the costs of liabilities from households by focusing on highly profitable lending to individuals, it is no coincidence that household credit rates have been falling at a rather slow pace over the past two years. Thus, interest rates on credit to households appear to be the most reluctant to follow the recent decline in yields, causing the margin between household lending rates and deposit rates (that is, the general level of interest rates) to widen and reach 13 percentage points in April. Nevertheless, household demand for consumer credit continues to grow, with the value of new lending extended by financial institutions amounting on average to HUF 40 billion a month during the first quarter. The implication is that considerable demand for new loans relieves the banks from the need to make a major cut in their lending rates *(see Charts II-15 and II-16)*.

4 Monetary aggregates

Over the first four months of 2000, real M3 growth was basically flat, while April saw a significant expansion in M1 and M4 in real terms. The behaviour of the aforementioned monetary aggregates is based on various underlying trends. Real growth in households' M1 was flat to falling over the past quarter, while growth in M3 and M4 held by households has been losing momentum since 1999 Q1. By contrast, the share of monetary aggregates held by other economic agents – primarily companies – showed robust growth in real terms. While M3 has been steadily expanding since mid-1999, the rise in M1 and M4 started at the end of 1999 *(see Charts II-17 and II-18)*.

The outstanding growth in the corporate component of M4 stems from high corporate profitability and the less-than-full rate of capacity utilisation. For the time being, the latter factor relieves companies of the need to finance large-scale investment projects. Thus, excess funds from the high level of profitability are held in the form of various liquid and non-liquid assets, which are also constituents of the monetary aggregates.

The growth in households' monetary aggregate holdings is determined by their financial wealth and assets portfolio decisions, i.e. demand for money to be used in transactions.

As noted in the March *Report*, the trend in households' portfolio decisions is determined to a great extent by the process of financial disintermediation. Hence the growing weight of securities holdings outside the banking system in households' portfolios. At the same time assets held by the banking sector have also been subject to some restructuring, with the share of liquid assets increasing at the expense of deposit accounts. This is partly due to the rising standard of services associated with more liquid assets, and partly to the fact that disinflation entails a fall in the opportunity cost of holding liquid assets.

The long-term tendencies outlined above were clearly visible over the past quarter in respect of deposit accounts, as their weight continued to fall within households' net financial wealth. At the same time, the growth in the share of sight deposits all but

***Chart II-15* Spreads between yields on government securities and household deposit rates**

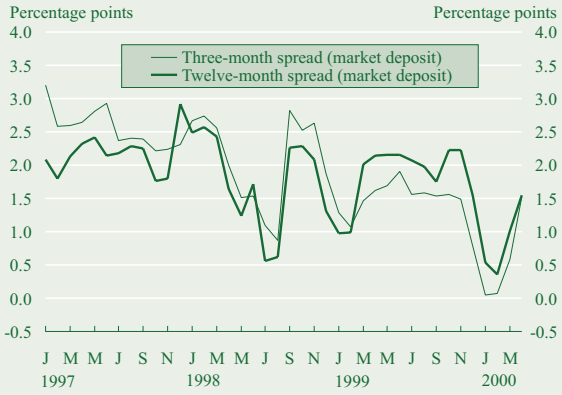


***Chart II-16* Household borrowing**

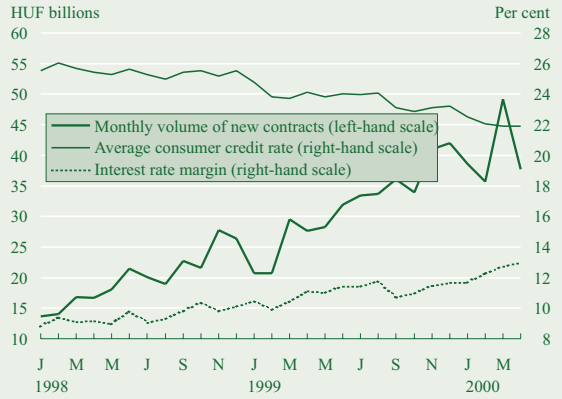


***Chart II-17* Real growth rate of monetary aggregates**
(Three-month moving average, same month of a year earlier = 100)

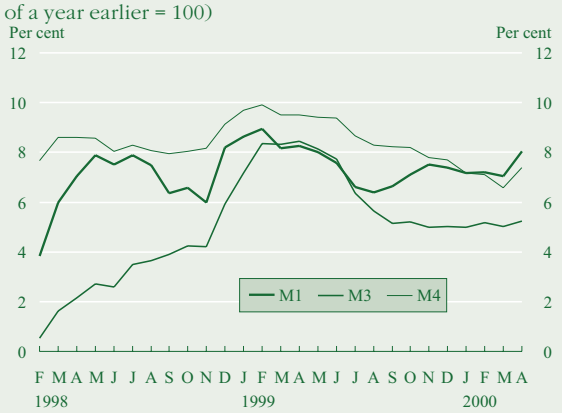


***Chart II-18* Real growth rates of the components of M1** (Three-month moving average, same month of a year earlier = 100)

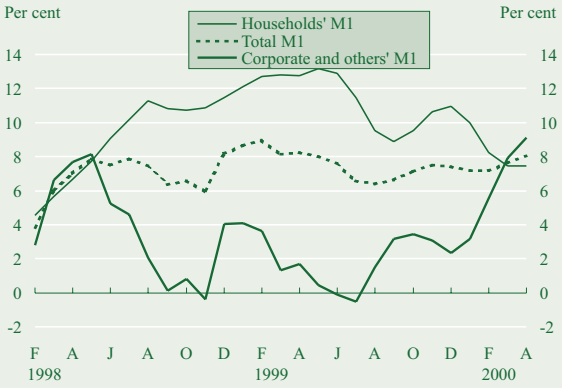


Chart II-19 **Real growth rates of M4 components**
(Three-month moving average, same month of a year earlier = 100)

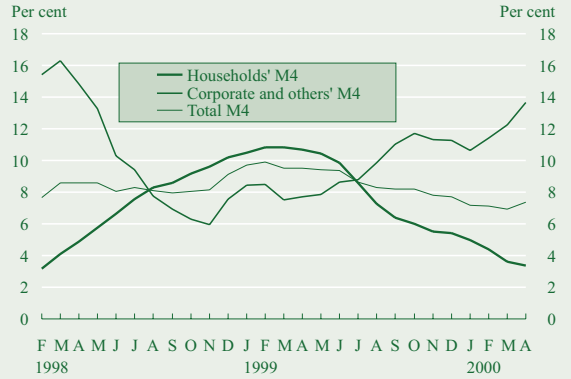


***Chart* II-20 Real growth rate of households' net financial wealth** (Three-month moving average, same month of a year earlier = 100)

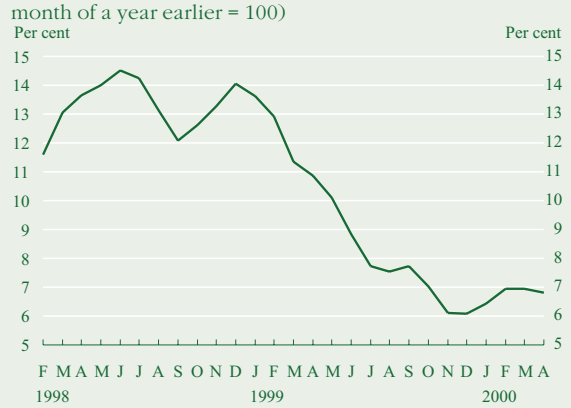


Chart II-21 **Velocity of circulation of M1** (1997 Q1 = 1)

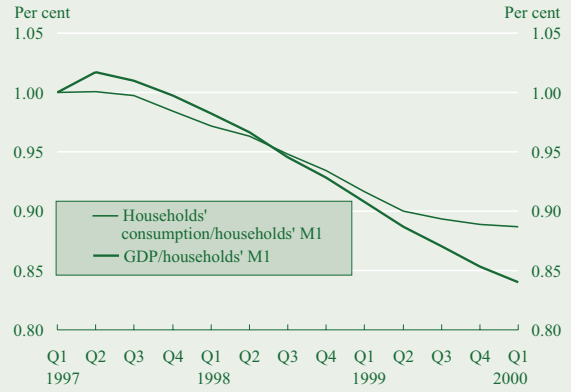
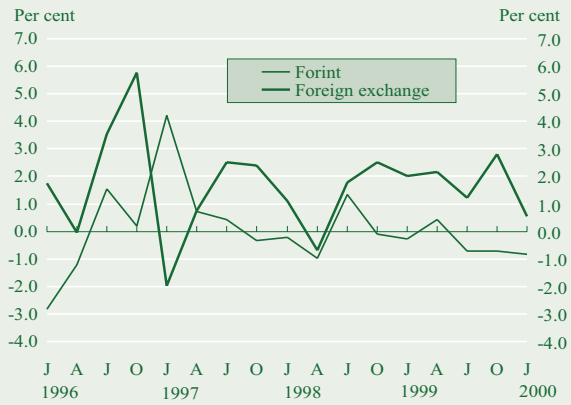


Chart II-22 **Seasonally adjusted net corporate borrowing transactions as a percentage of GDP**



stopped after the final quarter of 1999, but this year has seen it increase again slightly. The share of non-banking sector securities within the total portfolio has increased, but the share of government securities has been on a decline since the beginning of the year, compared with the earlier robust growth. The declining weight of government securities within the portfolio can be explained by the fall in yields beginning at end-1999. As from January on this has also induced a decline in deposit rates, this may also be a factor in the declining weight of deposit accounts.

Until the end of 1999, the slowdown in the real growth of households' holdings of monetary aggregates could be attributed to the declining growth of households' real wealth. This trend, however, turned around at the beginning of the year and is now expanding rapidly. Hence, an explanation for the changes in monetary aggregates should be sought in the portfolio decisions made by households. Real growth of individuals' M1 holdings relies heavily on changes in cash stocking. While last December saw an exceptionally high portion of notes and coin in individuals' portfolios, as a result of the effect of the millennium date change, the beginning of 2000 witnessed a sharp decline and then a slight rise again. A crucial component of M3 is the stock of deposit accounts. The dwindling role of such accounts in households' portfolios is reflected in the falling real growth rate of M3 held by individuals. M4 comprises M3 and the stock of government securities. As the share of the latter also contracted in households' portfolios, real growth in M4 also lost momentum *(see Charts II-19 and II-20)*.

Individuals' demand for money used for transactions is characterised by the velocity of circulation. Both indicators calculated by the Bank show that the velocity of M1 is holding to the downward trend seen in the past two and a half years, a sign of increasing demand for transactional money *(see Chart II-21)*.

5 Demand for credit

Net borrowing by the corporate sector adjusted for seasonal effects declined perceptibly over 2000 Q1. This is broadly due to the fact that the pick-up in exports to both the domestic market and the EU had a favourable impact on companies' profit-creating ability, in parallel with a subdued rate of investment activity, resulting in less need for external funds. Another factor at work in the lower demand for credit was the effect of earlier worries relating to the year 2000. The uncertainty surrounding the millennium date change had encouraged economic agents to maintain a higher proportion of liquid assets. Following the date change, the return to the level of liquidity regarded as being more desirable over the long term dampened demand for credit *(see Chart II-22)*.

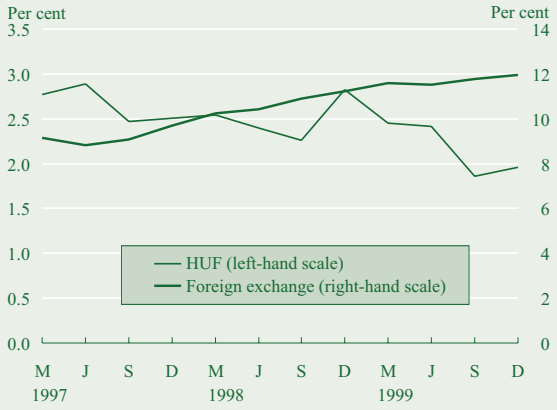
The structure of corporate financing followed the same trend as in 1999. The low leverage of Hungarian companies (by international comparison) has been financed by foreign currency borrowing. While the stock of lending in forints still exceeds forint assets, the corporate sector has built up a net saving position in respect of transactions over the last one and a half years. The composition of financing has undergone interesting changes, with the domestic banking system clearly shifting its lending to foreign exchange assets: since 1999 Q4 foreign exchange lend-

ing to businesses has considerably outstripped forint loans. Despite the lower interest income on foreign exchange credit, this state of affairs is not necessarily disadvantageous to banks, since this way they can decrease their foreign exchange short positions, which are restricted by banking regulations.

Domestic foreign exchange lending remained strong in the first quarter, but was offset by the upsurge in foreign exchange assets. Thus there was a fall in companies' net foreign exchange borrowing, the key factor in the improvement of the aggregate position. The rise in claims on foreign residents is primarily due to the swelling foreign exchange bank accounts of companies entitled to hold foreign bank accounts, and is thus concentrated in only a handful of major companies. As the rise in foreign bank assets was not accompanied by a perceptible rearrangement in the domestic balance, its main source is considered to be fast-growing export receipts.

In view of the easy access to foreign-exchange financing and the interest premium on the forint, this seems to be completely sensible behaviour on the part of companies enjoying naturally hedged positions on account of their prospective export receipts. The most recent period has seen a significant amount of investment activity aimed at establishing non-tradable service capacities priced in forint terms. As a matter of course, the financing of such investment projects in foreign currency entails an exchange rate risk. Thanks to expectations of trend real appreciation, this risk appears to be acceptable to most companies engaged in the services sector. The unhedged foreign exchange position of the corporate sector played a major role in contagion from the Asian crisis. As Hungarian companies have relatively low leverage and the international integration of the Hungarian corporate sector is much more advanced than that in South-East Asian countries, there is much smaller likelihood that the financing characteristics of the sector will pose a risk to the system *(see Chart II-23)*.

