



# Quarterly Report on Inflation

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Act LVIII of 2001 on the Magyar Nemzeti Bank, which entered into effect on 13 July 2001, defines the primary objective of Hungary's central bank as the achievement and maintenance of price stability. Low inflation allows the economy to function more effectively, contributes to better economic growth over time and helps to moderate cyclical fluctuations in output and employment.

In the inflation targeting system, from August 2005 the Bank seeks to attain price stability by ensuring an inflation near the 3 per cent medium term objective. The Monetary Council, the supreme decisionmaking body of the Magyar Nemzeti Bank, performs a comprehensive review of the expected development of inflation every three months, in order to establish the monetary conditions that are consistent with achieving the inflation target. The Council's decision is the result of careful consideration of a wide range of factors, including an assessment of prospective economic developments, the inflation outlook, money and capital market trends and risks to stability.

In order to provide the public with a clear insight into the operation of monetary policy and enhance transparency, the Bank publishes the information available at the time of making its monetary policy decisions. The Report on Inflation presents the inflation forecasts prepared by the Economics Department, as well as the macroeconomic developments underlying these forecast. The Report is published biannualy, while twice a year partial updates of the forecasts are also prepared. The forecasts of the Economics Department are based on certain assumptions. Hence, in producing its forecasts, the Economics Department assumes an unchanged monetary and fiscal policy. In respect of economic variables exogenous to monetary policy, the forecasting rules used in previous issues of the Report are applied.

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The Report incorporates valuable input from the MNB's other departments as well as the Monetary Council's comments and suggestions following its meetings on 14 November and 28 November 2005. However, the projections and policy considerations reflect the views of the Economics Department staff and do not necessarily reflect those of the Monetary Council or the MNB.

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## Overview

Equilibrium risks render the sustainability of a low inflation environment uncertain According to our main scenario, which – consistent with earlier practice – is conditional on the assumption of an unchanged short-term interest rate and exchange rate, inflation remains low and economic growth stable over the next two years.

However, the persistently high general government and current account deficit continues to call into question the sustainability of the macroeconomic path. The future adjustment of unsustainable trends may occur through several mechanisms. Regardless of whether this adjustment is attributable to changes in the external financial environment or to the behaviour of domestic economic participants or a correction in economic policy, it may lead to a fundamental transformation of current monetary conditions and other factors influencing inflation. The timing and impact on inflation of such changes are hard to predict. Therefore, in evaluating our inflation projection, it should be taken into consideration that this forecast does not, in any manner, reflect the impact of any possible future adjustments to unsustainable trends.

As regards other conditions, in the light of the 2006 draft budget, we expect fiscal policy to continue to boost domestic demand. By contrast, our assumption for 2007 is a path of neutral effect or some moderate contraction in demand. As for developments in oil prices in the global market, we expect them to remain persistently high, in line with market expectations.

While core inflation has remained broadly flat at a low level recently, the gap between the overall CPI and core inflation has widened, due to historically high oil and unprocessed food prices. This growing gap has also been observed in developed economies In addition to the globally low inflation of processed traded goods competing in global markets, the strong exchange rate of the forint and increasingly fierce import competition have contributed to reducing core inflation. By contrast, there was no material reduction in the inflation gap between tradables and nontradables. Against a backdrop of a general easing in labour market conditions in 2005, ULC in the private sector have fallen to a level consistent with lower inflation, i.e. no material cost-push inflationary pressure has built up in the labour market. Inflation expectations, which are at steadily low levels in historical terms, and consumer

Fiscal policy continues to fuel domestic demand in 2006; Oil prices remain high

Low core inflation, an increasingly marked difference between the CPI and core inflation, with wage inflation becoming stable

Inflation is expected to stand at approximately 3 per cent in 2007

demand, which is expanding at much more slower pace than in previous years, have also been instrumental in the consolidation of the low inflation environment.

If all of our assumptions hold true, inflation may remain low, although as soon as the temporary impact of VAT rate cuts wears off, core inflation is likely to rise. As far as other goods are concerned, the dynamics of inflation is expected to slow down. A rise in core inflation over the longer term is attributable to the fact that although nearly all macro-economic factors have been suggesting disinflation, in the future the various impacts of these factors may change. Within this, the turnaround in core inflation is ascribable mainly to a steady rise in imported inflationary pressure, which has recently been at a historically low level. This rise is due in part to the recent increase in European imported inflation and in part to the diminishing impact of competition in the domestic goods market. Historically high oil prices and the feed-through of increases in regulated prices into producer costs foreshadow a rise in inflation. Furthermore, increasingly buoyant domestic demand also suggests a future increase in the currently low level of inflation.

In our judgement, overall, the rate of wage growth – assuming no substantial secondary effects of the minimum wage hike – will be consistent with the inflation target over the forecast horizon, and the economy is expected to grow around its long-term trend. The majority of the direct impacts of government measures are expected have disinflationary implications. Nevertheless, the indirect impact may lead to stronger inflationary pressure over the long term, by stimulating goods and labour market demand; over the forecast horizon, however, the impact of these indirect effects may only partly offset the direct disinflationary influences.

Consequently, we anticipate a temporary decline in annual CPI inflation to approximately 1 per cent in 2006, owing primarily to VAT rate cuts and certain postponed raises in regulated prices. In 2007, the CPI approximates to the 3 per cent inflation target. At the same time, core inflation will decline below 1 per cent in 2006, while picking up to the rate of overall inflation in 2007. In our main scenario, the inflation differential with respect to the euro area is expected to decrease over the forecast horizon.

Fluctuations in the CPI will mainly be due to VAT rate cuts in 2006; apart from the direct impact of changes in the tax regime, inflation

remains stable as reflected in a constant tax inflation close to 3 per cent.

Quantifiable risks point to slightly lower-than-target inflation rate in 2007 Of the quantifiable risks to the inflation, it is oil prices and trends in imported inflation over the short term, and wages and demand over the longer term that are of key importance. While imported inflation, oil prices and demand pose an upside risk to inflation, wages represent a risk to inflation below the central path. In 2007, assuming an unchanged short-term interest rate and exchange rate at the October level, quantifiable risks point to slightly lowerthan-target inflation rate.

Fan chart of the inflation projection



## Summary table of the main scenario

(Projections are conditional, with the main scenario reflecting the most probable scenario that applies only if all of the assumptions presented in Section 3 materialise; unless otherwise specified, percentage changes on a year earlier.)

		2003	2004	2005	2006	2007
		Actual /Estimate		Projection		
Inflation (annua	Il average)					
Core inflation <sup>1</sup>		4.8	5.9	2.2	0.8	2.8
Consumer price	e index	4.7	6.8	3.6	1.1	2.8
Economic grow	th					
External demar	nd (GDP-based)	0.8	2.0	1.5	1.9	2.0
Impact of fiscal	demand <sup>2</sup>	-0.4	-0.6	1.0	1.0	(-0.5)-0.0*
Household con	sumption <sup>3</sup>	7.2	2.5	2.8	3.7	3.2
Gross fixed cap	pital formation <sup>3</sup>	2.5	7.9	8.1	5.4	2.9
Domestic abso	rption <sup>3</sup>	5.7	2.2	0.9	6.1***	3.1***
Exports		7.8	14.9	10.3	9.2	9.2
Imports <sup>4</sup>		11.0	11.6	6.6	11.1***	8.2***
GDP <sup>3</sup>	based on earlier data series	2.9	4.2**	3.8**	4.2	3.9
GDF	under the new methodology	3.4	4.6**	4.2**	4.5	4.3
Current accoun	t deficit <sup>₄</sup>					
As a percentag	je of GDP	8.8	8.8	8.1	9.1***	8.5***
EUR billions		6.4	7.1	7.0	8.3***	8.3***
External financi	ing requirement⁴					
As a percentage of GDP		8.8	8.5	7.4	8.4***	7.7***
Labour market						
Whole-economy gross average earnings <sup>5</sup>		11.1	7.1	7.9	6.7	6.1
Whole-economy	y employment <sup>6</sup>	1.2	-0.4	0.1	0.5	0.7
Private sector gross average earnings		9.0	9.3	6.9	7.3	6.5
Private sector e	employment <sup>6</sup>	0.7	-0.2	0.5	0.9	1.1
Private sector l	JLC	6.5	3.5	3.2	3.1	1.2
Household real	income	3.9****	4.1***	4.0	5.0	2.7

<sup>1</sup> For technical reasons, the indicator that we project may temporarily differ from the index published by the CSO; over the longer term, however, it follows a similar trend. <sup>2</sup> Calculated from the so-called augmented (SNA) type indicator; a negative value denotes narrowing of aggregate demand. <sup>3</sup> In its data disclosure in October, the CSO introduced a new methodology of data disclosure (known as the FISIM adjustment, see Box 2.2) for GDP, which entails an annual 0.3 to 0.5 percentage point higher GDP growth during the period under review. As no complete data series or details for the GDP were available at the time of our projection, it was prepared in accordance with the old methodology; for information purposes we present the GDP figures revised up in accordance with the estimated impact of the new methodology. <sup>4</sup> As a result of the uncertainty over the measurement of foreign trade statistics, as from 2004 actual current account deficit and external borrowing requirement may be higher than suggested by official figures or our projections based on such figures. <sup>5</sup> The 13th-month salaries carried over from 2004 to January 2005 in the public sector cause a downward bias of the 2004 wage growth indicator and an upward bias of that in 2005. <sup>6</sup> Consistent with the CSO labour force survey.