Chart II-23 **Corporate sector net debt as a proportion of trend GDP**



III. Demand

Chart III-1 **Contribution of domestic absorption and net exports to GDP growth**

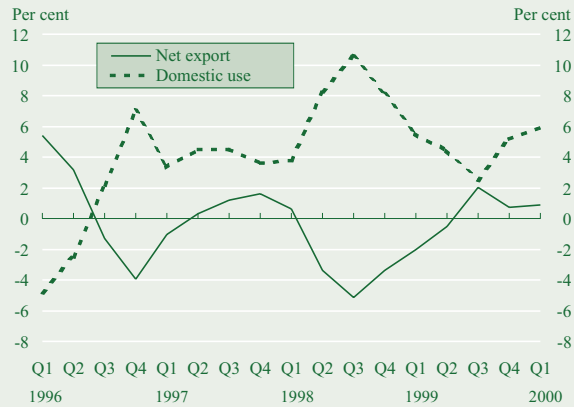


Table III-1 **Annual GDP growth and its components***
(Relative to the same period a year earlier)

Per cent

	1999					2000
	Q1	Q2	Q3	Q4	Total	Q1
	Preliminary figures Central Statistical Office					NBH estimates
Final consumption	4.6	4.4	4.3	3.8	4.3	3.6
Household consumption	4.5	5.0	4.5	4.4	4.6	4.0
Public consumption	4.6	1.4	2.8	0.1	2.2	1.2
Gross capital formation**	7.6	4.0	–1.6	7.6	4.3	11.1
Fixed capital formation	6.4	6.8	4.2	8.1	6.6	7.0
Total domestic absorption	5.4	4.3	2.4	5.0	4.3	5.7
Exports	9.5	9.8	13.6	18.9	13.2	21.1
Imports	12.9	10.2	9.3	16.6	12.3	18.3
GDP	3.5	3.9	4.5	5.9	4.5	6.8

* The Bank's quarterly GDP estimates are based on the quarterly GDP data published in April 2000 by the Central Statistical Office for the period 1995-1999. The estimates are consistent with the Bank analyses describing the income positions of individual 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 absorption items**
(Year-on-year)

Per cent

	1999					2000
	Q1	Q2	Q3	Q4	Total	Q1
	Preliminary figures Central Statistical Office					NBH estimates
Final consumption	3.4	3.1	3.0	2.7	3.0	2.7
Private consumption	2.9	3.0	2.7	2.7	2.8	2.6
Public consumption	0.5	0.1	0.3	0.0	0.2	0.1
Gross capital formation*	2.1	1.3	–0.5	2.5	1.4	3.2
Fixed capital formation	0.9	1.4	1.1	2.8	1.6	1.0
Total domestic absorption	5.5	4.4	2.5	5.2	4.4	5.9
Exports	5.0	5.2	7.3	10.1	7.0	11.7
Imports	–7.0	–5.7	–5.3	–9.4	–6.9	–10.8
Net exports	–2.0	–0.5	2.0	0.7	–0.1	0.9
GDP	3.5	3.9	4.5	5.9	4.5	6.8

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

The upswing in Hungarian economic growth which began in early 1999 continued over the first few months of 2000. In the first quarter, GDP expanded by 6.8% relative to the same period the year before. This acceleration took place with a stronger contribution by domestic absorption to GDP growth. Net exports on national income accounts made a smaller contribution (0.9%, as stronger export growth and the higher demand for imports, concomitant with the increase in domestic demand, have counterbalanced each other *(see Chart III-1)*.

Of the components of domestic absorption, the role consumption played in the expansion of GDP remained unchanged in the first quarter. Against a 2% rise in disposable incomes, the volume of household consumption exceeded the level for the previous year by 4%, whereas the volume of public consumption grew by a mere 1.2% *(see Chart III-1)*.

Despite the improvement in external sales opportunities, robust domestic demand and the favourable financial position of businesses, investment growth remained subdued during the first quarter. As the level of available technical capacities and sales prospects in the manufacturing industry (which accounts for about one-fourth of all investment projects) generally appear to be well balanced, capacity shortages have not yet provided sufficient impetus to trigger stronger investment activity. At the same time, investment in the area of market services continues to be strong, even though there has been a delay in the start of the motorway construction project. There is no evidence in first quarter data of a significant rise in home-building projects. Whole-economy capital formation rose by a total of 7% relative to a year earlier.

Stockbuilding, the other major capital formation item, made a significant contribution to GDP growth in the first quarter, along with other unspecified components of absorption. The majority of inventories consist of manufacturing and retail stocks. The level of manufacturing output inventories[1], accounting for about one-fourth of all inventories, rose at a higher rate than in 1999, partly as a natural consequence of the jump in manufacturing production (up by 20.7%). Looking at domestic manufacturing sales, the volume of products sold for further processing was considerably higher than the previous year (by 10%), which, in addition to increased output growth, presumably also entailed a faster rise in the level of input stocks. This tendency was reinforced by the robust growth in imports of intermediate goods *(see Table III-2)*.

[1] Based on industrial statistics.

Similar to previous quarters, buoyant external activity facilitated Hungarian economic growth in 2000 Q1. The performance of Hungarian exporters was assisted by the strengthening cyclical positions in both euro-area and CEFTA countries, but the recovery in CIS countries failed to feed through to the Hungarian economy.

In the first quarter, the growth rate of export volumes recorded on the national accounts (21%) considerably outstripped that of imports (18%), entailing a further deterioration in the terms of trade (by approximately 2%). The weaker terms of trade were predominantly due to rapidly rising prices for energy and commodities. It is important to note that a key factor in the exceptionally strong annual export growth recorded on the national accounts for 2000 Q1 is the effect of the low base, whereas short-term trend indices indicate a slowdown.

1 Household consumption

Over the first months of 2000 the real disposable income of households expanded at a lower rate, with operational income rising by a mere 1.8%. The various income types grew at differing speeds, with net earnings up by 4.1%, higher than the rate of total income growth. By contrast, cash benefits in real terms were 2.5% down on a year earlier, owing to the slowdown in the growth of nominal pensions and unemployment-related transfer payments and the flat level of cash family allowances *(see Table III-3)*.

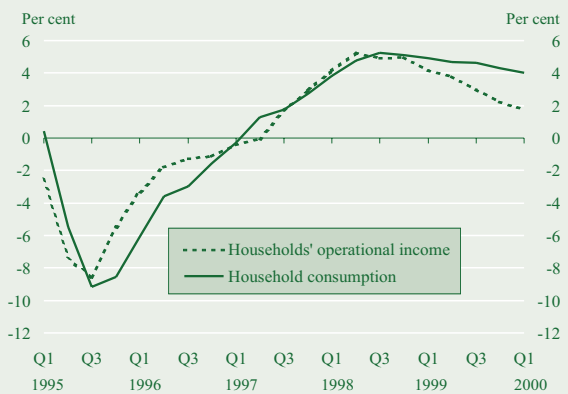
Table III-3 **Annual growth of households' income and consumption**
(Percentage change, year-on-year)

	1998	1999	2000 Q1
Income	4.0	2.8	2.0
Operational income	4.7	3.6	1.8
Consumption	4.9	4.6	4.0

Household consumption continued to grow at a faster pace than operational income, which is total income less the portion of interest receipts compensating inflation. This is partly due to consumers attempting to smooth their consumption. Optimistic income expectations are natural accompaniments of economic growth. A retroactive rise in pension payments will probably take place in the second half of the year. An increasingly broad range of the population is able to smooth out their consumption by taking advantage of the growing opportunities to access consumer credit.

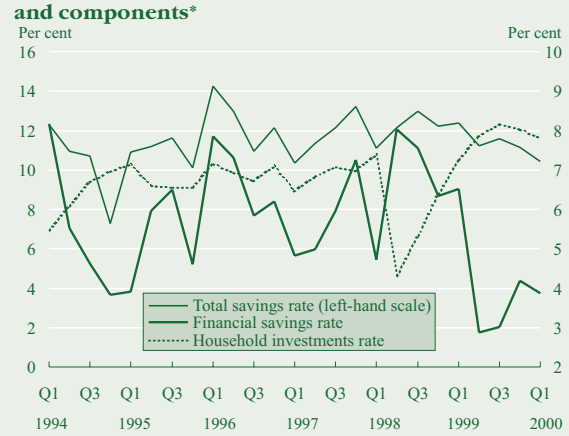
As a result of consumption growing faster than income, households' gross savings rate[2] has continued to decline slowly. Both the investment rate and the financial saving rate are fluctuating around the level prevalent in the second half of 1999, with the financial saving rate down 2.6 percentage points on a year earlier. One third of this decrease is explained by the continued growth in individuals' debt to the banks. Households' operational borrowing in the first quarter amounted to approximately HUF 19 billion, corresponding to the average quarterly rate seen in 1999. Thus, households' net borrowing rate is slightly higher than at the end of 1999. The indebtedness of the household sector is still very low by international comparison, which seems to reinforce expectations of increasing borrowing transactions by households *(see Chart III-2)*.

Chart III-2 **Real growth rate of household consumption and operational income**
(Percentage change, year-on-year)



[2] All savings rates mentioned in this section are operational categories and are seasonally adjusted.

Chart III-3 **Changes in household saving rates and components***

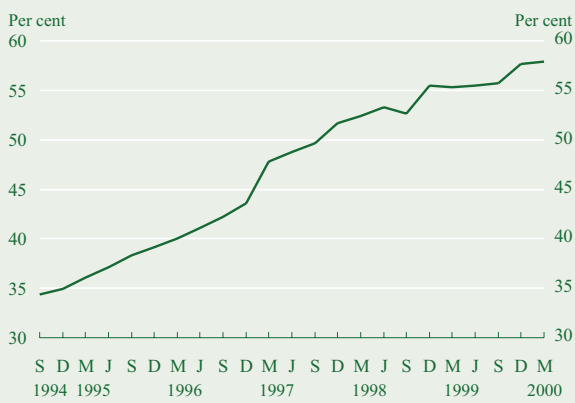


* Seasonally adjusted data as a percentage of disposable operational income.

Chart III-4 **Net borrowing by households***

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

Chart III-5 **Household net financial wealth as a percentage of trend disposable income**



Households have continued to shift their financial investments out of the banking sector. Although the value of bank deposits grew by over HUF 70 billion in January, this was predominantly due to the fact that cash stocks held on account of worries about the millennium date change were redeposited in the banking system. The subsequent months of 2000, however, have witnessed a net withdrawal of deposits, and the re-channelling of these funds into other types of financial assets as households rearrange their portfolios. The most popular choices include investment trusts, which reflects the confidence Hungarian individuals have vested in the capital market, and thus, the Hungarian economy.

The growing popularity of investment trusts was not accompanied by an increase in demand for equity shares. Households' weak demand for Treasury bills and government bonds may be associated with the decline in yields. The ongoing expansion of pension funds comes as no surprise and is very likely to be incorporated in the portfolio structure of individuals for a long time to come due to the nature of the pension reform. Households' financial wealth rose by HUF 163 billion over the first quarter, with over 40% (HUF 67 billion) coming from gains on foreign currency deposits and equity transactions *(see Charts III-3, III-4, III-5)*.

2 Investment

2.1 Fixed investment

In 2000 Q1, whole-economy investment grew by 7% in real terms, relative to the same quarter a year earlier. This weak growth in the first quarter deserves special attention for a number of reasons: the increase in external activity and the rising number of orders should have spurred stronger investment growth. First-quarter manufacturing performance (up 20.7% year-on-year) would also indicate stronger growth. This phenomenon is especially conspicuous in respect of the manufacturing sector, where investment growth was as low as 2.5% in the first quarter, compared with 7.7% last year *(see Table III-4)*. One possible explanation is that the exceptionally strong investment activity seen in 1998 (amounting to a roughly 24% increase in manufacturing) created capacities that are apparently sufficient to satisfy the expanding demand, even at the beginning of 2000.

The explanation presented above seems to be reinforced by business surveys conducted at the beginning of 2000. These surveys indicate expectations of a continued recovery and an increase in orders by manufacturing enterprises, most of which intend to step up investments. At the same time, the study conducted by TARKI[3] shows that while 35% of the companies surveyed are planning to implement investment projects in the course of the first half of 2000, the percentage for the year as a

[3] Exceptionally good prospects, more balanced growth (Status and prospects of largest manufacturing firms on the basis of data collected in January 2000), TARKI, Budapest, March 2000.

whole is about 7% higher. This implies that investment growth may gain further momentum, providing that favourable market conditions persist into the second half of the year. Another inference that can be drawn from the survey is that, in contrast with last year when due to less benign market conditions, 'investment activity was much more typical of firms with higher profitability and better growth potential',[4] this year these aspects are no longer included among the factors determining investment growth.

Annualised growth rates computed from seasonally adjusted series on manufacturing investment do not indicate any prospective decline in investment growth on the basis of first-quarter performance. Expectations of favourable market prospects and rising capacity utilisation for the year as a whole also imply more robust growth. Although data on investment goods imports do not rule out a stagnation in machinery imports, it is still unclear to what extent this would affect the overall investment rate.

Market services investment remains buoyant. Hotels and catering continue to be in the focus of investment growth (amounting to over 15% in 1999 as a whole and to 14.5% in 2000 Q1). After bottoming out last year, the transport, postal services and communication sector registered volume growth of 36.7%, based primarily on the performance of the postal services and communication categories, because of the delay in motorway construction. In general, these two categories account for an approximately 50% share in the sector's investment performance.

Investment growth in the retail and wholesale sector stood at around half of the level for 1999 Q1 (5.2%), and performance in the financial services sector also remained subdued, similar to last year. The effect of the new housing subsidy system has not yet fed through to the real estate sector, as is apparent in the number of new dwellings, which has remained basically the same as in 1999 Q1. Nevertheless, investment activity is likely to pick up later in the year, in view of the steady rise in the number of building permits issued since the beginning of 1999. The 30% year-on-year increase in the number of permits issued in 1999, appears to be continuing in 2000 (up 31% on 1999 Q1).

Investment activity in certain non-material services (including public administration, health and education) has been exceptionally strong. Nevertheless, investment in these areas is so low in absolute terms that even one or two projects with a negligible value at level of the national economy may cause volume indices to surge, resulting in strong volatility in these categories.

In respect of the material and technical composition of investment, in 2000 Q1 machinery investment expanded at a significantly higher rate than construction investment (though the latter saw a 2.5% rate of growth in real terms, compared with the slowdown seen in 1999 Q1). This is also reflected in the fact that in 2000 Q1 investment in the construction industry

Table III-4 **Whole-economy investment in terms of volume indices**
(Equivalent quarter a year earlier = 100%)

Per cent

National economy sectors	1999 Distribution (%)	1999 Q1	1999 Year	2000 Q1
Agriculture, hunting and forestry, fishing	3.29	117.3	96.7	84.3
Mining	0.42	174.2	149.6	82.6
Manufacturing	26.08	100.9	107.7	102.3
Electricity, gas, steam and water supply	6.95	127.5	103.8	95.3
Construction	1.95	136.8	112.1	105.3
Material production, total:	*38.68*	*107.5*	*106.5*	*99.9*
Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods	7.55	110.6	113.2	105.2
Hotels and restaurants	1.08	87.7	115.7	114.6
Transport, storage, postal sesrvicses and communication	17.93	96.9	101.9	136.7
Financial intermediation	2.83	99.7	90.5	92.1
Real estate, renting, business acitivities and housing investment	19.16	100.5	111.6	99.2
Material services, total:	*48.55*	*100.3*	*106.7*	*112.2*
Material production + material services, total:	87.23	*103.7*	*106.6*	*106.2*
Public administration and defence, compulsory social security	4.28	133.3	127.0	147.9
Education	2.03	169.2	115.9	115.8
Health and social work	2.13	100.8	90.1	116.3
Other community, social and personal services activities	4.33	119.3	95.7	88.4
Non-material services, total:	*12.76*	*124.9*	*106.3*	*117.6*
Total	**100.00**	**106.4**	**106.6**	**107.0**

[4] Exceptionally good prospects, more balanced growth (Status and prospects of largest manufacturing firms on the basis of data collected in January 2000), TARKI, Budapest, March 2000, page 23.

***Chart III-6* Changes in fixed investment**
(Seasonally adjusted, short-base annualised growth rates)

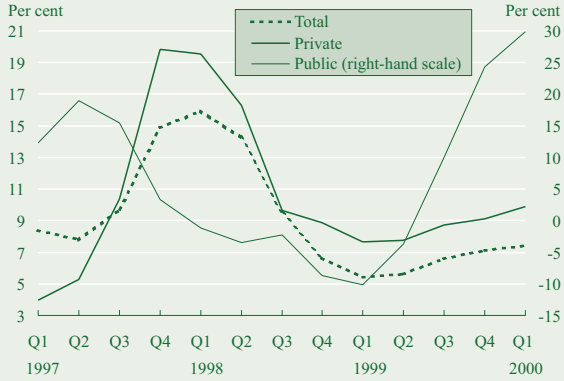
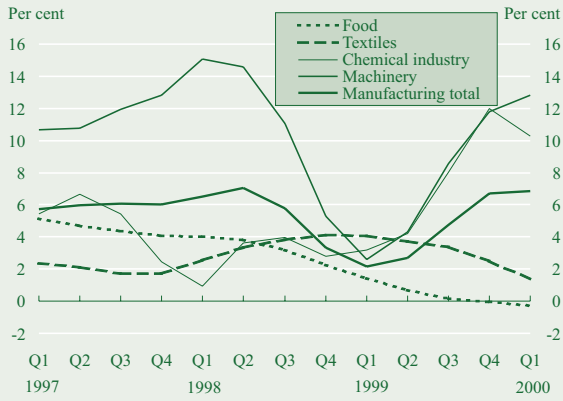
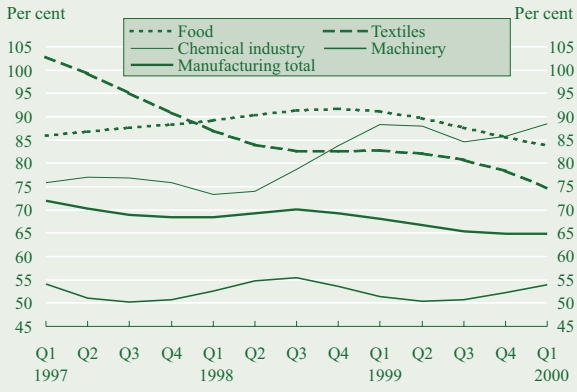


***Chart III-7* Output inventory investment ***
(Previous quarter = 100%)



* At current prices, based on seasonally adjusted data

Chart III-8* Output inventory to sales ratio



*Based on seasonally adjusted inventories and sales data.

grew at a moderate rate of only 5%, compared with the same period the year before. Stronger residential construction activity and the commencement of motorway construction are likely to result in a rise in the share of construction investment, but it is questionable as to whether the impact of these factors will be felt in 2000.

An analysis of investment projects in terms of income holders shows that in 2000 Q1 the public sector experienced the highest growth rate. This is mainly due to the fact that the 1999 base data were extremely low as a result of fiscal restraints. Nevertheless, the rate of public investment tends to show great volatility as it is more dependant on economic policy decisions than on the cyclical position of the economy. Hence, strong activity early in the year is not necessarily an indicator of an upward trend for the year as a whole *(see Chart III-6)*.

As far as private sector investment is concerned, year-on-year indices reflect moderate growth, but the rate is not flat even in terms of seasonally adjusted data. In addition to the corporate sector, the household sector is also expected to step up investment activity in the second half of the year based on the expected increase in home building activity. Meanwhile, households are likely to continue transferring part of their savings into real investment, but at a slower pace than last year.

2.2 Inventory investment

As noted in the previous section, the recovery in inventory investment during 2000 Q1 contributed significantly to GDP growth. No actual data on inventory levels is available for the first quarter, but the Bank has calculated its own estimates of manufacturing output stocks (see the June 1999 *Report,* page 32), comprising mainly finished and semi-finished goods, on the basis of the industry statistics published by the Central Statistical Office. Data on manufacturing input stocks, including raw materials, as well as inventories held by other sectors, are available only up to the final quarter of 1999. Similar to the previous reports, what follows is an analysis of the inventories held by the manufacturing industries, which are crucial for economic performance. Manufacturers' inventory stocks account for roughly 60% of whole-economy inventories, with output and input stocks accounting for largely equal shares.

In the first quarter, the level of manufacturers' output stocks rose sharply, by nearly 23% at current prices, relative to 1999 Q1. The increase primarily affected machinery and chemical industry stock levels. The stronger inventory investment seen in these two sectors took place against the background of accelerating sales. Thus, the rise in inventory levels can be regarded as a sign of optimistic business expectations. In spite of buoyant sales, the stocks to sales ratio has risen slightly in respect of both sectors, which seems to support the above inference *(see Charts III-7 and III-8)*.

Although there are no data available on input stocks for 2000 Q1, figures for the end of last year reflect a jump in the level of manufacturing input stocks, with special regard to those held by the mechanical engineering sector. The interruption in inventory investment that occurred during the Russian crisis was corrected

in 1999: in the second half of the year, the level of machinery input stocks (at current prices) was up by nearly one-fourth over the comparable level of the previous year. As noted above, the level of manufacturing input stocks probably continued to grow over 2000 Q1.

3 The fiscal stance

The SNA-type primary balance improved by 2.1% of GDP, relative to 1999 Q1; thus general government restricted aggregate demand by this amount. If the adverse effect of the base period[5] is removed, then the extent of demand restriction effected in the first quarter only amounts to 0.5% of GDP, which is not far off the 0.1% rate scheduled for the year as a whole (*see Chart III-5).*

Nevertheless, a significant amount of the 2.1% improvement on the primary balance can be traced to temporary factors. The deficit in 1999 Q1, representing the base period for 2000 Q1, was unreasonably high compared with the year as a whole. A comparable situation in 2000 could only come about with the large-scale payments of agricultural subsidies, while the pattern of other expenditure and receipt items tends to be more in line with that in 1998, with better seasonality, occasionally exhibiting even better quarterly performances.

1. In January and March, receipts from personal income taxes were exceptionally high, relative to both 1998 and 1999. The change in seasonality[6] in the first quarter temporarily improves the primary balance (with its effect amounting to as much as 0.1–0.2% of GDP), but has a negligible impact on the year as a whole.

2. The lower-than-expected rate of disinflation will boost revenues from taxes, especially VAT receipts, while its negative impact will only emerge in the fourth quarter, via increased expenses on pensions (in 1998 the retroactive rise in pensions also took place later in the year).

3. Net VAT receipts rose markedly in real terms as well, up by 12.9% in the first quarter. The removal of the base effect is of special importance here, as in the same quarter last year there was a one-off loss of considerable VAT revenues *(see Table III-6).* Summing up real growth rates achieved in the first quarters of the two years shows that net VAT revenues expanded by only 4.3%, of which nearly 2% is accounted for by the deferral to this year of VAT payments by tax payers who switched to the system of annual VAT returns. (Net VAT cashflow receipts ap-

Table III-5 **Budget deficit** (GDP %)

Per cent

	1998	1999					2000
		Q1	Q2	Q3	Q4	Preliminary	Q1
1 Central budget balance excluding privatisation	**–3.7**	**–9.0**	**–2.5**	**–1.5**	**0.2**	**–2.9**	**–4.3**
2 Primary balance (excluding NBH)	2.9	1.0	3.0	4.1	5.8	3.6	3.1
3 Interest balance	–7.0	–9.7	–6.3	–5.9	–5.5	–6.7	–7.6
4 Balance of NBH payment and subsidy	0.4	–0.3	0.8	0.3	–0.1	0.2	0.2
5 Balance of segregated funds excl. privatisation	0.1	–0.9	–0.1	0.0	–0.4	–0.4	0.1
6 Balance of Social Security funds excl. privatisation	–0.9	–2.2	–1.1	–1.2	–0.3	–1.1	–1.1
7 Balance of local authorities excl. privatisation	–0.3	2.1	–1.2	0.0	–0.5	0.0	1.3
8 Primary balance of local governments	–0.5	1.9	–1.4	0.7	–1.6	–0.2	1.1
9 General government balance excluding privatisation	**–4.8**	**–10.1**	**–5.0**	**–2.7**	**–1.0**	**–4.4**	**–4.0**
10 Primary balance included in 9	1.6	–0.2	0.3	3.7	3.6	2.0	3.3
11 Accrual-based deficit of general government	**–4.6**	**–8.2**	**–5.8**	**–2.9**	**–2.4**	**–4.7**	**–5.1**
12 Accrual-based primary balance	1.9	–1.0	0.4	2.9	3.9	1.7	2.1
13 Deficit correction by credit transactions	–0.8	0.2	–0.1	–0.1	–0.3	–0.1	–0.2
14 Deficit of Privatisation and Holding Company	–0.7	–0.3	–0.5	–0.8	–1.5	–0.8	–0.9
15 SNA financing requirement 15=11+13+14	**–6.1**	**–8.3**	**–6.4**	**–3.7**	**–4.2**	**–5.5**	**–6.3**
16 SNA primary balance 16=12+13+14	**0.5**	**–1.0**	**–0.2**	**2.0**	**2.2**	**0.8**	**1.0**
17 Effect of the pension reform	0.3	0.5	0.5	0.4	0.6	0.5	0.5
18 Demand effect (changes in lines 16 and 17)	**0.5**	**1.1**	**–0.4**	**–2.5**	**0.5**	**0.1**	**–2.1**

Table III-6 **Changes in VAT in real terms**
(Year-on-year)

Per cent

	1998				1999				2000
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Domestic VAT revenues	4.8	4.2	3.0	–4.8	1.1	6.6	9.1	8.7	17.8
Import VAT revenues*	15.5	18.7	16.7	8.8	–0.2	–1.4	–1.1	11.7	6.6
VAT refund**	7.5	8.4	11.9	10.7	8.9	3.2	–0.7	3.3	12.3
Net VAT revenues	11.8	13.8	7.3	–5.2	-8.6	1.9	8.4	17.0	12.9

* Adjusted by customs surety.
** Based on estimated accrual-based settlement.

[5] In 1999 Q1, the deterioration in the primary balance was due to extraordinary items, causing a disproportionately large portion of the annual deficit appear early in the year. This effect can be easily removed by taking 1998 Q1 as the base period, since the changes in expenditures and receipts over 2000 are more likely to resemble those in 1998 than in 1999. In this comparison, the general government restricted demand by altogether 1% of GDP during the course of two years (1.1% expansion followed by 2.1% restriction). After deducting the fiscal impact of the period between 1998 and 1999 (0.5%), the resulting rate for demand contraction in 2000 Q1 is 0.5%.

[6] The high level of receipts in March is due to high wage payments in February, on account of a higher number of working days (leap year). This one-off effect is expected to raise the monthly income tax index by 4–5%, the quarterly index by only 1.5% and the annual receipts by at most 0.4%.

Table III-7 **Changes in selected public expenditures in real terms***
(Year-on-year **)

Per cent

	1998				1999				2000
	Q1	H1	Q1-Q3	Year	Q1	H1	Q1-Q3	Preliminary	Q1
Pensions (including disability benefits)	4.7	5.4	8.4	9.2	6.9	6.9	4.3	4.1	–1.6
Sick-pay	–4.9	–4.4	–2.0	0.1	1.5	1.7	1.4	2.4	6.1
Social benefits (central budget)	–0.8	–1.4	–2.3	–2.8	–15.9	–1.1	–2.6	0.0	–3.0
Social benefits (local authorities)	26.0	28.9	30.2	26.1	12.5	–0.4	–3.3	–6.0	–11.8
Household transfers, total	**4.1**	**4.8**	**6.7**	**7.0**	**1.9**	**4.5**	**2.2**	**2.5**	**–2.3**
Investment (central budget)	–4.5	12.6	0.7	–12.4	–10.4	–12.4	–3.8	6.1	48.1
Investment (local authorities)	35.1	70.9	9.7	10.7	–8.0	–19.6	–15.2	–11.2	–5.7
Gross investment expenditure	**33.5**	**40.2**	**5.7**	**–1.0**	**–9.0**	**–16.5**	**–10.4**	**–3.8**	**15.3**

* *Source:* Public sector statistics, therefore this item differs from Central Statistical Office figures.
** Using the price indices for public consumption and investment.