\* Assumption for a fiscal impulse implicitly consistent with the macro-economic path; no detailed fiscal projection can be prepared for lack of a Budget Act for 2007. \*\* Original data; in 2004, the leap-year effect may have caused an upward distortion in GDP of some 0.2 percentage points, and a downward one in the same amount in 2005. In order for trends in growth to be assessed, these effects must be applied to adjust the data shown. \*\*\* Our projection includes the impact of the Hungarian Army's Gripen purchase, which raises the current account deficit and increases community consumption and imports. \*\*\*\* An MNB estimate.

1. Financial markets





The increase in risk appetite in the global financial markets seems to be losing momentum, and there is strong reason to believe that investor sentiment, which has been benign so far, will change. In their respective communications, the Federal Reserve and the ECB have emphasised that in their judgement risks to future inflation were on the upside. The source of such risks is the impact of persistently high oil prices on consumer price indices and, in the case of the euro area, the rapid buildup of excess liquidity. In response, markets expect the ECB to raise its key policy rate earlier than previously anticipated. Likewise, asset prices suggest that the Fed may tighten its stance soon as opposed to lowering its target for the federal funds rate, in response to natural disasters hitting the USA. Simultaneously, yields on 10-year euro and US dollar bonds have also risen.

Experience confirms that premia over EUR and USD interest rates on government bonds issued by emerging economies move in conjunction with EUR and USD interest rates. One explanation for this phenomenon is that, due to a rise in the general level of interest rates, doubts concerning the sustainability of government debt in emerging economies may grow, resulting in similar growth in the expected risk premia. Another approach is that higher EUR and USD interest rates dampen investors' risk appetite, since yields on their riskfree portfolio are high enough as they are, thus, they are less attracted to risky instruments. As a result, yields in emerging markets grow more substantially than EUR and USD yields. Although changes in the global inflation environment are not reflected in risk indicators yet, there is increasing risk that emerging markets will appear less appealing to investors in the future.

Along with other regional factors, trends in the global financial markets are clearly detectable in the exchange rates of local currencies and devel-

### Chart 1-1



opments in yields on long-term government bonds. After remaining relatively stable for several months, the Slovak koruna has weakened by approximately 2 per cent since early September. A similar development has been seen with the Czech koruna, which had been strengthening before September. The appreciation of the Polish zloty has stopped. The EUR/HUF exchange rate weakened by close to 4 per cent from early September to mid-November. As regards government bond yields, yields on 10-year eurobonds and Czech and Slovak long-term yields rose simultaneously. By contrast, yields on Polish government bonds grew more markedly, albeit with some time lag, and this can be attributed not to global factors but rather to uncertainty surrounding domestic politics. Risk premia on Hungarian government bonds rose sharply relative to both US dollar and euro bonds. Yields on 10-year Hungarian government bonds were 150 basis point higher in early November than two months before.

A comparison of recent regional developments in exchange rates and yields reveals that the

### Chart 1-2

Yields on long-term government bonds in the Visegrád countries



## Chart 1-3

Foreign exchange rates vis-à-vis the euro in the Visegrád countries



Source: Reuters.

EUR/HUF exchange rate has weakened, and yields on Hungarian government bonds have grown to a much greater extent than in the rest of the Visegrád countries. This suggests that uncertainty concerning fiscal policy and the introduction of the euro in September has come to play a dominant role in domestic financial developments. The impact of country-specific factors is especially striking in the premia on 5year euroforwards 5 years ahead, which grew significantly in the first half of September. There has been no change in the case of the Czech or the Slovak koruna. Although spread on the Polish zloty also widened at that time, it did so to a much lesser extent than with the Hungarian forint. This development confirms the occurrence of a domestic risk premium shock which mostly reflects deterioration in the market perception of the credibility of economic policy, nominal convergence and commitment to the introduction of the euro.

## Chart 1-4





Source: Reuters.

Differences in domestic financial trends are attributable to the fact that, in the judgement of the market, convergence in Hungary has reversed, and the envisaged introduction of the euro in 2010 has become more doubtful than ever. In early September it was announced that, based on the recommendation of Eurostat, the statistical office of the European Union, the Government would not include the revenues from State Motorway Management Ltd. in the general government and that it would recognise the costs of motorway construction due in 2005 as government expenditure. Furthermore, a Eurostat communication based on the autumn fiscal notifications revised the 2003 Hungarian budget deficit up to 7.4 per cent and the 2004 one to 6.5 per cent (under the ESA methodology). Following the decision on the accounting of motorway revenues, the Government revised up its ESA-based general government deficit target from 4.9 per cent to 7.4 per cent. It also became clear in September that, based on the 2006 draft budget, the fiscal deficit would be considerably higher in 2006 than had been set in the Convergence Programme.

In response to these developments, market analysts have revised upwards their fiscal projections for both 2005 and 2006. The fact that market analysts expect a higher 2006 general government deficit even on a cash basis suggests that they expect real fiscal easing to take place next year rather than simply acknowledging the changes in

#### Chart 1-5



Expectations for domestic balance indicators (2005 Reuters Polls) Billion EUR/

Source: Reuters.

the accounting methodology and incorporating that into their perception of fiscal trends in Hungary. The perception of trends in external balances has not, however, changed materially.

In the context of a repeated reversal in fiscal convergence, the issue of the postponement of the introduction of the euro has been raised on a government level, which is reflected in market expectations as well. The majority of the respondents in the Reuters surveys had perceived 2010 as the target date of the introduction of the euro in Hungary as a realistic objective. However, the survey conducted in October reveals that they now put it somewhere between 2012 and 2014. The anticipated date of Hungary's entry into ERM II has also been put off by several years, in response to the adverse developments in fiscal convergence. Deterioration in risk perception is also discernible in the derived 3-month forward yield curve. Relative to early September, expected 3-month yields have risen concerning the distant future. By contrast, there has been a more pronounced rise in euro yields at the shorter end of the yield curve. These phenomena confirm the conclusion that the underlying reason for rising forint yields is mostly stronger longer-term uncertainty.

#### Chart 1-6





Source: MNB.

There have, however, been changes in short-term expectations for monetary policy in Hungary. Developments in yields on 3-month treasury bills point to the fact that expectations for cuts in the central bank key policy rate tapered off in September. Short-term yields rose after the October rate-setting meeting, pointing to the pricing-in of an interest rate increase. Despite rising yields, ex ante real interest rates remained in the range of 3-4 per cent, tipical in earlier periods of this year.

Looking back over the past one and a half years, we can conclude that there have been fluctuations of a magnitude similar to the current one in the exchange rate of the forint and in short-term yields; the exchange rate of the forint did not weaken more dramatically than it did in the spring. However, only in 2003 H2 was turbulence similar to that caused by the rise in yields on long-dated 5–15-year government bonds in September and October and by the extent of daily fluctuations recently experienced. A marked difference is that the fluctuations in the exchange rate of the forint in 2003 were much more pronounced than they were during the period currently surveyed.

#### Chart 1-7

3-month forint benchmark yields and the central bank key policy rate



Source: Reuters, MNB.

#### Chart 1-8



\* Monthly averages of one-year government bond yields deflated by the current 12-month inflation and Reuters' one-year ex ante inflation consensus (year-end values, derived from expectations for average inflation using interpolation). Expectations for December 2005 and 2006 were calculated using Reuters' inflation consensus (as at end-2006 and 2007) and expected one-year yields (at end-2005 and 2006).

#### **Chart 1-9**

The CPI-based real exchange rate\*



\* Real effective exchange rate, 2000 average = 100 per cent. Higher values denote real appreciation. Our estimates of expectations for end-2005 and 2006 are based on a Reuters consensus on inflation and the exchange rate. We assumed that inflation in trading partner countries would not change, relative to a year-on-year average, and that expectations for the appreciation/depreciation of the effective exchange rate would be identical to those for the appreciation of the forint vis-à-vis the euro.

The fact that a deterioration in risk perception has led to adjustments in long-term yields rather than in the exchange rate of the forint indicates that exchange rate expectations have remained relatively stable. According to the Reuters survey in October, weakening affected analysts' exchange rate expectations more profoundly for end-2005 than for end-2006. Moreover, as markets expect the difference between domestic and foreign inflation to disappear, expectations for the real effective exchange rate have remained unchanged. Both global and domestic trends suggest that the likelihood of news that may improve risk perception will diminish in the months to come. Owing to increasingly strong inflationary pressures, the outlook for global interest rates points to higher rates. Based on the responses of the market to the 2006 draft budget, no tangible improvement can be expected in the perception of the euro convergence process over the shorter term. In addition to the persistent vulnerability of the exchange rate of the forint caused by external imbalances, these are the factors that will determine the financial market context for monetary policy in the months ahead.

2. Inflation and its determining factors





## 2. 1 Economic activity

Data published since our August *Report* continue to confirm the picture of stable economic activity in Hungary. There have been no clear signs of an upturn in foreign economic activity since the last quarter, while growth in external demand is still positive. Dynamic domestic business activity has been supported by an increase in consumption and investment.

#### Chart 2-1

Size of Hungary's export markets and GDP in its major foreign trade partner countries\*



\* Export markets size: weighted average growth of imports in Hungary's export markets.

Slow growth in external demand and improvement in business confidence

The indicators of foreign business activity do not show an unambiguously improving economic performance. The growth of demand by Hungary's trading partners of key interest from the point of view of domestic exports, measured both in imports and in GDP, declined somewhat in Q2.<sup>1</sup> At the same time, however, business confidence indicators in Germany and the euro area suggest that the business climate has improved further in the last few months.

#### Chart 2-2





## Box 2-1 Question marks regarding German economic activity

Since Germany is Hungary's largest foreign trade partner, its economic developments have a major impact on the economic activity of Hungarian enterprises. As the present state of the German economy differs from that of the euro area as a whole in many respects, it is essential to deal with German business activity separately when attempting to accurately assess the outlook for Hungarian economic activity. Following the global recession in 2001, the euro area – albeit gradually – recovered and the growth rate of GDP increased to near the estimated potential rate of 1.8 per cent in 2004. By contrast, German GDP growth practically came to a halt in 2002, and then showed a moderate decline in 2003. In 2004, it also increased at a rate lower than the euro area average (1.1 per cent). Due to Germany's large weight in Hungary's foreign trade

<sup>1</sup> For more information on economic activity in Germany, Hungary's most important foreign trade partner, see Box 2.1.

structure, this could have led to weak external impulses and limited sales opportunities abroad for Hungarian enterprises.

But this was not the case: after the global economic decline in 2001 the business activity of Hungarian enterprises recovered in the following year, although activity did not return to the same rate as experienced at the beginning of the recession. Both industrial output and exports started to increase. The reason for this was that while the slow growth of German GDP was mainly due to subdued domestic demand, the business activity of German enterprises on foreign markets recovered quickly.

#### Chart 2-3





and imports fell significantly, German exports have continued to increase from 2002 almost at the rate characteristic of the period preceding the recession. Imports also started to expand, mainly due to stronger exports, although the rate of growth was far short that of exports due to the protracted slump in domestic demand (stagnating household consumption, significantly declining investments).

A large number of German economic analysts agree that domestic demand is in a 'vicious cycle'. A much better domestic sales outlook would be necessary to boost investments, but due to the moderate wage increases following the large wage rises at the beginning of the 1990s and the shortage of employment opportunities, the income expectations of the population are subdued and thus households are not increasing their consumption at a level needed for enterprises to start new investments or to create new positions.

As regards economic outlook, both household consumption and investments continued to decline in 2005 H1. Economic growth was primarily attributable to the continued expansion of net exports. In order to put an end to this 'vicious circle' the government has started to introduce reforms in the labour market and elaborate incentives for small and medium-sized enterprises which will show their effect only in the long term. Consequently, we can assume that the recovery of the German economy remains primarily dependent on the improvement of net exports in the near future, marked by outstanding growth in exports and an expansion in imports at a slower rate than that of exports, while still remaining at a high level. From the point of view of foreign demand for Hungarian products this is a favourable development as we found that this demand was determined by the imports of Hungary's foreign trading partners to a greater extent than by their domestic demand.

#### Slower output growth in manufacturing

At nearly 15 per cent in annualised terms, value added in manufacturing was rather robust in Q2, while value added in market services continued to expand at a slower pace than the surprisingly fast rate of increase registered in Q1. The growth rate of value added in construction increased, most likely caused by much more intensive-thanexpected motorway construction also appearing in gross fixed capital formation on the expenditure side.

In Q3, the growth of gross industrial output slowed down modestly. Detailed data showed that this deceleration was due to slower expansion in manufacturing and in machinery and equipment in

## Inflation and its determining factors

particular.<sup>2</sup> Gross output figures indicate that growth in industrial value added may drop in Q3, while the outstanding rate of growth in Q2 strengthens risks pointing to a faster economic growth in terms of the whole year.

#### Chart 2-4



\*Based on trend month-on-month indices.

## Foreign trade in goods – robust exports, accelerating imports

Foreign merchandise trade statistics provide a slightly different picture of industrial activity. According to foreign trade data, goods exports continued to increase robustly in Q3, while the slowdown indicated by gross output was not reflected in foreign trade statistics.

In our previous *Report* we discussed the recent inconsistencies between foreign trade and GDP statistics and how this calls into question the validity of merchandise statistics. Last year, import figures calculated on the basis of merchandise trade statistics fell behind the figures expected on the basis of estimated imports required by consumption, investments and exports.<sup>3</sup> In Q3, uncertainty decreased as imports began to grow: the difference between the deficit justified by merchandise trade and other macroeconomic statistics stopped increasing.







\* For 2004 we have made adjustments to the imports trend data series for import purchases brought forward and for the public warehouse effect. The former adjustment meant deducting an amount of EUR 350 million from growth in imports in March and April 2004, which was added to growth during the rest of the year distributed evenly from May. Adjustment in the latter case meant deducting a total amount of EUR 419 million from the value of (the c.i.f. value) of imports during the period between May and July 2004. The value of the public warehouse adjustment was removed from the data series for goods. Data for June are preliminary.

Developments regarding the terms of trade in goods remain unfavourable. In our August Report we noted that, as a whole, 2004 was characterised by a deterioration in the terms of trade. This was also reflected by the fact that the growth rate of gross domestic real income (GDI) fell short of that of GDP. In our view, the deterioration in the terms of trade was not primarily due to the changes in energy prices over the long term. The examination of several quarters reveals that changes in the terms of trade in goods, on the whole, were predominantly influenced by changes in machinery and equipment. Energy prices only had a significant effect on the terms of trade in 2005 Q2. Further analysis is required to assess the reasons for

<sup>&</sup>lt;sup>2</sup> Manufacture of electrical and optical equipment and transport vehicles: these are the two sub-sectors which represent the largest weight in machinery and equipment.

<sup>&</sup>lt;sup>3</sup> For more details on this phenomenon, please see Box 4-5 of our August Report on Page 65.

unfavourable changes. It is, however, clear that deterioration is not a typical phenomenon in the Central and Eastern European region: it only took place in Slovakia and Hungary between 2001 and 2005 on a significant scale.

#### Chart 2-6



### Chart 2-7

Terms of trade in goods in Central and Eastern Europe\*



Increase in household consumption – growth in income and loans

In the whole of 2004 consumption grew at a stable rate of approximately 3 per cent, with this rate increasing in 2005 Q1 and Q2. The picture of accelerating growth is supported by the continuous increase in retail trade turnover since mid-2004. Consumption has been determined by two factors in the last few quarters. On the one hand, disposable income grew rapidly, while on the other foreign currency loans taken out by households for consumption purposes reached a new peak. In light of rapidly increasing household liquidity and other indicators, it is very likely that consumption will pick up further in the coming period.

### Chart 2-8

Households' consumption expenditure and retail trade turnover

(annualised quarter-on-quarter growth rates)



#### Chart 2-9

Net borrowing by households for consumption purposes (with bank and lease loans)



Robust government, moderate corporate investment activity

Gross fixed capital formation declined slightly in Q2, yet the first half of the year on the whole proved to be rather intensive. In our previous *Report* we expected a revision of the outstanding growth in Q1 and an end to the recent significant

fluctuations in the time series, but neither of these expectations came true. Based on a more detailed breakdown of investment statistics by sectors, it is very likely that the higher-thanexpected growth in gross fixed capital formation in H1 was due to the expansion of governmentfinanced investment (mainly motorway construction), which far exceeded our previous assumptions.

In contrast to government-financed investment, households and the manufacturing industry are characterised by much less intensive investment activity. More in line with overall economic activity, investment in the manufacturing industry grew at a more modest rate in Q2, while investment by households continued to decline. The two key indices of the real estate market (the number of building permits issued and home completions) demonstrate weaker willingness to buy new

#### Chart 2-10



#### Chart 2-11

Building permits issued and homes built (annualised quarter-on-quarter growth rates)



homes: the number of building permits has been declining for more than a year followed accordingly by a drop in the number of completions a few quarters later.

#### Faster economic growth

In 2005 Q2, gross domestic product grew by nearly 4 per cent relative to 2004 Q2.<sup>4</sup> On the expenditure side, growing economic activity is mainly due to the combined effect of robust domestic demand components and still favourable net exports.<sup>5</sup> Among expenditure items, the growth rate of consumption increased somewhat in Q2 and the surprisingly buoyant investment activity in Q1 did not lose momentum to any great degree up to the middle of the year.

<sup>&</sup>lt;sup>4</sup> According to its publication of 3 October 2005, the CSO calculates gross domestic product (GDP) based on a new methodology (for more on this revision, please see the Box text). Nonetheless, currently accessible data are based on the old methodology.

<sup>&</sup>lt;sup>5</sup> The assessment of net exports, however, should be treated with caution due to the repeatedly mentioned uncertainty surrounding merchandise trade figures.

## Box 2-2 FISIM-revision: new methodology – significantly revised GDP data

In its publication on 3 October 2005, the CSO retrospectively revised the data on gross domestic product (GDP). In this case, the changes include the results of two impacts: on the one hand, they were part of the usual statistical data revision (i.e. the revision of annual data on the basis of new information which became available regarding earlier years - e.g. tax returns, annual profit and loss accounts, balance sheets of enterprises, etc.), on the other hand they represent a change in methodology. Previously, fees for financial intermediation services indirectly measured (FISIM) did not increase GDP on the whole, while according to this new type of calculation they appear both on the production and on the expenditure side.<sup>6</sup>

As this change in methodology may significantly influence our picture of the rate and structure of economic growth both in the period under review (2002-2004) and most likely in the near future as well, we will address only with this type of revision in the following.

The new type of FISIM settlement must be introduced by every EU Member State, to a great extent during this year. According to the calculations of the EU and some of its Member States (e.g. Germany and England), accounting for FISIM according to this new type of methodology may increase nominal GDP by approximately 1-1.5 per cent, but they do not expect this to have a significant impact on growth rates. These expectations are confirmed by international experience to a large extent, but there are countries (e.g. Slovenia) where this new method of calculation has led to a modification of the GDP growth rate as well.