Chart III-9 **External demand in Hungary's main export markets**
(Same period a year earlier = 100)

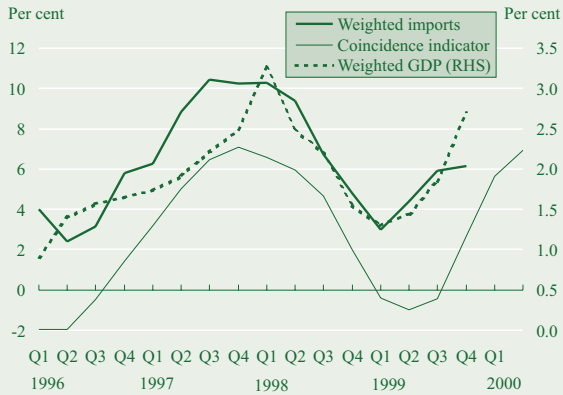


Table III-8 **Main macroeconomic indices of the euro area, I**
(Year-on-year, seasonally adjusted data)

Per cent

	1998		1999				2000
	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Real GDP	2.6	1.9	1.9	2.0	2.5	3.1	
Domestic absorption	3.5	3.3	2.9	2.9	3.0	2.6	
Private consumption	3.3	3.1	2.8	2.4	2.4	2.8	
Public consumption	1.2	1.0	1.5	1.3	1.6	1.4	
Gross fixed capital formation	4.8	3.9	4.0	5.5	5.1	4.9	
Stockbuilding*	0.3	0.4	0.2	0.1	0.1	–0.2	
Exports	4.5	2.2	0.6	2.3	5.5	9.1	
Imports	7.6	6.1	3.8	5.2	7.0	8.0	
Net exports*	–0.8	–1.1	–1.0	–0.9	–0.4	0.5	
New car registration**	7.4	6.3	6.7	8.3	6.4	–0.1	1.2
Retail sales**	2.8	2.9	2.6	2.4	2.1	2.8	

Source: ECB Monthly Bulletin, May 2000.
* As a contribution to real GDP in percentage points.
** Seasonally unadjusted data.

Table III-9 **Main macroeconomic indices of the euro area, II**
(Year-on-year, seasonally adjusted data)

Per cent

	1998	1999			
	Q4	Q1	Q2	Q3	Q4
Real GDP	1.2	2.8	2.4	4.1	3.2
Domestic absorption	4.1	3.2	1.6	2.4	2.8
Private consumption	2.4	3.2	1.2	2.8	2.8
Public consumption	1.2	4.5	–0.4	1.2	0.8
Gross fixed capital formation	2.8	7.4	3.6	6.6	2.0
Stockbuilding*	2.0	–0.8	0.4	–0.8	0.8
Exports	–5.1	2.4	10.8	14.8	8.7
Imports	3.6	4.5	10.0	10.0	7.4
Net exports*	–2.8	–0.8	0.4	1.6	0.4

Source: ECB Monthly Bulletin, May 2000.
* As a contribution to real GDP in percentage points.

pear to be higher, but the refund estimates based on the accruals concept in Table III-6 take into account the fact that first-quarter savings are present only in terms of cashflow, as a result of new refund regulations causing a shift in the timing of refunds.)

The value of households' cash transfers in real terms was reduced partly by the slower-than-expected pace of disinflation and partly by the exceptionally high starting point in the base period in respect of the social expenditures of local governments. The fall in the real value of pension expenditures is only temporary, since a recalculation using the Swiss indexation method (rise in pensions is linked to inflation and earnings growth in equal shares, i.e. 50%), taking account of the higher-than-expected rate of inflation, will lead to a retroactive rise in pensions at the end of the year.

The rising share of investment represents a favourable change in the composition of expenditures. Following a sharp decline in 1999, the volume of local government investment seems to be stabilising, following a slight downturn in the first quarter. Budgetary investment, especially in comparison with the base period, jumped, and the combined investment growth in the two years, relative to the same period in 1998, amounted to 35.7%. In respect of the central Budget, chapter and institutional investment growth played the greatest role, with spending on "priority" projects[7] even falling short of last year's low base *(see Table III-7)*.

4 External demand

External economic conditions continued to improve in 2000 Q1. The consumer confidence index for the euro area continued to strengthen, and business confidence has grown exceptionally strong. According to currently available data, there was a rise of 3.1% in euro-area GDP in 1999 Q4, relative to the same period a year earlier. A measure of external demand for Hungarian

[7] Priority projects usually account for half of total Budget investment.

Box III-1 Coincidence indicator of the external cyclical position

In addition to the two key indicators of the cyclical positions of Hungary's main trading partners (GDP and import series weighted with the Hungarian export structure), Chart III-9 also displays the cyclical coincidence indicator. The coincidence indicator is derived as follows from the leading indicators constructed by the OECD. A leading indicator series is available for most OECD countries for the purpose of forecasting the cyclical position over the short term. We have examined which lag in the indicator correlates best with the GDP series of the given country (more specifically, growth rates were used). The higher the number of time lags found in this manner, the greater the lead of the indicator, i.e. the more suitable it is for projecting prospective developments. Having determined the extent of leads for each country, we applied the lagged series, that is, we made them coincide. The resulting country-specific cyclical coincidence indicators were then weighted with the Hungarian export structure - as in the case of GDP and import series - to obtain the coincidence indicator for the external cyclical position, as displayed in Chart III-9. Thanks to the use of the lagged series, the value of this coincidence indicator is already available for the second quarter, for which there are no GDP and import data yet. This is why leading indicators are quite useful: they provide information in the present about processes on which factual data will be available only much later.

exports is found in the import and GDP figures of Hungary's main trading partners, as weighted by the Hungarian export structure. In 1999 Q4, weighted GDP rose by 2.7% and effective imports by 6.1% on a year earlier *(see Chart III-9 and Tables III-8 and III-9)*. No figures are available for 2000 Q1-Q2, but the evidence provided by the coincidence cyclical indicator estimated by the Bank suggests that the upswing has been gathering pace, relative to 1999 Q4.

As a result of buoyant activity in the European Union and stronger economic growth in Russia, the CEFTA area has seen an upswing in economic growth. Poland's GDP increased by an estimated 6%, and the Czech Republic and Slovakia also seem to have regained a footing after the recession. There is strong growth in the CIS countries as well, thanks to high world prices for energy and commodities.

Total exports of goods and services by the Hungarian economy rose by 21.1% in 2000 Q1, relative to the year before, while imports of goods and services expanded at a lower rate of 18.3%. As a result, the balance of trade based on the total of real economy transactions made a positive contribution to GDP growth. As illustrated below, this has been the result of two contradictory developments, with the customs-statistics based deterioration in the gross trade balance being counterbalanced by the improvement in the services balance.

In 2000 Q1, exports and imports accounted for EUR 6,557 million and EUR 7,431 million, respectively. Consequently, the balance of trade deficit amounted to EUR 875 million, up EUR 330 million on a year earlier.[8] Thanks to stronger external demand, exports and the associated import value growth continued to be substantial in 2000 Q1, although these fell short of the level for the previous quarter. The implication is that the exceptionally high growth rate seen in the last quarter of 1999 is due more to a one-off positive shock than to a turning point in the trend *(see Chart III-10)*.

Chart III-10 **Export and import trends according to customs statistics**
(Annualised quarterly growth rates, in EUR)

[8] There are only preliminary data available on the first quarter, which may be supplemented as customs declaration forms are processed. The *Report* carries the figures corrected for expected additions, but the final data may modify the overall picture.

Chart III-11 **Balance of trade according to customs statistics, in EUR terms**

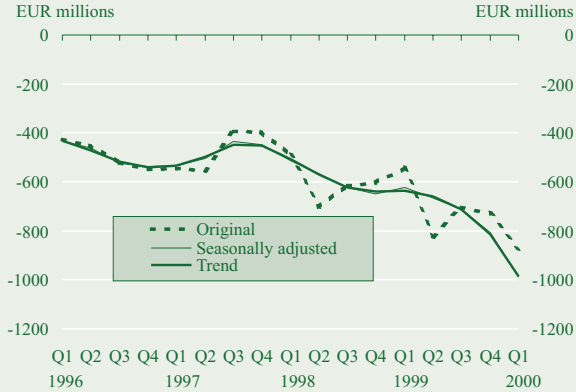


Chart III-12 **Annualised quarterly growth rates of export and import volumes**

Chart III-13 **Customs statistics-based balance of trade at constant prices**
(In 1996 Q1, HUF terms)

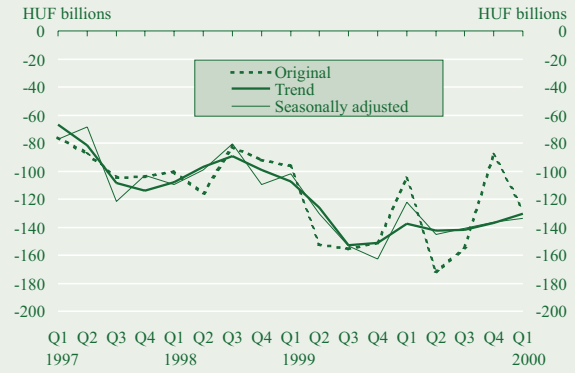
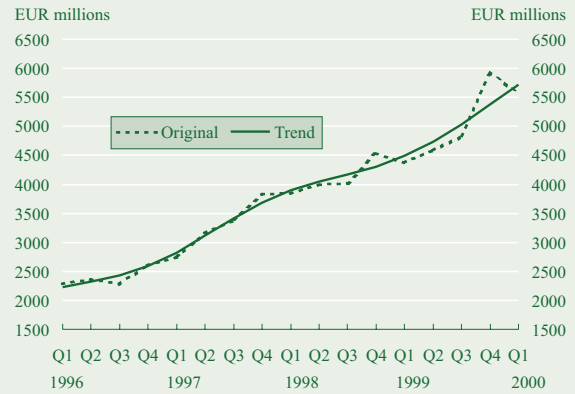


Chart III-14 **Exports to developed countries**



Furthermore, quarterly trend growth in exports lagged behind that of imports in 2000 Q1. The customs statistics-based seasonally adjusted balance of trade continued to deteriorate. However, in terms of volume data, export volume growth has still outstripped import volume growth (although the pace of growth was slower than in 1999 Q4, just like in respect of the value data).

The seasonally adjusted balance of trade at constant prices appeared to improve slightly over the last four quarters. The difference between the developments in value and volume data is explained by a roughly 2.3% deterioration in the terms of trade, primarily due to rising world prices for energy and commodities.

By contrast, there was a slight improvement in the terms of trade for manufactured goods and machinery. According to Bank estimates, energy price increases account for approximately EUR 200 million in the trade deficit in the first quarter *(see Charts III-11, III-12 and III-13).*

The country structure of exports reflects the development of foreign demand. Exports to developed countries have continued to rise strongly.

The temporary nature of the exceptional surge in the growth rate seen in 1999 Q4 becomes most apparent primarily in respect of this group of countries.

Seasonally adjusted trend data indicate a slight slowdown in first-quarter growth, but the annual index nevertheless still reflects a growth rate of 27% *(see Chart III-14).*

The expansion of exports to CEFTA countries, which began in 1999 Q1, continued at a steady pace, a sign of the region's recovery from recession. Exports in euro terms to CIS countries rose considerably, up by approximately 42%.

This, however, was mainly due to cross rate effects – the weakening of the euro against the dollar – since the value in terms of dollars has remained unchanged during the first quarter (although on account of the base effect the annual growth rate reflects stronger growth even in dollar terms). Thus, the improving cyclical position of this country group has had no considerable impact on Hungarian export growth *(see Charts III-15 and III-16).*

An analysis of the composition of exports shows that durable goods exports continued to grow at the fastest pace (up by 37.5% year-on-year [9,10]).

Export growth in investment goods slowed relative to the previous quarter, although it is still significantly higher (by 17%) than the equivalent quarter the year before.

[9] It should be noted that in contrast with the previous *Reports,* energy products are now excluded from the category of intermediate goods, in order to be represented as a separate series to enable better demonstration of the effects of energy price changes.

[10] In the absence of adequate data, the analysis of export goods classified in terms of utilisation is based on series that do not yet include the latest corrections.

Non-durable consumer goods exports expanded at a rate similar to that in the previous quarter. The continued substantial rise in intermediate goods exports, excluding energy products, (up by 35.3% year-on-year) is attributable to factors related to external demand *(see Chart III-17)*.

An analysis of the contribution of the various products to export growth shows that intermediate and durable consumer goods top the list in 2000 Q1.

It is a new development that the contribution of investment goods has declined. Despite growing at a buoyant rate, energy exports failed to make a major impact on export growth due to their small weight *(see chart III-18)*.

The SITC breakdown of exports points to the fact that the exceptional, albeit temporary, growth rate in 1999 Q4, as was noted above, is largely based on machinery exports. The quarterly and annualised growth rates for machinery and related equipment (20.4% and 31%, respectively) is still regarded as high. Exports of food, beverages, tobacco, raw materials and manufactured goods displayed steady growth (up by 20–23% year-on-year) *(see Chart III-19)*.

A classification of import goods shows that while durable goods imports grew strongly, maintaining the trend of the previous quarter, imports of investment goods lost some momentum.[11]

In a year-on-year comparison, investment goods and durables imports rose by 19% and 22%, respectively.

Intermediate goods imports expanded at a slower – but still rapid – pace (up by 19% on a year earlier). Thus, the outlook is for steady – though slightly slower – growth in machinery investment and durables consumption. Meanwhile, growth in non-durables imports remained flat (though still registering an impressive 14% increase compared with the equivalent period a year earlier).