## Table 2-1

Changes in GDP at current prices as a result of revisions undertaken (HUF billion)

	2002	2003	2004
GDP at current prices (according to the last quaterly GDP publication of CSO)	16,740.4	18,408.8	20,338.2
GDP at current prices (using the old type FISIM settlement)	16,757.9	18,447.0	20,265.9
GDP at current prices (using the new type FISIM settlement)	16,915.3	18,650.8	20,413.5
Impact of usual statistical data revision on GDP	17.6	38.2	-72.2
Impact of changing in (FISIM) methodology on GDP	157.3	203.9	147.6

<sup>&</sup>lt;sup>6</sup> FISIM measures the issues of those services of financial enterprises which do not have explicit fees and thus they are included in interest. According to the methodology applied so far this amount of services has not been divided, but it has reduced the economy's gross value added as intermediate consumption of the national economy in its entirety. On the basis of the new methodology defined by Eurostat and to be introduced in every EU Member State, FISIM must be divided among the sectors using it. Accordingly, FISIM – which has only appeared so far as a current producer use – can be shown as current producer use, final use (mainly in the case of households) or exports from now on.

### Table 2-2

#### Volume indices of the main expenditure items of GDP

(annualised percentage changes)

	20	2003		04
	Previous data	Actual data	Previous data	Actual data
Household final consumption expenditure	7.8	8.5	3.1	3.2
Actual final consumption of government	6.5	11.2	-3.9	0.9
Social transfers in kind	4.9	4.8	-0.2	2.6
Total actual consumption	7.1	7.8	1.7	2.8
Gross fixed capital formation	2.5	2.5	7.9	8.4
Gross capital formation	1.3	1.0	3.7	2.8
Total domestic use	5.7	6.2	2.2	2.8
Exports	7.8	7.8	14.9	16.4
Imports	11.0	11.1	11.6	13.2
GDP	2.9	3.4	4.2	4.6

level of Hungarian nominal GDP by around 0.7- future, simultaneously with this the interest dif-1.1 percentage points in the period published so far (2002-2004), while revised GDP levels have not significantly affected GDP-proportionate indicators of economic equilibrium and indebtedness processes. At the same time, however, the growth path of the economy has changed considerably: the new volume index was 3.4 per cent instead of 2.9 per cent in 2003 and 4.6 per cent instead of 4.2 per cent in 2004.

The level increasing effect (i.e. the nominal effect of the methodological changes regarding FISIM raising the GDP level) is dependent on households' deposits and loans and the differential<sup>7</sup> achieved on the interests of these transactions. While the amount of deposits and

This change in methodology increased the loans is expected to rise significantly in the ferential of transactions is likely to fall, partly due to stronger market competition and partly to the continuation of interest convergence. The effect on nominal GDP growth is the result of these two mainly contradicting changes. In the case of the real growth rate of the economy, however, we can expect a clearly positive effect on growth<sup>8</sup> due to the gradual trend-like deepening of the financial intermediation system primarily vis-à-vis households. This means that when and as long as the GDP-proportionate amount of households' bank loans and deposits exhibits trend-like growth (i.e. the growth rate of nominal outstanding amounts exceeds that of the nominal GDP) an impact on real growth can also be expected.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> In the case of loans: interest rate differential = average loan interest - reference interest, while in the case of deposits: interest rate differential = reference interest - average deposit interest.

<sup>&</sup>lt;sup>8</sup> This effect might be in the range of 0.3-0.5 per cent in terms of yearly changes.

<sup>&</sup>lt;sup>9</sup> The value of FISIM calculated at the base price can be calculated using the following formula both in the case of loans and deposits: FISIM (at base price)=(FISIM at current price/price index)\*(interest rate differential in base period)/(interest rate differential in the reporting period). If we take into account that FISIM at current price is the product of the nominal holding and the interest rate differential calculated in the reporting period, we can see that FISIM calculated at the base price can be arrived at using this formula: (nominal holding/price index)\*(interest rate differential in the base period). The annual growth rate of this value is only dependent on the growth rate of the real holding.

Growth data from the various countries paint a rather mixed picture of economic activity in Central and Eastern Europe.<sup>10</sup> Looking over the last few quarters there are no signs of a significant acceleration in economic growth in any of the countries in the region: the gross domestic product time series of some countries show a growth rate of around 4-5% on an annual level in most cases. Poland is the only exception where the rate of economic growth fell very sharply to around 1 per cent according to 2005 Q2 figures. In our August *Report* we wrote that, according to data available to us at the time, the growth rate in Hungary was one of the lowest in the region, but these new figures on Polish economy have somewhat modified this picture. According to the latest data, in Q2 the difference between the fastest growing Slovakia, the Czech Republic and Hungary<sup>11</sup> decreased and Poland took last place.



<sup>\*</sup> Growth rates were calculated using data not corrected for FISIM. The Q3 Hungarian growth rate is MNB-estimate based on the flash estimate by Ecostat.

<sup>&</sup>lt;sup>10</sup> Until the FISIM correction is completed in national GDP statistics, cross-country comparisons can be carried out using uncorrected data.

<sup>&</sup>lt;sup>11</sup> For Hungary in Q3 Ecostat's flash estimate with FISIM-correction was 4.6%. Without the FISIM-correction, the estimated growth rate is 4.2%.

## 2. 2 Labour market

Labour use still moderate despite buoyant economic activity

The robust growth in external economic activity since early 2003 prompted Hungarian enterprises to increase their output significantly. Simultaneously with this – in addition to expanding investment willingness – labour demand has also increased, albeit falling far short of the growth characteristic of that seen in the rising business cycles of previous years. In the last one and a half years, total hours worked (the key indicator of labour use) increased only gradually and to a limited extent, despite the intensive growth in value added. These developments can be explained by various sectoral effects.

#### Chart 2-13

Total hours worked



Labour use in manufacturing has been continuously declining in practical terms for the last five years, despite the recovery in industrial activity witnessed since the end of 2003, as evidenced both by statistics in employment and in total hours worked. Despite the decline in employment, average hours worked have increased considerably, indicating that enterprises tend to make a better use of their existing capacity as opposed to hiring new employees. The weekly average number of hours worked by manual workers is nearing its historical peak very fast. Despite the continuously rising labour supply, the statistics – showing moderate employment expansion and outstanding average hours worked – may indicate the continued existence of a structural labour shortage or cautious behaviour by enterprises. If most enterprises are uncertain about their outlook for growth and deem the positive economic activity to be merely temporary, they increase the average hours worked by their existing employees instead of a more costly adjustment of workforce.

#### Chart 2-14

Manufacturing output and weekly average hours worked by manual full-time workers



Long-term changes in enterprises' production structure is another reason for this moderate demand for employment. In recent years, labour has become considerably more expensive. Most enterprises reacted to the sudden increase in labour costs by gradually substituting labour for capital. This substitution has speeded up in the upward phase of the business cycle, which in itself led to a growing demand for capital and lower employment.

Higher labour costs may be related to the gradual decline of the Hungarian textile industry, which continued in 2005 and had a major effect on the growth in manufacturing employment. The output figures of the last few months, however, suggest a possible turning point: the long-lasting decline in textile industry output seems to be coming to an end. Nevertheless, at the time being the currently available information is not sufficient to assess how permanent this output growth will be and what effect it will have on the employment in the sector.

The output of the services sector has gained new momentum since early 2004. In contrast to the previous period, growth was attributable to mostly external economic activity in the last year and a half as opposed to consumption. Accordingly, the increase in the labour use of the sector is mainly due to the expansion of employment in trade, transportation and storage services (i.e. sectors associated with external demand and manufacturing).

With regard to the whole of the national economy, the statistics of the National Employment Office on mass layoffs and unfilled vacancies also indicate weak labour demand. The number of unfilled vacancies fell again following a rise in

#### Chart 2-15





2004. At the same time, however, the number of mass layoffs also declined, albeit to a smaller extent.

#### Growing activity, rising unemployment

As a result of weak labour demand in the private sector and the gradual decline in the number of government employees since early 2003, the number of employed has remained practically flat since early 2004 on the whole economy level. Economic activity, however, has started to increase again recently following a lull at the end of 2003 and in early 2004. Labour supply was faced with stagnating labour demand, which resulted in rising unemployment starting from early 2004.

#### Chart 2-16

**Economic activity, employment and unemployment** (seasonally adjusted)



The rising trend in employment willingness despite weak labour demand is difficult to explain. Initial findings of ongoing research show that a part of the inactive population is almost as closely attached to the labour market as people with official unemployed status and this group may even be considered as part of the labour reserves of the whole economy. The co-movement of the economic activity cycle with the

## Inflation and its determining factors

employment cycle, however, does not explain current developments.

#### Declining wage inflation

Wage inflation in the private sector continued to decline in 2005. In line with the gradual drop in inflation expectations, nominal wage adjustment has been observed since early 2004.

At first it was difficult for the private sector to adjust to the disinflation trend which started early 2001. The sudden and significant drop in the inflation rate surprised private enterprises. Consequently, both inflation perceptions and expectations have long exceeded actual price rises which could lead to higher nominal wage agreements. Even with lower inflation expectations, enterprises could not significantly decrease wages. Labour supply stuck at a low level, the shortage of trained skilled workers, the large rises in minimum wages in 2001 and 2002 and the significant wage increases in the government sector coupled with an increase in employment – further reducing the potential labour force of the private sector – represented a series

#### Chart 2-17



(seasonally adjusted, annualised quarter-on-quarter growth rates)



\* Due to adjustment for bonus payments, the time series is determined by the dynamics of regular payments. In 2004 and 2005, the adjustment for bonuses was undertaken according to our own estimate on bonus payments. of shocks to private enterprises. Consequently, real labour costs have exceeded labour productivity for a long time which has led to an increase in the wage share.

### Chart 2-18

Nominal unit labour cost, productivity and wages in the private sector

(annualised quarter-on-quarter growth rates)





Real wage costs, productivity and wage share in the private sector

(annual growth rates and levels)



The pressure toward high wage growth has gradually decreased since early 2004. Stronger industrial activity, growing labour supply and weak labour demand have finally given way to wage adjustments. As a result of the rationalisation of production and the increase in capital deepening, productivity in the private sector rose significantly

increase in real labour costs. In 2005, the gap between the growth rates of labour costs and pro-

during 2004, at a rate exceeding that of the ductivity seemed to close gradually which suggests more balanced labour market developments in the current period.

## 2. 3 Inflation developments

In 2005 Q3, the consumer price index (CPI) stood at 3.7 per cent,<sup>12</sup> slightly lower than the Q2 index. Core inflation, however, declined significantly, falling by approximately 0.7 percentage points, to 1.5 per cent, compared to Q2. Accordingly, the gap between the consumer price index and core inflation continued to widen in Q3, i.e. inflationary pressure is still mainly attributable to items falling outside the scope of core inflation.

#### **Chart 2-20**



The growing gap between the two inflation measures is not only a Hungarian phenomenon, but is observable in the euro area as well. While the world market price of oil, which mainly affects price developments in items falling outside the scope of core inflation, rose markedly, the rate of core inflation in the developed world slowed down significantly. According to international analyses, there may be several factors underlying this latter process, including the strengthening of product market competition seen on a global scale, credible anti-inflationary monetary policies in developed countries and the subdued increase in wages, despite high oil prices.

#### Chart 2-21



# Steadily low core inflation against a background of diverse processes

Since the beginning of the year, core inflation has continued to stagnate at around 1 per cent, which is a historically low level.<sup>13</sup> This low rate of core inflation is attributable to both low domestic inflation of tradable products (industrial goods and certain food products). By contrast, inflation in non-tradable services remained at a relatively high level of 6–7 per cent.

<sup>&</sup>lt;sup>12</sup> The October CPI stood at 3.2 per cent, in line with our projections representing a marked drop as compared to the previous months. With core inflation staying at its low growth rate, inflation in vehicle fuels saw a significant decline, due to a change in government regulations (reduction of VAT rate on vehicle fuels) as well as external oil price developments. As a result, the gap between the CPI and core inflation has decreased somewhat.
<sup>13</sup> Based on the annualised quarterly growth rates.

#### **Chart 2-22**

#### **Core inflation**

(seasonally adjusted, annualised quarter-on-quarter growth rates)



Disinflation and deflationary pressure in the scope of tradable products is only partly attributable to the pass-through into domestic prices of the forint exchange rate, which began appreciating last year. Additionally, the aforementioned decline in world market prices also played a significant role in domestic price developments. This is also shown by the fact that the deflation in domestic industrial goods, which has lasted for nearly a year, occurred when euro area industrial goods inflation was historically low.<sup>14</sup>

#### Chart 2-23

Domestic industrial goods inflation and its main determinants

(seasonally adjusted, annualised quarter-on-quarter growth rates)



In respect of market services, no significant disinflation has been perceived recently, and the inflation differential between generally non-traded services and traded industrial goods fluctuated around the relatively high level of 7 per cent, despite the generally low inflationary environment.

#### Chart 2-24

Inflation differential between services and industrial goods\*

(differences of year-on-year growth rates)



\* The peak in 2004 Q1 is the result of the VAT increase at the beginning of 2004, which had a stronger impact on market services prices than on the prices of industrial goods.

Our analyses show that the lack of decline in the inflation differential can be broadly explained by the fact that the increase in unit labour cost of manufacturing, which produces tradable products, consistently exceeded that of the service sector by a significant degree. This phenomenon – which is typical of converging countries – is even more characteristic of Hungary, as the substitution of labour with capital is observable in manufacturing, which facilitates the increase in manufacturing labour productivity.

#### Oil price movements added to inflation

While core inflation stabilised at a low level, items falling outside the scope of core inflation generally boosted inflation. Although the Q2 price shock

<sup>14</sup> It is also conceivable that the low inflation of tradable products is partly attributable to strengthening market competition, when the range of products has expanded towards lower-quality, and thus lower-price products in an increasing manner, which resulted in a downward quality rearrangement in the consumer basket. It should further be examined to what extent this type of decline in the consumer price index represents 'real' disinflation.
in unprocessed foods, which was discussed in detail in our August Report, more or less unwound by Q3, the inflationary effect of the rise in the world market price of oil and in certain regulated prices remained dominant. In particular, during the first three quarters of the year domestic vehicle fuel prices increased by 13 per cent, while oil prices in euro increased by nearly 50 per cent, and the HUF/EUR exchange rate was relatively stable.<sup>15</sup>

So far, only the direct effects of oil price rises on the prices of energy-like consumer goods has started to appear in domestic consumer prices. Accordingly, the unravelling of effects is in its initial stage, and additional inflationary pressure is anticipated for the future, if the oil price level remains high for a longer period of time. These effects are so-called indirect price effects appearing via production costs and secondary inflationary effects via a possible increase in inflation expectations.

# The decline in inflation expectations came to a standstill

From a monetary policy aspect it is especially important to what extent the high oil price and the domestic price increase in certain regulated goods with high price transparency may result in a rise in economic agents' inflation expectations, and whether monetary policy is able to anchor expectations. Increasing inflation expectations may result in wage inflationary pressure during the wage bargaining process, which may cause additional acceleration of inflation as a secondary effect. Over recent months central banks of developed economies have also called attention to the danger of a persistently high oil price level and the possibility of an increase in inflation expectations. Based on the surveys conducted among Hun-

#### **Chart 2-25**

Perceived and expected price changes based on the GKI survey\*



\* Balance indicator, i.e. a move in the positive (negative) direction means the increase (decline) in inflation perception or expectation. Source: GKI survey, DG Ecofin data base.

garian households, no clear signs of increase can be seen in either perceived or expected inflation. However, it is worthy of note that according to the surveys by both GKI and Medián, last year's downward trend came to a standstill in the first half of this year, and the indices have stagnated in the last two to three quarters.

#### **Char 2-26**

Inflation perceived and expected by households according to the MNB survey\*

(for the last and next 12 months)





<sup>15</sup> For more information on of the effects of world oil price changes on the Hungarian economy, please see Box 3.2.

3. Inflation outlook





According to our projection, several demand and supply factors underlying the decline in core inflation to the current low level are expected to have an inflationary effect in the coming two years. Although this trend is expected to be temporarily masked by the price-reducing effect of the VAT reduction in 2006, core inflation is expected to increase from the current level of approximately 1.5 per cent to nearly 3 per cent by 2007.

#### Chart 3-1



## **Box 3-1** Assumptions

In our forecast, in accordance with our rules, the values of individual factors in the last full month (currently 2005 October) are projected over the whole forecast horizon (presently, the first 10 working days of October 2005 constitute the reference period.) The exception is our oil price assumption, where the forward oil price path is used. In terms of year-end values, a 6 per cent central bank base rate, 6.67 per cent five-year yield, exchange rates of EUR/HUF 251.7 and EUR/USD 1.202 were used in our calculations. A sustained price path of around 60 USD/barrel was assumed as the Brent oil price.

Our forecast was prepared on the basis of the adopted tax laws and the 2006 budget bill. On aggregate, the adopted and planned measures will result in fiscal easing. In parallel with this, as was analysed in detail in the MNB's *Report on Convergence*, fiscal policy has deviated from the path undertaken in the Convergence Programme, which is inadmissible over the longer term. The consolidation required for the path undertaken in the Convergence Programme would presumably involve a slowdown in economic growth in the short run, while the effect on inflation depends on whether consolidation is enforced by the autonomous decision of fiscal policy or by international money market investors. Despite the uncertainties and in accordance with our forecasting rules, in the base scenario we assumed the continuation of October's average of both the central bank base rate and the exchange rate.

Pick-up in domestic business activity, with stable growth

It is expected that on our forecast horizon economic growth will continue to be around the level of the past two years, i.e. around 4 per cent.<sup>16</sup> In terms of the driving forces of economic growth, domestic demand is anticipated to play a somewhat more important role than external demand in the coming two years. This will result in a slight inflationary pressure from the demand side.

Although the moderate growth in external demand is expected to continue, it will be slower than in the last two years. The underlying reason is that the expected pick-up in European domestic demand will be offset by the effect of persistently high oil prices, which has a restraining influence on economic growth. Overall, based on our forecast, the size of Hungary's export market may grow by 4-5 per cent in the coming two years.

#### Chart 3-2



Individual factors' contribution to GDP growth\*

\*According to the former methodology of CSO, i.e. without the FISIM correction.

At the same time, a gradual pick-up in domestic demand is anticipated, and the expected developments in both consumption and investment will play a role in this regard. Household consumption's becoming more dynamic will basically stem from the increase in household disposable income, fostered in part by the VAT reduction in 2006, the rise in minimum wages and increases in the family support scheme. In addition, continued financial deepening is also expected, which may be coupled with a further expansion of households' borrowing opportunities. We expect a slowdown in the rate of investment growth in our projection, mostly as a result of a slowdown in corporate investment and a pick-up in government investment in 2006.