The value of energy imports jumped by 84%, compared with the year before, on account of energy price increases. In 2000 Q1, import growth in this product category fell back from the exceptionally high rates seen earlier, thanks to the lower volume of purchases in the first quarter.

Analysing the contribution of the different product categories to import growth in 2000 Q1, it is clear that the greatest impetus was provided by intermediate and durable consumer goods.

Although declining slightly, the role played by investment goods remained significant, with non-durables continuing to make a minor contribution.

In 2000 Q1 the share held by energy imports dropped off from the high level seen earlier. The strong growth in intermediate goods imports can be linked to the acceleration of economic growth *(see Charts III-20 and III-21)*.

The services account on the balance of payments in 2000 Q1 recorded a surplus of EUR 254 million, up by EUR 164 million on 1999 Q1.

[11] In the absence of adequate data, the analysis of import goods classified in terms of utilisation is based on series that do not yet include the latest corrections.

Chart III-15 **Exports to the CEFTA area**

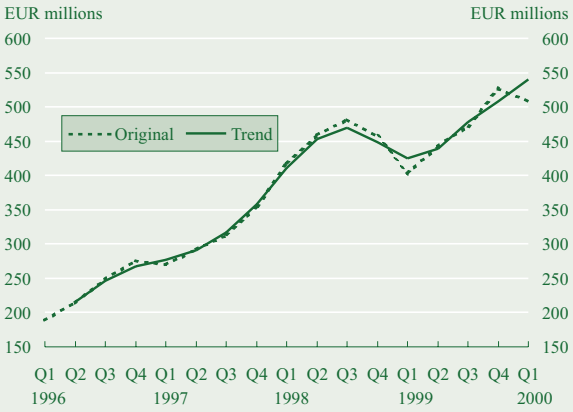


Chart III-16 **Exports to CIS countries**

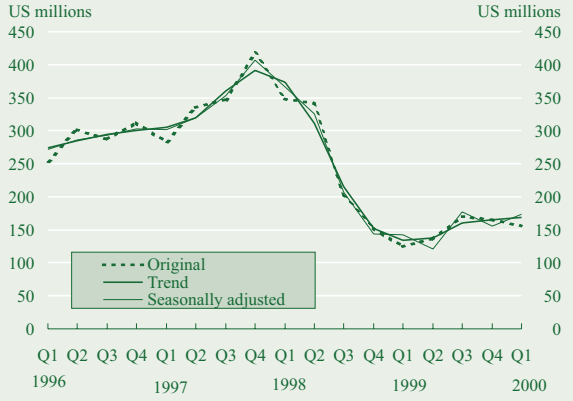


Chart III-17 **Annualised quarterly trend growth rates in different export categories** (in EUR terms)

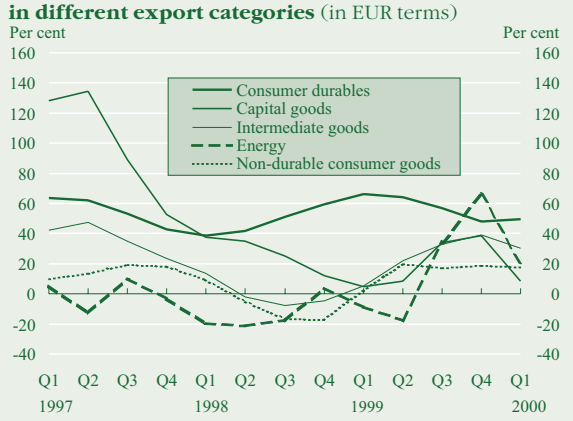


Chart III-18 **Contribution of different product categories to trend export growth**

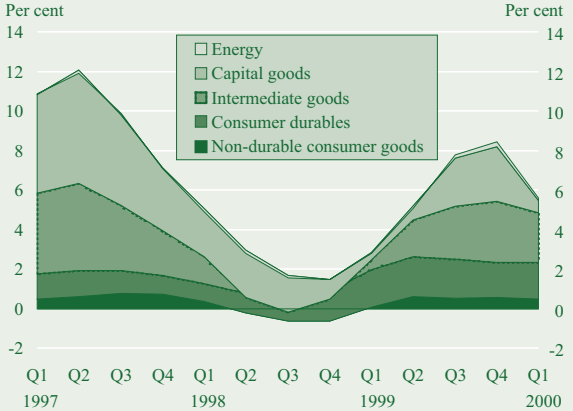


Chart III-19 **Annualised quarterly trend growth rates in SITC-5 categories of exports**

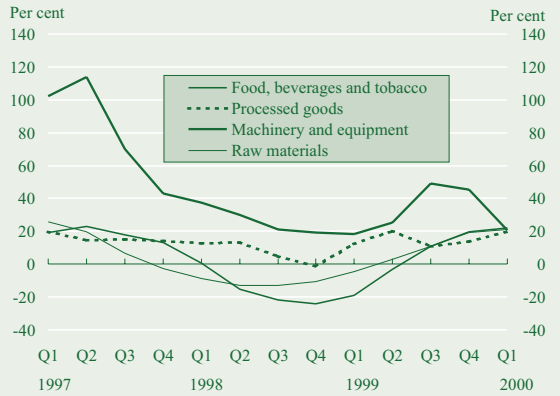


Chart III-20 **Annualised trend growth rates in different import categories** (in EUR terms)

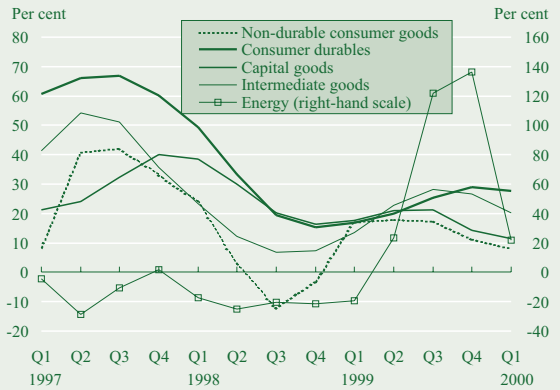


Chart III-21 **Contribution of different product categories to trend import growth**

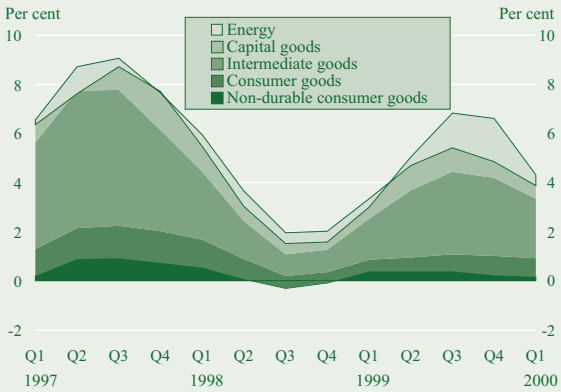
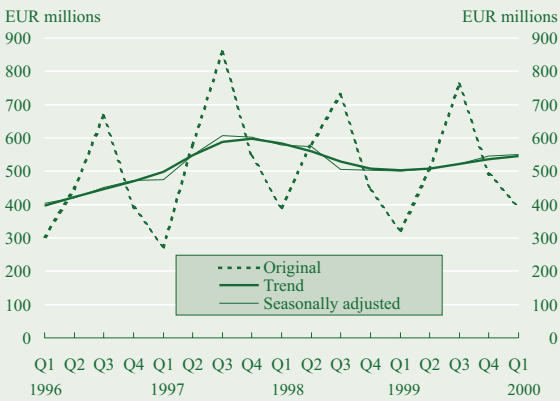


Chart III-22 **Travel balance**



This improvement in the balance is also apparent over the shorter term, with the seasonally adjusted trend balance up by EUR 35 million on the previous quarter. This was due both to the EUR 70 million rise in the travel surplus and the EUR 95 million fall in the deficit on other services.

As a result of revenues of EUR 634 million and expenditures of EUR 243 million, the travel balance ran a surplus of EUR 392 million in 2000 Q1, up by EUR 70 million on the same quarter a year earlier.

The slight pick-up in the seasonally adjusted travel balance, first seen in the second half of 1999, continued over the first quarter, as a result of a 4.7% improvement in first-quarter revenues and a subdued 0.4% increase in expenditures. According to Bank estimates, although up by only 0.5% on a year earlier, the volume index of travel receipts[12] was better than in the previous quarter, while annualised short-base indices reflected a 12.5% expansion in the volume of revenues over the first three months *(see Chart III-22)*.

The volume of revenues calculated without the balance of transactions on households' foreign exchange accounts grew at a somewhat slower pace (by 0.3% on a year earlier).[13]

Hence, the improvement in the currency account transactions balance was among the factors at work in the increase in revenues. The moderate results on the first-quarter travel account net of currency account transactions is also manifest in the low level of travel activity, with the number of tourist arrivals up by just 1% and the number of tourist nights down by 1.4% on a year earlier.

Expenditures followed an opposing trend to the increase in travel intentions: the above-7% rise in the number of those travelling abroad was matched by a reduction of a similar size in the volume of expenditures, relative to the first quarter of the previous year. Thus, the increase in the travel balance is also attributable to the subdued rise in expenditures.

The increase in the balance of services outside the category of travel since the second half of 1999 continued in 2000 Q1. The balance of receipts of EUR 645 million and spending of EUR 783 million was a deficit of EUR 137 million, compared with the EUR 149 million and EUR 232 million deficits in the previous quarter and 1999 Q1, respectively.

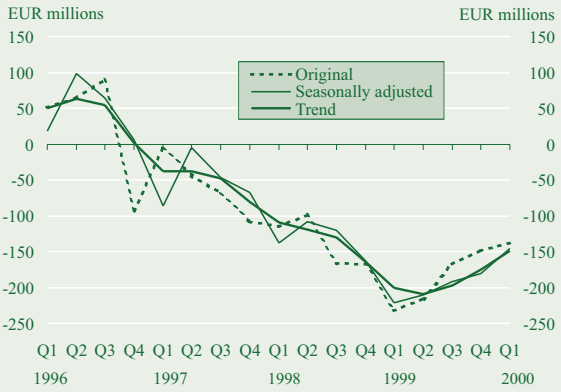
The lower deficit, simultaneous with rising expenditures in terms of seasonally adjusted data, is due to even stronger growth in receipts. The short-based annualised value index in euro terms shows growth of 28% in receipts and 24% in expenditures.

[12] The volume index of travel is constructed as a means of removing price and exchange rate effects. The price index used applies a larger weight to services, in accordance with the composition of travel. As the price index does not provide a full representation of the product structure of travel, the volume index can only give an approximation of the changes in travel volumes.

[13] As will be remembered, the balance of transactions on households' foreign currency accounts is now recorded with the travel revenues, as a result of a methodology change implemented in December 1999. Before then, the travel category did not include this item.

The heterogeneous nature of the other services category and the available information make it difficult to judge whether the decline in the deficit on the services balance represents a trend or only reflects temporary effects. Looking at individual services, there is an upturn in construction and assembly, as well as goods transport and technical cultural services. One clear conclusion is that the deterioration in the services balance from 1996 to mid-1999 has definitely stopped since the third quarter of 1999 *(see Chart III-23)*.

Chart III-23 **Balance of services**



IV. Supply

1 The labour market

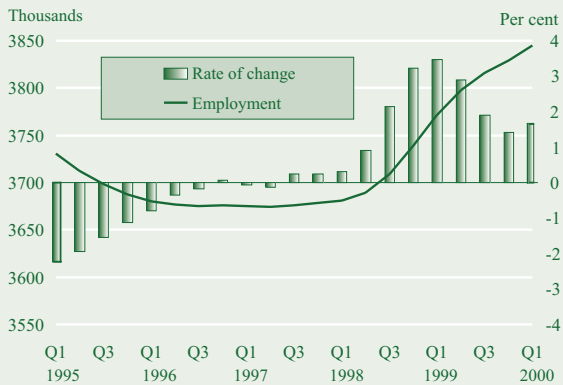
The tendencies observed in the labour market over preceding periods have continued: employment has continued to expand, while the rate of unemployment and inactivity has declined. As a result of these factors the participation rate continued to rise, approaching levels last seen in 1994. Data from the first quarter draw attention to two differences relative to the preceding period: the slowdown in both employment growth and the decrease in the rate of unemployment seen at the end of 1999 has been replaced by acceleration in both areas.

1.1 Employment

The household labour force survey (LFS) of the Central Statistical Office (CSO) shows that after removing seasonal and random effects, employment expanded at a somewhat faster pace in 2000 Q1 than in the previous quarter. Although the year-on-year employment growth rate published by the CSO indicates a slowdown to 0.9% – the lowest rate in the past one and a half years – this reflects the effect of the exceptionally high 3.4% growth rate recorded in 1999 Q1. *Chart IV-1* shows that after filtering out the effect of the high base of 1999 Q1, employment growth relative to the final quarter of 1999 has lost no momentum. In terms of the number of employed in early 2000, about half of the 15-74 age group were registered as employed. The exceptionally rapid growth in employment seen in the past two years has brought the employment rate back to levels last seen in 1993, reversing the downward trend of the previous several years. The employment rate calculated for the 25–54 age group, the backbone of the labour force, came close to 70%, up by nearly one percentage point on a year earlier.

As discussed in the Bank's previous *Report*, individual labour groups – differentiated by demographic, regional, level-of-skill and other characteristics – are not perfect substitutes for one another. Thus, various group-specific indicators contain relevant information for monetary policy, facilitating the recognition of labour market demand and supply conditions and potential bottlenecks. As far as individual *age groups* are concerned, similar to the previous quarter there was a significant increase in the employment rate in respect of every age group of people over 25. This proves that there has been genuine expansion in employment, meaning that the underlying factors are not so much changes in the demographic composition – the rising share of the most active 25–39 age group – but rather reasons associated with

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



* On the basis of seasonally adjusted data.

the development of labour market demand and supply. As far as individual age groups are concerned, the sharpest rise in employment, relative to a year earlier, was again seen in the 55–59 age group, due to changes in retirement incentives. Looking at the *regional* breakdown, data from the first quarter tend to confirm the trends seen in the previous period. Accordingly, the western part of Transdanubia, showing very high rates of employment and activity and low unemployment to begin with, again recorded exceptionally high rates of employment growth and a fall in unemployment to below 4%. This entails a risk of labour market bottlenecks, especially as industrial production in this region rose by over 35% in 2000 Q1, compared with a year earlier.

According to the institutional employment statistics compiled by the Central Statistical Office on the basis of surveying businesses employing over five persons, as well as budgetary and non-profit institutions, employment has expanded at a rapid pace. The 0.7% aggregate rise in employment growth in the first quarter, compared with a year earlier, is composed of a 1.7% rise in the private sector and a 1.1% decline in the public sector, in line with previous trends. Looking at the blue-collar and white-collar components of the labour force, there is evidence that the previously observed asymmetric trend is strengthening. In view of the surge in the number of white-collar workers in the areas of public administration, defence and social security, the contraction of the public sector was solely due to the nearly 9% drop in the number of manual workers, alongside a slight rise in the number of white-collar employees in other areas. Data on the private sector reflect a continuation of earlier tendencies: within manufacturing, there were sharp increases in the number of manual workers in metal processing (5.3%) and machinery (10.6%), along with an expansion of market services in wholesale and retail trade and repair of vehicles (5%), hotels and catering (4.1%), as well as real estate activities and business services (5.7%). It is a new development, however, that, in contrast with the robust growth seen earlier, there appears to be a slowing in the number of the white-collar labour force in the sectors of transport, storage, postal services and communication. The growth rate of 1.7%, recorded in the first quarter, is merely half the earlier figure. The wage index for the white-collar labour force in the sector has outstripped the market sector's average rate of wage growth. In this light it is not clear how the slowdown in white-collar labour force growth should be interpreted. Data from forthcoming quarters will likely shed new light on whether this implies a decline in labour demand growth, i.e. an easing of labour market bottlenecks, or, on the other hand, the existence of tight supply, with direct impact over the short term.

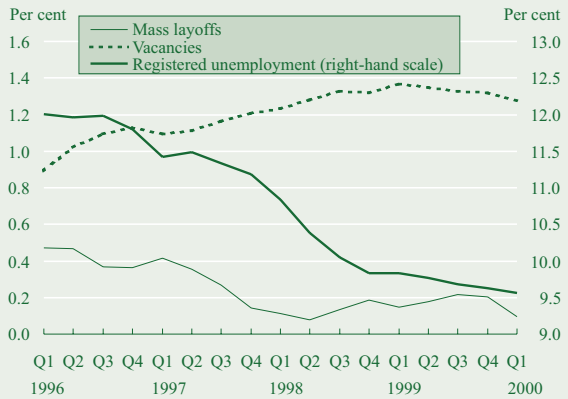
1.2 Unemployment

As noted in the March issue of the *Report*, the "fog" obscuring the data for the continuation of the decline in unemployment was lifted by the figures for late 1999. The latest data also support the Bank's interpretation that the decline in unemployment has been continuing and even gathering pace. As a result, the rate sank below 6.5% in the first quarter, down by over 0.5 percentage points

Chart IV-2 **Unemployment rate***

* Based on seasonally adjusted data.

Chart IV-3 **Complementary indicators of the labour market***



* All indices are given as a proportion of employed persons as recorded by the LFS (the rate of registered unemployment has the number of the unemployed in the denominator as well); seasonally adjusted.

Table IV-1 **Wage inflation***
(Year-on-year)

Per cent

Sectors	1999					2000
	Q1	Q2	Q3	Q4	Year	Q1
Manufacturing	16.2	13.4	13.6	10.7	13.5	11.5
Retail and repairs	15.4	12.9	12.1	7.7	12.0	15.2
Other market services	16.8	13.5	15.0	13.6	14.7	11.1
Private sector as a whole**	**16.4**	**13.3**	**13.9**	**11.0**	**13.6**	**11.4**
Public sector	16.1	17.7	16.8	17.2	17.0	12.1
Whole economy	**16.3**	**14.6**	**14.8**	**12.9**	**14.6**	**11.6**

* Indices calculated by the Bank. See Box for discussion of relevant information.
** The data allow a more accurate separation of the private sector than in the previous Reports, going beyond the simple separation by sectors. Thus, all organisations, with the exception of budgetary and non-profit institutions, belong to the private sector.

on the 1999 average *(see Chart IV-2)*. Although the fall affected each age group and region, with regard to labour market tightening it should be noted that the sharpest fall in the rate of unemployment was recorded in western Transdanubia, an area which was already characterised by low unemployment.

Other complementary aggregate indicators available on the state of the labour market also confirm the message conveyed by the labour force survey that there is stronger activity on the labour market. The number of *registered unemployed*, calculated on the basis of the administrative records of employment centres, has remained unchanged for a long period, which, together with rising employment, implies a decline[1] in the ratio. A new development since the March *Report* is that the number and proportion of both people *affected by layoffs* and the number of *reported vacancies* have started to decrease in comparison with the number of employed people. Nevertheless, this allows no definite conclusions to be drawn on the state of the demand for labour, as it is not clear whether this signals a long-term tendency. Moreover, the administrative nature of the indicators also hampers their proper evaluation (which is why they are considered only secondary to the CSO's labour force survey) *(see Chart IV-3)*.

1.3 Earnings growth

Starting with this *Report* the Bank will use for the analysis of earnings growth a new group of indices which satisfy all of the criteria discussed so far in connection with wage inflation. The analysis continues to be based on the wage, working hours and staff number 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. However, the analysis will focus *exclusively* on the pure wage inflation indices calculated by the National Bank of Hungary *(see Box)*.

The twelve-month figures suggest a general slowdown of wage inflation. According to Bank calculations, the whole-economy rate fell from an average 14.6% last year to 11.6% in 2000 Q1 *(see Table IV-1)*. This decline is made up of a sharp fall to 12.1% in public sector wage inflation and to 11.4% measured in the market sector in the first quarter, which also marks a decrease, although not as sharp as that in the public sector. Taking inflation into account, the Bank's wage inflation index reflects growth of over 1% in *gross real earnings* for the entire economy. Market sector wage inflation rose relative to the final quarter of 1999, but not relative to 1999 as a whole, primarily with respect to the manufacturing, wholesale and retail trade and vehicle repair sectors, while other market services outside retail produced a substantial decline in wage inflation.

[1] The National Labour Centre (OMKMK) in Hungary has ceased publishing the rate of registered unemployment. Although the Bank's quarterly *Inflation Reports* present an analysis of the quarterly unemployment rate based on the labour force survey of the Central Statistical Office, they will continue to look at the registration rate as well, by way of complementary information. However, the rate of registered unemployment used by the *Report*s will be constructed differently from the original definition of the OMKMK (see page 34, March 1999 *Inflation Report*). The rate used by the Bank is defined as the ratio of the registered number of unemployed people divided by the sum of employed people according to the labour force survey and the registered number of unemployed people in the given quarter.

***Box: IV-1* How is the wage inflation index of the NBH calculated?**

Previous *Report*s of the National Bank of Hungary have given ample coverage to the methods of assessing wage data in a manner consistent with their calculation and meaningful from the perspective of economics. It was in the November 1998 *Report* (page 40) that the concept of *wage inflation,* as a measure of the change affecting the price of one unit of labour, was first introduced. It was demonstrated that "pure" price change can only be grasped in terms of an indicator from which changes in employment composition – the ratio of blue collar to white-collar work, across and within sectors – have been removed. With this in mind, a so-called standardised changing weight Laspeyres index was computed, in line with the practice in developed countries. The September 1999 *Report* (page 45) also noted that changes in the unit of labour, that is, the average number of hours worked in the given month or quarter, might also distort the indices. An example of this occurred in February 2000, when the leap year added one day to the month compared with February 1999, thereby contributing significantly to the 6.4% jump in the number of average monthly working hours in the private sector, relative to the same period a year earlier. Unless the wage data are collected with respect to working hours, adjustment is only possible subsequently and subject to certain limitations.

The wage index measured for the public sector is also affected by the special problem of the potential deferment of year-end payments received on an irregular basis (such as 13th month salaries, bonuses, etc.) from the end of the year until the next January. As was noted in last June's *Report* (page 39), payments deferred from the end of 1998 until the beginning of 1999 resulted in a significant *upward* distortion of the earnings indices for the public sector in 1999. It was also predicted that the same effect would distort the earnings indices for early 2000 *downwards*. In respect of the impact on demand, it was also suggested that an accounting of incomes which is considered correct in the economic sense requires the use of the accrual concept for the accounting of transactions, meaning that earnings should not necessarily be accounted for the time of their technical receipt, but for the period when the claims originate. Although correction of the aggregate data published by the CSO is rather cumbersome, the Quarterly *Report*s of the Bank have started to calculate a tentative public sector earnings index adjusted for the timing of irregular payments.

Starting from the present *Report*, the development of earnings growth is analysed exclusively by means of the "pure" wage inflation indices computed by the Bank. This is because by early 2000 the aforementioned factors had distorted the wage indices to such a serious degree that the use of the original data published by the Statistical Office would suggest a completely misleading picture on the state of wage inflation. As it is, the increase in working days and working hours caused the February wage index of the private sector (relative to the same month in 1999) to jump to 18.4%, suggesting a sharp acceleration in real earnings growth, even though changes in the length of a month are not regarded as being of a cyclical nature. Similarly, it is not a dramatic fall in real wages that the published annual public sector earnings index of 5.2% in January 2000 reflects, but rather the distortion caused by the deferment of irregular payments to early 1999.

Hence, the following differences should be pointed out between the wage inflation index used in the Bank's *Report*s and the gross wage indices regularly published by the Central Statistical Office:

1. In the *Report*s, gross *monthly* wages are recalculated in terms of gross *hourly* wage rates in respect of both the blue-collar and white-collar labour force in every area of the private sector.

2. The effect of the changes in composition is removed from the twelve-month indices of hourly wage rates via standardised Laspeyres indices.

3. The earnings index of the public sector is corrected for the change in the timing of irregular payments by means of the method described in the June 1999 *Report*.

The corrections used by the Bank are of a strongly *ad hoc* nature and are therefore merely experimental and subject to ongoing development. Still the principle of "lesser evil" seems to suggest that even these experimental wage inflation indices provide better assistance for the assessment of earnings developments than the original unadjusted ones.

The 11.5% value of *manufacturing* wage inflation was below the average figure for the whole economy, but some of its largest branches, which recorded the fastest pace of employment growth – with special regard to basic metal and machine manufacturing – produced high wage inflation indices, in excess of 14%. In view of the fact that the rise in the number of workers went hand in hand with rising average working hours, and that the areas most strongly affected in Transdanubia can boast of exceptionally high rates of employment and low unemployment, the presence of strong wage inflation may easily signal labour market tightening. At the same time, first quarter productivity in these sectors – the volume of gross production per employed person – rose by 20–25% relative to the equivalent period a year earlier, together with robust sales growth. Thus, while the possi-

bility that labour market tightness is pushing up wages is not ruled out, the figures provide no definitive evidence in support of that conclusion. Nevertheless, in light of the strong rise in the number of employed persons and the number of working hours in the sectors under review, it seems highly likely that shortages of sufficient labour force reserves in the areas concerned could easily lead to problems in the long run.

As noted in the discussion of inflationary developments in Chapter I, relative price inflation has increased sharply in respect of certain *market services*. The question is whether this can be explained by higher cost inflation, more specifically, wage inflation in the area of these services. In this context, two developments should be highlighted. First of all, wage inflation in the *retail and vehicle repair sector* in 2000 Q1 (15.2%) was up by 3 percentage points on average, compared with last year. This can be interpreted either as a correction of the very low wage inflation (7.8%) seen in 1999 Q4, or as the manifestation of high first-quarter retail sales growth in the form of a pick-up in productivity. In volume terms, sales expanded at a rate of over 5%, after removing seasonal and calendar effects. Nevertheless, the existence of cost-side inflationary pressures can only be established with any degree of certainty when the data from coming months are available. The other noteworthy development is the decline in the wage inflation index of *other market services*. Most conspicuously, earnings growth remained subdued in the sectors of *transport, storage, postal services and communication services*, as well as *real estate activities and business activities*, in contrast with the high wage inflation previously reported. This is all the more remarkable as in the second half of 1999, the upsurge in the earnings index for white-collar work staff in the former sector appeared to be a cause for concern (see previous *Report*s). In the first quarter, the high wage index for the white-colour labour force was partly offset by the approximately 2.5% rise in the average monthly number of hours worked by this group. Thus, the Bank's wage inflation index reflects a decline in earnings growth. This, however, still does not imply an easing of the relative labour shortage characteristic of the sector, with particular regard to the telecommunications segment. This is because the rise in the average number of hours worked, alongside the expanding number of employed persons, may also be an indication of labour market tightening.

The *public sector* wage inflation index of 12.1% is nearly 5 percentage points down on last year's average. This is due in large part to the low 7.7% earnings index in education, in contrast with the 16.6% index in the area of administration, which considerably exceeds the average.

2 Capacity utilisation

In 2000 Q1, the rise in average capacity utilisation[2] in the manufacturing industry continued in terms of the seasonally adjusted data *(see Chart IV-4)*. This increase occurred in parallel

[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.)

with an outstanding expansion of manufacturing output, while the rate of manufacturing investment was subdued. As a result of the uninterrupted growth in average capacity utilisation over the last nine months, the level in the first quarter exceeded the average for the period between 1996 and 1999, even approaching the exceptionally high levels seen in late 1997 and early 1998. Hence, there are prospects for an acceleration in investment activity *(see Chart IV-4)*.