## Varying effect of supply-side factors of inflation over the longer term

Supply-side factors of inflation currently have a disinflationary effect. In the coming two years, however, many of these factors, e.g. the rising imported inflation, the decline in the disinflationary effect of competition and the exchange rate, which has weakened slightly compared to the last one and a half years, point to inflation, which is higher than it is at the present time. In addition, the historically high oil price level, mainly as a cost factor appearing at several points in the production process, may also generate inflationary pressure in the future. At the same time, labour market trends are not expected to exert inflationary pressure; on the contrary, the reduction of employers' social security contribution in 2007 may temporarily result in a lower rate of price increases. The expected gradual turnaround in the disinflation process which has been experienced during the

<sup>16</sup> The computation of GDP by the CSO under the new methodology can generate an additional 0.3-0.4 percentage point yearly growth rate in the coming years. For more information on this topic, see Box 2.2.

last one year will temporarily be masked by the VAT reduction in 2006. The aforementioned factors are examined in more detail below.

Apart from the oil price increase, the inflationary environment has essentially been favourable up to now. Liberalisation of the global economy exerts a disinflationary effect via several channels, such as wage containment, greater competition and improving productivity. Presumably, partly as a result of the processes outlined above, consumer price inflation of industrial goods sank to its alltime low in the euro area. This disinflationary effect evolved in a shorter period of time in converging countries, including Hungary, than in developed countries, since the transformation of economic structures (e.g. that of trade) was also inevitably more dynamic, and EU accession further enhanced this process.

At the same time, it is noteworthy that export prices of processed goods and producer prices have been increasing in the euro area for one and a half years. The gap between consumer and producer prices is, on the one hand, attributable to the higher trade purchase prices' delayed appearance in consumer prices, and on the other hand, it may be explained by the further strengthening of

#### Chart 3-3

Selected major price indices of the euro area (annual change)



\*Weighted export price in the euro area.

competition as well. Considering all this, our forecast reckons with the international inflationary environment becoming somewhat less favourable on the forecast horizon, due partly to the persistently high oil price as well.

We believe that fierce competition may also have played an important role in the recent decline in domestic core inflation. Competition may continue to strengthen in the coming years as well, although as structural transition in the trading sector progress, its disinflationary effect is expected to gradually wane.

#### Chart 3-4





<sup>\*</sup>Ecostat survey.

In accordance with our basic assumption, our projection is that in the coming two years the forint exchange rate will be slightly more devalued than in the last one and a half years, which is also a factor pointing to higher inflation.

In contrast to the above factors, the effect of labour market developments in the next two years are expected to become varied in terms of inflation, but on the whole, this will not result in higher inflation. In this regard, two important changes in labour market regulations can be expected in the coming two years. First, the minimum wage will

increase significantly in 2006, which will result in somewhat higher wages and an increase in labour cost. Then, at end-2006 the lump-sum health care contribution will be terminated, and at the beginning of 2007 the social security contribution paid by employers will be reduced. The reduction of contributions implies a decline in labour cost and an increase in the profitability of corporations, which may gradually result in lower sales/consumer prices.<sup>17</sup>

Labour market developments are expected to result in an increase in the number of employed, due to the external upswing becoming sustainable, the gradual resolution of the structural labour shortage and the reduction of employers' contributions. However, continued substitution of labour with capital and the rationalisation of labour have a negative effect on employment growth. Overall, during the projection period the increase in labour demand is expected to exceed the increase in labour supply, which will result in growing employment and a gradual decline in the rate of unemployment.<sup>18</sup>

In addition to demand and supply factors, inflation developments may be substantially affected by the inflation expectations of economic agents. Therefore, it may be an important sign that according to surveys, the one-and-a-half-year-long decline in perceived and expected inflation came to an end in the last quarter, despite the gradual fall in core inflation. Our projection is based on the assumption that the recent higher-than-inflation price increase of items falling outside the scope of core inflation will not be included in inflation expectations over a longer term. Similarly, it was also assumed that the general price level reducing effect of the VAT reduction in 2006 will not become a lasting part of inflation expectations either.

Summarising the aforementioned factors, it can be ascertained that on our forecast horizon a gradual increase in inflation can mainly be expected in the scope of goods exposed to import competition, where the effect of growing imported inflation appears directly, and where disinflationary pressure following from strengthening competition and the past period's stable exchange rate may decline.<sup>19</sup> At the same time, the inflation differential between items exposed to import competition and market services is expected to shrink only slowly. This is explained both by the persistent difference between the two sectors' productivities and the slight pick-up in domestic demand.

## Overall, other factors are expected to reduce inflation and carry significant risk at the same time

As for the items falling outside of the scope of core inflation, an overall price increase around inflation is projected.<sup>20</sup> Within this, however, vehicle fuel prices are expected to remain practically unchanged, which is justified by the stability of forward prices used in our projection. At the same time, it should be noted that the effects of the significant oil price increases in the last year appeared only partly, which may cause inflationary pressure over the longer term.

<sup>&</sup>lt;sup>17</sup> Over the longer term, this may slightly be cushioned by the companies, which, as a result of the wage bargaining process, may gradually let their employees have a part of the increased profit in the form of higher wages, which may result in a somewhat higher inflation via indirect effects. This is all the more likely, as the minimum wage increase in 2006 might result in wage compression.

<sup>&</sup>lt;sup>18</sup> However, it is important to point out that the unemployment rate is expected to decline only slowly, as part of the increase in employment may be attributable to the outflow from inactives.

<sup>&</sup>lt;sup>19</sup> In 2006, the aforementioned long-lasting process is expected to be masked by the temporary price index reducing effect of the VAT reduction.

<sup>&</sup>lt;sup>20</sup> In case of regulated products, in accordance with our forecasting rules, we calculated with a price increase 1.3 times higher than core inflation. As for unprocessed food, a slight price rise around inflation and starting from the current price level is expected, propelled by the assumed developments in agricultural production paths.

## Box 3-2 The effect of recent oil price rise on domestic CPI

World market prices of oil increased from the early-2005 level of around 40 dollars per barrel to over 60 dollars by the middle of the year, and have more or less stabilised at that level since then. In our projection, in accordance with the October average forward prices, we calculated with unchanged oil prices of 60 dollars per barrel. The question is how this affected our current forecast. As it was mentioned before, oil price developments influence domestic prices via several channels.<sup>21</sup> They are directly reflected in domestic energy prices. In addition, there are indirect effects, mainly through transportation costs and the feed-through of commodity prices. These impacts are cushioned or amplified by the indirect, macroeconomic and labour market adjustment processes, which depend significantly on developments in inflation expectations and on economic policy reactions.

According to our calculations, the (almost 50 per cent) oil price rise since end-2004 will result in a nearly 2 per cent total increase in the consumer price level over the longer term. Some of the relevant elements have already appeared, others have not yet made their effect felt, or only to a limited extent. In 2005, through the higher fuel prices, oil prices will directly raise inflation by approximately 0.6 percentage points. Higher petrol prices will indirectly result in an additional 0.2 percentage point increase in the consumer price index in 2005. Moreover, this trend is expected to continue in the coming two years as well, adding another approximately 0.3 per cent to the consumer price level. It is important to emphasise that the effect on household (regulated) energy prices has not appeared yet; it is expected to be perceived only later (it may represent an additional approximately 0.7 per cent total increase). The impact of the higher oil price has mostly appeared in regulated energy prices for companies, but it may add another approximately 0.5 per cent to the price level through the pass-through of production costs. All of this will somewhat be cushioned by the demand reducing effect of macro and labour market factors (lower real income and consumption due to higher oil prices).

No sufficient information is available yet on the future timing of the long-term effect (e.g. the future development of regulated prices is unknown). Along the path presumed in the *Report*, the rise in oil prices relative to the level at end-2004 increases inflation by approximately 0.6-0.6 per cent annually in 2006 and 2007.

### Chart 3-5



Inflationary effect of higher oil prices

Within the framework of the five-year tax reduction programme, the highest VAT tax rate will be reduced from 25 per cent to 20 per cent as of 2006. As direct effect of this, the consumer price index is estimated to temporarily decline by 1.4 percentage points in 2006. Therefore, and due to the low inflation dynamics of non-core items, the average consumer price index may fall close to 1

<sup>&</sup>lt;sup>21</sup> See the August 2004 Report.

per cent in 2006. Nevertheless, the constant price index, which does not contain the technical effect of the indirect tax changes, is expected to be close to 3 percent.

### Chart 3-6

Individual factors' contribution to the consumer price index





Over the longer term, with the disappearance of the direct effect of the VAT reduction, inflation is expected to be close to 3 per cent in 2007. It is questionable, however, whether this rate of price increase can be considered long lasting. On the one hand, our forecast horizon covers only two years, during which several changes in legislation are expected, i.e. we cannot state for sure that economic developments will result in a steadily low inflation rate in an autonomous manner. On the other hand, the low core inflation rate follows from the strongly different inflation index of the market services sector exposed to import competition and determined mainly by domestic factors, i.e. the difference between the indices is great. However, sustainable low inflation can only be expected if it is typical of the whole economy, as a result of a rate of wage increases and inflation expectations consistent with the low inflation.

#### Quantifiable risks are balanced

The uncertainty surrounding our forecast is even greater than usual. A significant part of this uncertainty is difficult to quantify, and is rather related to the sustainability of the macro path. What effect the future development in the budget will have on the risk premium is a risk of this nature. Despite the fact that the budget bill is already known, this risk has not lessened substantially, as the government is trying to counterbalance the certain decline in revenue and increase in transfer expenditure partly with outsourcing and partly with temporary expenditure reducing measures or with ones of dubious efficiency. Consequently, the budget is expected to be easing again, and the deficit will not really be perceptibly lower.

Of the quantifiable forecasting risks there are currently four major factors worth highlighting. One important risk is how long the presently still favourable global inflationary environment will continue. It is also a question, how long the strengthening of import competition (also in correlation with sharpening conditions in the retail trade sector) will have a reducing effect on the rate of price changes. In addition, there are several signs which indicate that inflation developments in the rest of the world seem to be turning. We believe that both the globally typical decline in core inflation and strengthening competition may have a waning effect on inflation developments in Hungary, although this effect will mainly show in 2006, while its longer-term significance is much smaller.

World market inflation factors are reflected in energy prices. There is uncertainty to what extent the historically high energy prices will manifest themselves in inflation expectations, how they will be included in nominal wages, and thus in core inflation. Moreover, energy prices may also feed through into regulated energy prices, and the magnitude and timing of this development represent a considerable uncertainty on our forecast horizon. In our opinion, this effect increases the probability of the evolution of higher inflation over the entire forecast horizon.

In addition, in our risk perception the trend of nominal wage growth in a lower inflation environment also plays an important role. Its assessment is also hard because the labour market will be affected by two contrasting effects. The spillover effects of the minimum wage rise in 2006 may add to wage inflation, and thus increase the importance of costpush inflation factors. On the other hand, the reduction of the social security contribution in 2007 will be a labour cost-reducing factor. The question here is, to what extent this will be included in the wage bargaining process. In our calculations we now assume that employers and employees will share the reduction in contributions to a nearly equal degree. However, we think that it

#### Chart 3-7

#### Inflation fan chart\*

(percentage changes on a year earlier)



\* The fan chart represents the uncertainty around the central projection. Overall, the coloured area represents a 90 per cent probability. The central, darkest area containing the central projection for the consumer price index illustrated by the white dotted line (as the mode of distribution) refers to 30 per cent of the probability. The year-end points and the continuous, horizontal line from 2007 show the value of the announced inflation targets.

is somewhat more likely that this effect will appear in the decline in employers' labour costs to a larger extent.

Overall, on the horizon relevant from the aspect of monetary policy, in 2007 the uncertainty distribution of our inflation projection around the inflation target can be considered nearly symmetrical. Risks point very slightly to lower inflation.

4. Special topics





## 4. 1 Background information on the projections

Although several data have been modified in our present forecast as a result of macroeconomic information disclosed since the publication of the August 2005 *Report*, the broad evolution of the projected inflation and main macroeconomic variables remain essentially unchanged.

As the 2005 Q3 developments in consumer price inflation corresponded to our implicit short-term projections set forth in the August Report, our forecast on the 2005 annual average CPI growth has not been modified.

The primary reason for the 0.5 percentage point reduction in our 2006 inflation projection is that after the draft 2006 budget and tax bill was submitted, better estimates could be given for the effects of the announced regulatory and tax-related measures, which could merely be presumed for lack of more specific data three months earlier. Among the items adding to core inflation the excise tax on wine was not raised (we assumed higher rate in August to offset revenue losses due to lower VAT rates), and the excise tax on tobacco was raised to a lesser extent. Besides these items, that are the most relevant in lower core inflation, our expectation on unprocessed food prices for 2006 also changed downwards. Regulated prices will also contribute to lower annual inflation since natural gas prices for households will be raised at a later period of the year than we thought in August. This altogether would imply a 0.7 percentage point deduction in our average annual CPI inflation for 2006, but this will partly be offset by higher fuel and energy prices.

Due to the offsetting effects of conflicting factors, our inflation projection for 2007 remains fundamentally unchanged, although the core inflation projection was decreased. Although demand is slightly more vigorous, our assumption on the HUF exchange rate is somewhat lower and the difference between the rates of inflation in market services and tradables have been revised down, as in our opinion disparity between the productivity indicators of the two sectors does not give grounds for assuming long-term durability of the current trend of inflation. Greater emphasis has been laid on the fact that in 2007, lower social security contributions will result in higher corporate profits and allow companies to cut their prices (this effect is slightly offset by the fact that companies share part of the increment in profits with their employees in the form of higher wages).

Economic growth is projected to undergo similar development as in August 2005, albeit the FISIMrevision explained in detail in Box 2.2 will enhance annual GDP growth by 0.3 to 0.5 percentage points over the entire projection horizon, at the same time we expect stronger domestic demand. The underlying reasons for the higher projections for household consumption and the gross fixed capital formation include more favourable-thanexpected 2005 Q2 consumption and corporate investment data. In addition, over the projection horizon, an upward revision of the August projection is justified by the aforementioned tax and regulatory measures in the case of consumption and the recently promised major corporate and government investments in the case of fixed capital formation. Despite these, overall domestic use will not improve in 2005 as (due amongst other things to statistical discrepancy) inventory investment has been lower than expected. For this reason, the upward revision of our projection for 2005 GDP reflects more favourable net exports. In 2006 and 2007, however, more intensive increase in domes-

tic use is expected to generate faster GDP growth than projected in the August *Report*, while net exports (especially in 2007) may even be less favourable than expected in August. In an assess-

ment of our projections, the fact that (as explained in Box 2.2) our projections are based on the national account time series specified prior to the last revision by CSO.

## Table 4-1

#### Changes in the central projections relative to August

(percentage changes on a year earlier unless otherwise indicated)

		2004	2005		2006		2007	
		Actual/		Projection			•	
		Estimate	Aug.	Current	Aug.	Current	Aug.	Current
Inflation (annu	al average)	•						
Core inflation <sup>1</sup>		5.9	2.2	2.2	1.1	0.8	3.2	2.8
Consumer pric	ce index (CPI)	6.8	3.6	3.6	1.6	1.1	2.9	2.8
Economic grov	wth							-
External dema	and (GDP-based)	2.0	1.6	1.5	2.0	1.9	2.0	2.0
Fiscal demand	d effect <sup>2</sup>	-0.6	0.8	1.0	0.5-1.0*	1.0	(-0.5)-0.0*	(-0.5)-0.0*
Household co	nsumption <sup>3</sup>	2.5	2.4	2.8	3.5	3.7	3.0	3.2
Memo: Housel	hold consumption expenditure <sup>3</sup>	3.1	2.7	3.1	3.8	4.3	3.5	3.7
Gross fixed ca	apital formation <sup>3</sup>	7.9	5.4	8.1	4.9	5.4	2.1	2.9
Domestic abs	orption <sup>3</sup>	2.2	1.2	0.9	5.7***	6.1***	2.7***	3.1***
Exports		14.9	11.1	10.3	8.8	9.2	9.2	9.2
Imports <sup>4</sup>		11.6	8.0	6.6	10.6***	11.1***	7.9***	8.2***
GDP <sup>3</sup>	based on earlier data series	4.2 (4.0)**	3.4 (3.6)**	3.8 (4.0)**	3.9	4.2	3.8	3.9
GDI	under the new methodology	4.6 (4.4)**		4.2 (4.4)**		4.5		4.3
Current accou	nt deficit⁴							
As a percenta	ge of GDP	8.8	7.6	8.1	8.6***	9.1***	7.6***	8.5***
EUR billions		7.1	6.7	7.0	8.0***	8.3***	7.6***	8.3***
External finance	cing requirement⁴							
As a percenta	ge of GDP	8.5	6.9	7.4	7.8***	8.4***	6.8***	7.7***
Labour market	t							
National econ	omy gross earnings <sup>3</sup>	7.1	8.2	7.9	6.5	6.7	5.4	6.1
National economy employment <sup>4</sup>		-0.4	-0.3	0.1	0.1	0.5	0.6	0.7
Private sector gross average earnings		9.3	6.8	6.9	7.2	7.3	5.6	6.5
Private sector	employment <sup>6</sup>	-0.2	0.2	0.5	0.4	0.9	1.0	1.1
Private sector	unit labour cost	3.5	2.9	3.2	2.1	3.1	0.2	1.2
Household rea	al income	4 1****	37	4.0	46	5.0	21	2.7

<sup>1</sup> For technical reasons, our projected indicator may, in the short term, be different from the index published by the CSO. Over the longer term, however, both follow identical trends. The cause of this technical discrepancy is that core inflation calculated by CSO cannot accurately be reproduced from the available group of CPI data, since the CSO breaks down several groups into core inflation items and sub-items excluded from such (e.g. pharmaceuticals). <sup>2</sup> Calculated from the so-called augmented (SNA) type indicator; a negative value means a narrowing of aggregate demand. <sup>3</sup> In its data disclosure in October, the CSO introduced a new methodology of data disclosure (known as the FISIM adjustment, see Box 2.2) for GDP, which entails an annual 0.3 to 0.5 percentage point higher GDP growth during the period surveyed. As no complete data series or details for GDP were available at the time of our projection, it was prepared in accordance with the old methodology; for information purposes we disclose the GDP figures revised up in accordance with the estimated impact of the new methodology. <sup>4</sup> From 2004 on the uncertainty in trade statistics may imply higher actual values for the current account deficit / external financing requirement than the official data and our projections based on the latter. <sup>5</sup> The 13th month salaries carried over from 2004 to January 2005 in the public sector cause a downward bias in the 2004 wage growth indicator and an upward bias in 2005 <sup>6</sup> According to the CSO labour force survey. \* Assumption for the fiscal impulse inherently consistent with the macroeconomic path; due to the lack of a draft bill on the 2007 budget, we cannot provide a detailed fiscal projection. \*\* Adjusted for leap-year effect. \*\*\* Our projection allows for the adverse impact of the procurement of Gripen fighter aircraft on the current account and its contribution to an increase in public consumption and imports. \*\*\*\* MNB estimate.