The level of excess technical capacities held by businesses, relative to prospective demand in the subsequent 12 months, increased perceptibly in late 1998 and early 1999, owing to weaker economic activity. Since then, however, the pick-up in average capacity utilisation and the recovery in production continuing in line with expectations have caused excess capacities to drop. The proportion of businesses reporting excess capacities relative to prospective demand continued to remain flat in 2000 Q1, along with a decline in the proportion of those projecting excess capacities and an increase in the numbers predicting adequate capacities. The moderate rate of investment in manufacturing may indicate the existence of adequate capacities for the time being *(see Charts IV-5 and IV-6)*.

By sectoral breakdown, an above-average proportion[3] of firms has reported excess capacities in the food industry, a sector especially badly hit by the poorer sales prospects in late 1998 and early 1999. Fewer excess capacities are being reported by companies producing for export than by those predominantly catering to the domestic market. Capacity shortages relative to the number of orders have been reported by an above-average number of companies from the wood, paper and printing industries, with the mechanical engineering sector also facing problems, especially in the case of small firms owned by Hungarian residents.

3 Competitiveness

In 2000 Q1, the nominal effective exchange rate depreciated by 4.4% relative to the equivalent period a year earlier. This was over 2% lower than the official devaluation rate of the central parity. It is in roughly equal shares that the weakening of the euro against the dollar and the intra-band strengthening of the forint account for the divergence of the two indices.

From the second half of 1999, the CPI-based real exchange rate has remained relatively stable. After the removal of cross-exchange-rate effects and the fluctuations of the forint within the band, the index has remained virtually unchanged, compared with the slow but steady trend of real appreciation seen prior to early 1998. While the prices of non-tradables rose at a faster pace than those of tradables, as a result of the productivity difference between the two sectors, the flatness of the CPI-based real exchange rate indicates that the real exchange rate is not yet back on the path from which it was diverted by the financial crisis in 1998. This is partly because stronger foreign inflation has caused the rate of Hungarian inflation to converge faster than expected by the Bank. On the other hand, from the second half of 1999, the external balance has started to suffer

[3] Distribution weighted by the number of staff.

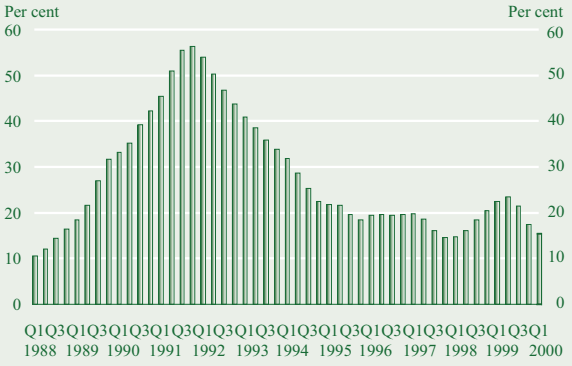
Chart IV-4* Average capacity utilisation in manufacturing

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

Chart IV-5* Proportion of businesses reporting capacity shortages, relative to prospective demand in manufacturing

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

Chart IV-6* Proportion of businesses reporting excess capacities, relative to prospective demand in manufacturing



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

***Chart IV-7* Consumer price index-based real exchange rates**

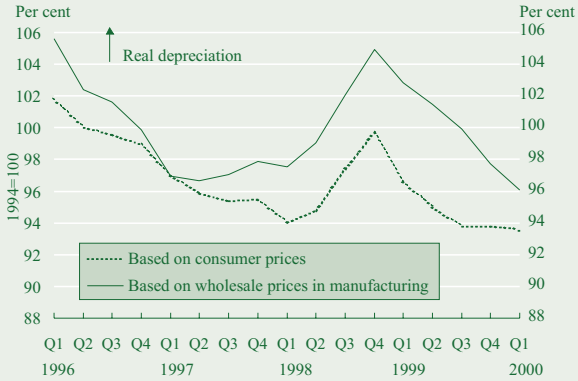


***Chart IV-8* Real exchange rate of the forint based on the domestic manufacturing sales price index**

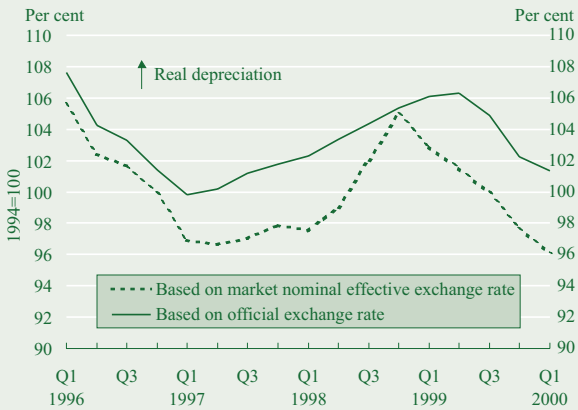
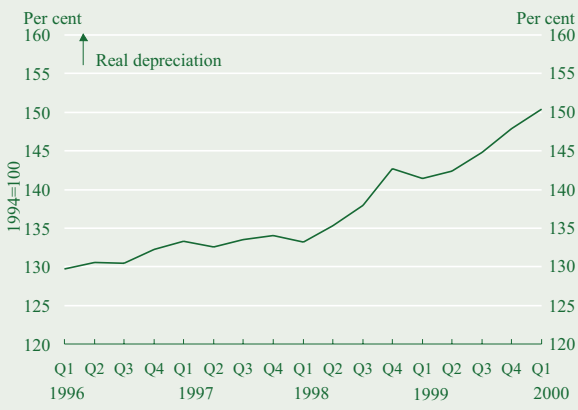


***Chart IV-9* Real exchange rates based on manufacturing unit labour cost calculated with value added**



from the impact of oil price increases. Hence, it could be argued that the current real exchange rate contains sufficient reserves for a flexible adjustment to the negative external supply shock entailed by the persistent upward trend in oil prices.

The rise in oil prices and the resulting deterioration in the terms of trade are factors exerting influence over the equilibrium exchange rate. Most empirical studies claim that worsening terms of trade will cause the equilibrium exchange rate to depreciate. As the worsening terms of trade will, *ceteris paribus*, have an adverse effect on the balance of trade, in order to maintain the *initial* foreign trade position of the economy, the real exchange rate will, *ceteris paribus*, have to depreciate. This, however, does not imply actual depreciation, since movements in the equilibrium exchange rate are influenced by other factors as well, including the Balassa-Samuelson effect, discussed in previous *Report*s. However, the fact that the equilibrium real exchange rate depreciates does not imply that the rising oil prices will cause a downturn in competitiveness. What is really meant here is that, against the background of more expensive imports, the *initial* position of the external balance can only be maintained if domestic producers achieve an extra improvement in profitability, that is, a rise in competitiveness, *ceteris paribus*, against the depreciating real exchange rate.

The manufacturing-based real exchange rate continued to appreciate according to the trend since late 1998, which – as noted in earlier *Reports* – was initially due to the movements of the forint within the band, and then, from the second half of 1999, to oil price rises feeding through to domestic sales prices. The annualised real appreciation rate of 6–7% seen in the first quarter, high both historically speaking and in view of the economic content of the index, essentially reflects a composition effect arising from the different structures of domestic and foreign price indices[4] *(see Charts IV-7, IV-8 and IV-9)*.

In 2000 Q1, the unit labour cost-based index continued to signal marked depreciation at an annualised rate of 6.4%. This was basically due to the continuation of the exceptionally high added value in manufacturing, thanks to the robust growth in export sales.

[4] See the chapter on competitiveness in the March 2000 issue of the quarterly *Report*.

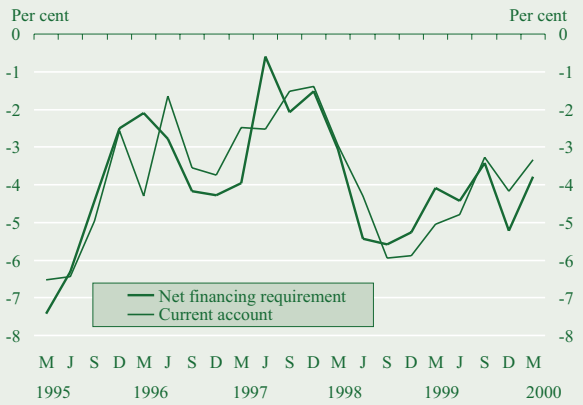
V. External equilibrium

1Net savings position

Although a favourable cyclical position of the economy is usually accompanied by a rise in external financing, despite Hungary's stronger economic growth of 4.6% in 2000 Q1, the external financing requirement was nearly identical to the figure for the same period a year earlier. This is partly because of the fact that the current account deficit in the base period was temporarily higher as a result of the Russian crisis, and partly because the expansion of investment activity with a relatively high import requirement remained subdued, in spite of the stronger economic activity. Provided that the recovery continues at the present rapid pace, there will probably be a rise in investment spending, naturally implying an increase in the financing requirement. Nevertheless, the stronger need for imports generated by the rise in domestic demand is likely to be offset by the rapid rise in export receipts. Furthermore, with regard to Hungary's chief trading partners, the outlook is for continued strong activity, which makes it unlikely that the size of external financing will approach a level that proves to be unsustainable over the longer term, even in the event of higher investment demand. This assumption seems to be supported by the fact that export and import[1] volume growth, net of the effect of the deterioration in the terms of trade[2], reflects a much more favourable trend than that conveyed by the external balance indicator based on nominal values.

A beneficial effect on economic equilibrium this year has been the balance established between the inflows and outflows of income transfers and unrequited transfers[3], causing the value of disposable income to be equal to GDP[4], for the first time in the last 5 to 8 years. As this was due to the rise in non-specified unrequited transfer items, it is not yet possible to decide whether this is a lasting trend or merely a temporary phenomenon. Income transfers to foreign countries were implemented proportionately to the amount of time elapsed, and profit repatriation by companies in foreign ownership was also of an extent[5] typical for the first quarters of previous years.

Chart V-1 **Net financing requirement and the seasonally adjusted current account deficit as a percentage of GDP ***



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

[1] Exports and imports according to the national accounts.

[2] The deterioration occurred as a result of the exceptionally strong energy and commodity price increases from mid-1999.

[3] Net income transfers and unrequited transfers are identical to the items included in the balance of payments, and are derived from such.

[4] By contrast, the past five years were characterised by an outflow of net incomes, which reduced GDP available for domestic use by approximately 0.2–3.2% (this value fluctuated in the range of 0.4-2.1% during the first quarters of the years mentioned).

[5] In the first quarter, profit repatriation was not very strong. The amount of HUF 12.8 billion repatriated in 2000 Q1 corresponds to an annualised rate of 2.5% of GDP proportionately to the amount of time elapsed.

The distribution of disposable income among domestic economic agents returned to the state typical of the first quarter of 1998. By contrast, in 1999 Q1, government receipts temporarily lagged behind scheduled levels, a situation aggravated by the extraordinary expenses burdening the budget, which resulted in a temporary rise in company incomes.

Households' net financing capacity continued the downward trend seen in the previous year, falling to 2.3% of GDP, which – *ceteris paribus* – caused a nearly 2 percent rise in the external financing requirement. Last year, the correction for the exceptionally high levels of financial savings existing in 1998 also contributed to the lower level of savings. Although the tendency is expected to slow this year, the outlook is for individuals to increase consumption and investment at a faster pace than disposable income growth, just as in 1999. The tendency is also strengthened by the fact that the development of money markets tends to entail a rearrangement in the portfolio of household financial assets, resulting in a much higher debt to income ratio.

Corporate profitability was affected by several temporary and contradictory influences, which resulted in the ratio of firms' disposable income to GDP approaching the rate observed in the equivalent period a year earlier. The rapid rise in industrial sales has also stoked corporate sector disposable income growth. By contrast, the deterioration in the terms of trade, reflected only to a limited extent even in domestic sales prices, exerted downward pressure on corporate profitability. These two factors combined led to company profitability growth roughly equivalent to GDP growth. In spite of an expansion in companies' own resources and a rise in the domestic and foreign components of demand, investment growth remained subdued, which is reflected in the moderate rate of investment spending, despite the high level of stock-building. Nevertheless, the sharp rise in businesses' liquid

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

Per cent

	1998					1999					2000
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1
Gross domestic product	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
+ net income transfers	–2.9	–5.4	–3.2	–4.3	–4.0	–2.0	–4.0	–2.4	–4.8	–3.4	–2.1
+ unrequited transfers	1.7	2.2	2.6	2.2	2.2	1.6	1.9	2.3	2.0	1.9	2.1
Disposable income	**98.8**	**96.8**	**99.4**	**97.8**	**98.2**	**99.6**	**97.8**	**99.8**	**97.2**	**98.6**	**100**
– households	72.7	69.4	70.9	70.8	70.9	75.3	70.1	71.2	70.1	71.5	73.8
– corporate sector	12.8	14.5	14.9	12.4	13.6	12.7	16.1	15.0	11.4	13.8	12.5
– public sector	13.3	12.9	13.7	14.6	13.6	11.5	11.6	13.7	15.8	13.3	13.7
Final consumption	**75.4**	**71.6**	**71.3**	**71.8**	**72.4**	**77.8**	**73.2**	**72.6**	**71.8**	**73.7**	**77.5**
– household consumption	64.8	61.4	61.3	61.9	62.3	66.2	62.6	62.6	62.1	63.3	66.3
– public consumption	10.6	10.2	10.0	9.9	10.2	11.6	10.5	10.0	9.7	10.4	11.3
Gross savings**	**23.4**	**25.2**	**28.1**	**26.0**	**25.7**	**21.7**	**24.7**	**27.3**	**25.4**	**24.9**	**22.4**
– households	7.9	8.0	9.6	8.9	8.6	9.1	7.5	8.6	8.0	8.3	7.5
– corporate sector	12.8	14.5	14.9	12.4	13.6	12.7	16.1	15.0	11.4	13.8	12.5
– public sector	2.7	2.7	3.6	4.7	3.5	–0.1	1.1	3.7	6.1	2.9	2.4
Net capital transfers											
– households	0.4	0.3	0.2	0.1	0.2	0.4	0.3	0.2	0.1	0.2	0.4
– corporate sector	1.0	1.0	1.2	2.2	1.4	1.0	0.9	1.2	1.1	1.1	1.1
– public sector	–1.4	–1.3	–1.4	–2.3	–1.6	–1.4	–1.2	–1.4	–1.2	–1.3	–1.5
Investment	**26.9**	**30.4**	**30.3**	**30.7**	**29.7**	**26.5**	**29.5**	**27.9**	**30.9**	**28.8**	**27.0**
– household investment	5.7	3.1	4.0	3.8	4.1	5.5	5.8	6.4	4.7	5.6	5.6
– corporate investment and inventories	18.9	23.8	22.7	21.7	21.8	18.6	20.4	19.1	21.0	19.8	18.7
– public investment	2.2	3.5	3.7	5.2	3.7	2.3	3.3	2.4	5.2	3.4	2.7
Net foreign financing requirement	**–3.5**	**–5.2**	**–2.3**	**–4.6**	**–3.9**	**–4.7**	**–4.8**	**–0.6**	**–5.5**	**–3.9**	**–4.6**
Financing capacity of households	2.6	5.2	5.7	5.2	4.7	4.0	2.0	2.4	3.5	2.9	2.3
Corporate sector financing requirement	–5.1	–8.3	–6.6	–7.0	–6.8	–4.9	–3.3	–2.9	–8.5	–5.0	–5.1
Public sector financing requirement	–1.0	–2.1	–1.4	–2.8	–1.9	–3.8	–3.5	–0.1	–0.4	–2.1	–1.7

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, i.e. 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 by non-residents to Hungary (according to balance-of-payments statistics).

financial assets suggests a likely recovery in investment activity, which will be accompanied by an increase in the financing requirement.

The unchanged net borrowing requirement of the corporate sector and the deteriorating financing capacity of households have led to a nearly 2% rise in the private sector's financing requirement, relative to 1999 Q1. Nevertheless, the negative impact this had on the external balance was offset by the decline in the government's financing requirement. The improvement in the position is spectacular relative to 1999 Q1, but even after removing the effects of the extraordinary factors from last year there is clear evidence of the demand-restricting impact of the government. While the robust economic growth and the slower-than-expected decline in inflation tended to boost government receipts, these extra revenues did not cause expenditures to exceed the prescribed levels. This was possible because the unforeseen expenses and subsidies caused by the natural disasters were covered by reallocation of budgetary funds. Thus, even in the face of expanding government investment, the financing requirement of the budget shrank to approximately 1.7% of GDP.

2 The current account and its financing

In the first quarter, the balance of payments current account ran a deficit of EUR 378 million. While the deficit on the balance of trade (EUR 511 million) was largely in line with most analysts' projections (and also appropriate relative to the amount of time elapsed), the balance of services produced a significantly higher-than-expected surplus (EUR 254 million). The net outflow of incomes (EUR 236 million) slightly exceeded the level seen in the first quarter of 1999. The increase in the deficit can be attributed to the income transfers on non-debt generating investments, whereas the level of income transfers on debt-type investments remained virtually unchanged relative to 1999 Q1. The relatively high surplus on the balance of current transfers (EUR 115 million) is associated with the rise in private sector transactions.

Despite the fact that the deficit contracted by EUR 160 million on a year earlier, the improving trend in the balance of payments current account seems to have broken off *(see Chart V-2)*. Note, however, that it would be premature to draw long-term conclusions from this recent interruption of the trend.

The majority of the first-quarter current account deficit (EUR 280 million) was financed from non-debt-generating capital inflows, compared with a smaller portion (EUR 102 million) covered from debt-creating net inflows. Within the former category, net equity transactions associated with foreign direct investment amounted to EUR 232 million, while within a net volume of share transactions linked to portfolio investment a capital inflow amounting to EUR 48 million was registered. For now, the explanation for these relatively low levels seems to be found in general causes. Accordingly, foreign direct investment could be hampered by such factors as the saturation of the domestic market and the shortage of qualified labour available (especially in the more popular areas) and the draining effect of other countries, while the stronger capital repatriation by a few non-resident

Table V-2 **The current account**

EUR millions

	1999. Q1	2000. Q1	Change
I. Goods	–467	–511	–44
Credit (exports)	4,644	6,047	1,403
Debit (Imports)	5,111	6,558	1,447
2. Services	90	254	164
Travel, net	322	392	70
Other services, net	–232	–138	95
3. Incomes	–209	–236	–27
on debt, net	–210	–197	13
on non-debt, net	1	–39	–40
4. Current transfers	48	115	67
Current account (=1+..+4)	**–538**	**–378**	**160**

Chart V-2 **The balance of payments current account**

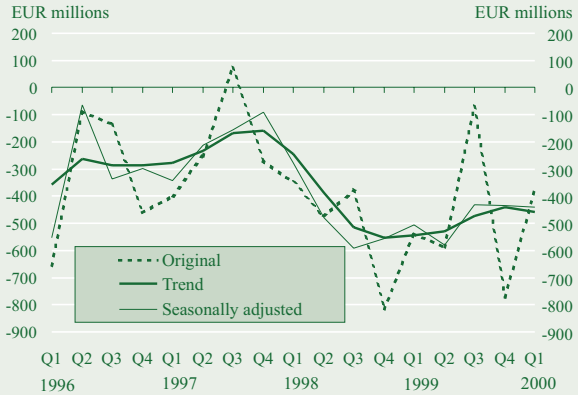


Table V-3 **Financing the current account**

EUR millions

	1999 Q1	2000 Q1	Change
(1) Current account deficit	**538**	**378**	**–160**
(2) Total financing	**792**	**382**	**–411**
– non-debt (=2b.1+2c.1)	**570**	**280**	**–290**
– debt (=2a+2b.2+2c.2)	**222**	**102**	**–120**
(2a) NBH and the government (=2a.1+2a.2)	272	–359	–630
(2a.1) Debt transactions	162	–73	–236
– o/w Government securities	63	558	496
(2a.2) International Reserves	109	–286	–395
(2b) Private sector (=2b.1+2b.2)	252	492	240
(2b.1) Equity transactions	166	48	–117
– Credit institutions	–7	5	12
– Corporate and other sectors	173	44	–129
(2b.2) Debt transactions	87	444	357
– Credit Institutions	15	703	688
– Corporate and other sectors	72	–259	–331
(2c) Direct investment (=2c.1+2c.2)	268	248	–20
(2c.1) Equity capital	405	232	–173
– in Hungary	428	235	–193
– Abroad	–23	–4	20
(2c.2) Intercompany loans	–136	16	153
– in Hungary	–131	21	152
– Abroad	–5	–4	1
(3) Capital account	**–12**	**15**	**27**
Net Errors and Omissions (=1-2-3)	**–242**	**–18**	**224**

owners also contributed to the emergence of this low level. The factors indirectly at work behind the decline in portfolio-type equity investment may include the weakening of the euro, the disappointing performance of companies whose shares are quoted on the stock exchange, as well as the profit realisation efforts of those benefiting from the rising exchange rate late last year also continuing into the first quarter and putting upward pressure on the selling side from March.

The main channels of debt-generating capital inflows have been net borrowing by credit institutions (EUR 703 million) and government security purchases by non-domestic residents (EUR 558 million). Added to these was an amount of EUR 200 million also arriving in the same quarter (generated by a further increase in the foreign bond issue of 1999 Q4). However, these amounts were offset by the government sector and Bank debt servicing of EUR 800 million, an EUR 286 million rise in international reserves, as well as the net debt repayments by the corporate sector amounting to EUR 260 million. On the whole, debt-creating net financing has hardly exceeded EUR 100 million.

The capital account, comprising unrequited capital transfers and transactions in non-produced and non-financial assets, recorded a modest surplus of EUR 15 million in the first quarter.

3 International investment position

The external debt recorded on the balance of international investments (which comprises both non-debt and debt-type elements) stood at EUR 31.1 billion at the end of the first quarter. Of this, non-debt components accounted for EUR 19.8 billion and debt components for EUR 11.3 billion. Net foreign debt calculated without non-residents' forint-denominated government security holdings and the stock of intercompany loans amounted to EUR 6.3 billion at the end of the period.

Non-debt claims on non-Hungarian residents remained unchanged during the quarter, with domestic companies' direct investments abroad above the value of intercompany loans, amounting to EUR 1.4 billion, and the level of portfolio investment in foreign equities remaining at EUR 100 million. The level of foreigners' direct investment in Hungary (net of intercompany loans) rose from EUR 16.2 billion to EUR 16.4 billion, and the stock of non-Hungarian residents' portfolio equity holdings rose from EUR 4.3 billion to EUR 4.9 billion, relative to the final quarter of last year. This was primarily due to a rise in the exchange rate, as the analysis on the financing requirement has already shown the absence of any significant equity purchases by foreigners.

The debt-type net investment position remained unchanged relative to 1999 Q4. In the assets category, the level of international reserves rose by EUR 0.4 billion to EUR 11.2 billion,[6] but the

Table V-4 **International investment position**

EUR billions

	1999		2000
	March	Dec.	March
Net international investment position (=1-2)	**–26.8**	**–30.4**	**–31.1**
– non-debt (=1a.1+1b.1-2a.1-2b.1)	**–15.2**	**–19.1**	**–19.8**
– debt (=1a.2+1b.2+1c+1d-2a.2-2b.2-2c)	**–11.6**	**–11.3**	**–11.3**
(1) Foreign assets (=1a+..+1d)	**14.4**	**19.1**	**20.9**
(1a) Direct investment abroad	1.4	1.6	1.7
(1a.1) Equity capital	1.1	1.4	1.4
(1a.2) Other capital (intercompany loans)	0.3	0.2	0.3
(1b) Portfolio investment	0.5	1.2	1.7
(1b.1) Equity securities	0.1	0.1	0.1
(1b.2) Debt securities	0.5	1.2	1.6
(1c) Other investment	4.2	5.6	6.3
(1d) International reserves	8.2	10.8	11.2
(2) Foreign liabilities (=2a+..+2d)	**41.2**	**49.5**	**52.1**
(2a) Direct investment in Hungary	16.9	19.1	19.5
(2a.1) Equity capital	14.4	16.2	16.4
(2a.2) Other capital (intercompany loans)	2.5	2.9	3.1
(2b) Portfolio investment	12.9	16.9	17.7
(2b.1) Equity securities	1.9	4.3	4.9
(2b.2) Debt securities	11.0	12.6	12.9
(2c) Other liabilities	11.4	13.5	14.8
MEMORANDUM ITEMS			
(M) Government securities held by foreigners	1.2	1.7	2.3
Gross foreign debt* (=2b.2+2c-M)	**21.2**	**24.4**	**25.4**
Net foreign debt* (=2b.2+2c-M-1b.2-1c-1d)	**8.3**	**6.9**	**6.3**

* Excluding government securities held by foreigners and intercompany loans.

[6] As of 2000, the level of international reserves is reported in the balance-of-payments statistics as the market value of the securities that constitute part of it, less the accumulated interest payments. There have also been changes in the way the reserves kept in terms of SDRs are converted into forints. As a result, the end-1999 level of international reserves calculated according to the new methodology adopted in 2000 is EUR 123 million below the value calculated using the former methodology. The figures in this *Report* on 1999 Q4 are calculated according to the new methodology. The change affects the stock of debt-type foreign assets held by the Hungarian economy (of which the reserves form a part), and consequently, also net foreign liabilities.

volume of portfolio and other investments also rose by more than EUR 1 billion. In terms of debt instruments, there has been a substantial rise in the volume of other investments (based primarily on commercial bank borrowing, as already noted in the section on financing). The rise in the level of portfolio investment was only on account of non-residents' increasing their Hungarian government security holdings (from EUR 1.7 billion to EUR 2.3 billion). In respect of the total of debt-type investment, the increases in foreign assets and liabilities have netted each other out, which caused the debt-type net investment position to remain unchanged.

Forint-denominated government securities and debt-type investments excluding intercompany loans comprise net foreign debt, which dropped from EUR 6.9 billion at the end of the previous quarter to EUR 6.3 billion. Table V-5 also shows that the National Bank and the government account for hardly more than 5% of the net foreign debt (EUR 0.3 billion). By contrast, this share stood at 19% in the previous quarter and 36% in 1999 Q1. Gross foreign debt rose to EUR 25.4 billion, with the growth associated predominantly with the private sector, where most of the increase is generated on non-euro-denominated debt instruments as a result of cross exchange rate changes (i.e. figures appear higher in terms of the weakening euro).

Table V-5 **Composition of foreign debt* by sectors**

	March 1999		Dec. 1999		March 2000	
	EUR billions	%	EUR billions	%	EUR billions	%
(1) Gross foreign debt (=1a+1b)	**21.2**	**100.0**	**24.4**	**100.0**	**25.4**	**100.0**
(1a) NBH and the government	11.9	56.3	13.4	54.9	13.6	53.3
– NBH	10.2	48.0	9.8	40.0	9.6	37.6
– Government	1.8	8.4	3.7	15.0	4.0	15.7
(1b) Private sector	9.3	43.7	11.0	45.1	11.9	46.7
– Credit institutions	4.8	22.6	5.5	22.6	6.1	23.8
– Enterprise and other sector	4.5	21.1	5.5	22.4	5.8	22.8
(2) Net foreign debt (=2a+2b)	**8.3**	**100.0**	**6.9**	**100.0**	**6.3**	**100.0**
(2a) NBH and the government	3.0	36.0	1.3	19.3	0.3	5.4
– NBH	1.7	20.0	–1.9	–26.8	–3.2	–50.6
– Government	1.3	15.9	3.2	46.1	3.6	56.0
(2b) Private sector	5.3	64.0	5.6	80.7	6.0	94.6
– Credit institutions	1.9	23.2	2.0	28.3	2.7	41.8
– Enterprise sector	3.4	40.8	3.6	52.4	3.3	52.8

* Excluding government securities held by foreigners and intercompany loans.

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