## Table 4-2

Changes	in	maior	assumptions	relative	to	August	2005*
unungus		major	assumptions	I CIMII V C		1 ugust	2000

	August 2005 projection			Current projection			Change		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
Central bank base rate (per cent)**	6.75	6.75	6.75	6.00	6.00	6.00	-0.75***	-0.75***	-0.75***
5-year yield (per cent)**	6.25	6.25	6.25	6.67	6.67	6.67	0.42***	0.42***	0.42***
EUR/HUF exchange rate	246.9	246.5	246.5	248.0	251.7	251.7	0.4	2.1	2.1
EUR/USD exchange rate (cent)	124.5	120.5	120.5	124.8	120.2	120.2	0.3	-0.2	-0.2
Brent oil price (USD/barrel)	54.1	59.5	58.0	55.0	61.0	60.0	1.7	2.6	3.5
Brent oil price (HUF/barrel)	10,788	12,181	11,880	10,987	12,782	12,572	1.8	4.9	5.8

\* Annual averages, from 2005 Q3, based on the July 2005 average exchange rates and futures oil prices. \*\* Year-end figures. \*\*\* Difference, percentage points.

Among our major assumptions, rise in the futures rate of oil prices must be highlighted once again. In addition, our projection has been made with lower interest rate and weaker exchange rate assumptions than in August 2005.

# Impact of an alternative interest rate and exchange rate assumption on our projection

In line with our earlier practice, the effect of substituting our interest and exchange rate assumptions with the October expectations of Reuters analysts on our projection are outlined.

The assumption underlying our main scenario of the central bank base rate is a fixed 6 per cent interest rate over the entire projection horizon. Reuters' analysts expect further, albeit relatively moderate decrease in the central bank base rate, which would result in nearly 30-bp lower rate than we assume by late 2006. Our exchange rate assumption for the entire forecast period has been fixed at the average exchange rate of the trading days of October 2005, i.e. EUR/HUF 251.7. The average of professional analysts' exchange rate expectations is slightly more

#### Chart 4-1

Central bank base rate based on the October Reuters survey and the assumption with a constant interest rate





Exchange rate based on the October Reuters survey and the assumption of a constant exchange rate\*





depreciated (for late 2006, the difference is nearly 1.2 per cent).

The interest and exchange rates expected by Reuters' analysts for the end of 2005 are roughly the same, while those relevant to the end of 2006 are 0.2 percentage points higher than the MNB's inflation projection, and by the end of 2007, this difference will have dropped again to 0.1 per cent. If calculated using the alternative interest and exchange rate assumptions, our GDP growth projection would be nearly 0.1 per cent higher in 2006, whereas the difference would be insignificant in 2007.

# A comparison of our projections with those of other institutions

Similarly to the situation a quarter of a year earlier, our projections for the developments in inflation and economic activity in 2005 are broadly identical with other analysts' opinions. The differences anticipated for 2006 concern primarily inflation (our projection is nearly one percentage point lower than the average of other analysts' projections), and in addition to the disparity between the underlying assumptions, such significant divergences are, for the most part, due to the different judgement of the effects of the announced government measures. Although in terms of 2006 growth, we are slightly more optimistic than the analysts, we expect higher government deficit and current account deficit. The information available for analysts on 2007 is rare. The MNB's inflation and GDP forecasts are roughly similar to those forecasters' who already disclosed their projections for 2007. But the MNB expects slower foreign demand and higher current account deficit

## Table 4-3

#### The MNB's main scenario versus other projections

	2005	2006	2007
Consumer price index (average appual increase, percen		2000	2007
MNR	36	11	28
Consensus Economics (November 2005) <sup>1</sup>	35-36-37	$1.3 - 20(1.9)^* - 3.2$	
OECD (November 2005)	37	20	27
European Commission (autumn 2005)	37	20	3.0
IMF (September 2005)	4.0	3.6	
Beuters-survey (November 2005) <sup>1</sup>	35-36-36	12-18-24	24-30-38
World Bank (October 2005)	3.6	2.2	n/a.
GDP (annual growth. percentage)			
MNB	3.8 (4.0**)	4.2**	3.9
Consensus Economics (November 2005) <sup>1</sup>	3.2 - 3.9 - 4.2	3.5 - 4.0 - 4.4	n/a.
OECD (November 2005)	4.2***	4.5***	4.3***
European Commission (autumn 2005)	3.7	3.9	3.9
IMF (September 2005)	3.4	3.6	n/a.
Reuters-survey (November 2005) <sup>1</sup>	3.8 - 4.0 - 4.2	3.5 - 4.1 - 4.5	n/a.
World Bank (October 2005)	3.5	3.8	n/a.
Current account deficit (in EUR billions)			
MNB	7.0	8.3****	8.3****
Consensus Economics (November 2005) <sup>1,2</sup>	6.3 - 7.1 - 7.7	6.5 - 7.7 - 8.8	n/a.
Reuters-survey (November 2005) <sup>1</sup>	6.5 - 6.9 - 7.6	6.8 - 7.4 - 8.2	n/a.
Current account deficit (as a percentage of GDP)			
MNB	8.0	9.1****	8.5****
OECD (November 2005)	8.4	8.7	8.5
European Commission (autumn 2005)	8.4	8.4	7.7
IMF (September 2005)	8.5	8.0	n/a.
World Bank (October 2005)	7.6	8.2	n/a.
General government deficit (according to ESA-95, as a p	ercentage of GDP)		
MNB	7.5 – 8.1****	7.8 - 8.9****	n/a.
Consensus Economics (November 2005) <sup>1</sup>	5.4 - 6.5 - 7.9	5.5 - 6.5 - 8.3	n/a.
European Commission (autumn 2005) <sup>4</sup>	6.1	6.7	6.9
Reuters-survey (November 2005) <sup>1</sup>	6.1 - 7.4 - 8.0	5.2 - 7.8 - 10.0	n/a.
World Bank (October 2005)	6.1	5.7	n/a.
Projections on the size of Hungary's export market			
MNB	4.1	5.3	4.9
OECD (November 2005) <sup>3</sup>	4.3	6,3	7.3
European Commission (autumn 2005) <sup>3</sup>	4.9	6.0	5.9
IMF (September 2005) <sup>3</sup>	4.2	4.9	n/a.
Projections on the GDP growth rate of Hungary's trading	partners		
MNB	1.5	1.9	2.0
OECD (November 2005) <sup>3</sup>	1.6	2.1	2.4
European Commission (autumn 2005) <sup>3</sup>	1.7	2.1	2.4
IMF (September 2005) <sup>3</sup>	1.7	2.1	n/a.

MNB projections are so-called 'conditional' projections. Therefore, they cannot always be directly compared to other projections.

\* The consensus in parentheses has been calculated excluding analysts who do not take account of the tax effect.\*\* Adjusted for leap-year effect. \*\*\* OECD's GDP-forecasts already include the estimated effect of the FISIM-revision. \*\*\*\* Our projection takes account of the approximately 0.5 per cent GDP-proportionate negative effect on the current account resulting from the Gripen fighter procurement. \*\*\*\* The band indicates the uncertainty of the application of the ESA methodology in Hungary.

<sup>1</sup> In addition to the averages of polled analysts' responses (the values in the middle), the smallest and largest values are also indicated in italics for the Reuters and Consensus Economics surveys in order to illustrate dispersion.<sup>2</sup> The survey specifies current account projections in US dollars, therefore they are converted at the EUR/USD exchange rate assumed in the current Report.<sup>3</sup> Values calculated by the MNB; the projections of the named institutions regarding individual countries are considered with the weights used for calculating the MNB's own external demand indicators. This way, the forecast may differ from the numbers published by the aforesaid institutions.<sup>4</sup> For the sake of comparability the projection of the European Commission was corrected taking into account payments to the private pension fund system.

Source: Consensus Economics Inc. (London) Eastern Europe Consensus Forecasts (November 2005); European Commission Economic Forecasts, autumn 2005; IMF World Economic Outlook (September 2005); Reuters survey, November 2005; World Bank EU-8 Quarterly Economic Report (October 2005); OECD Economic Outlook (November 2005). Projections by the OECD are not yet public and will be disclosed later.

## 4. 2 Developments in general government deficit indicators

In the course of 2005, fiscal policy has been considerably easing aggregate demand and will continue to do so in 2006 (in our estimate total easing amounts to about one per cent of GDP), which means that the broadly defined government sector increasingly raises the income of the other sectors compared to 2004.

Without further balance-improving measures, instead of declining, the ESA deficit may even rise significantly in 2006 compared this year's expected figure. The reason for this is that investment cuts, reduced financing of local governments and the curtailment of government institutions' expenditures can only partially offset the revenue-decreasing impacts of tax cuts and increases in welfare expenditures. Moreover, the

#### Chart 4-3



1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 \* Including the effect of Gripen purchase.

deficit cuts planned by the government for 2006 envisage the 'outsourcing' of a considerable part of government investments to participants falling outside budgetary accounts. This raises several problems. First, their assessment under the ESA

## Table 4-4

Fiscal indicators in our baseline scenario (as a percentage of GDP)\*

	Actual/E	Estimate	Proje	ection
	2003	2004	2005	2006
1) GFS balance	-6.0	-6.5	-6.1	-8.0
2) Adjustment of the balance of interest payments according to ESA	-0.1	-0.4	-0.3	-0.2
3) Other corrections on ESA basis	-1.3	0.4	(-1.1)-(1.5)	(+0.4)-(-0,7)
4) ESA balance (1+2+3)	-7.4	-6.5	(-7.5)-(-8.1)	(-7.8)-(-8.9)
5) Balance according to national definition**	-6.5	-5.4	(-6.2)-(-6.6)	(-6.4)-(-7.5)
6) Quasi-fiscal expenditures and other adjustments	-1.2	-1.7	-1.4	-2.2
7) Augmented (SNA) balance (1+6)***	-8.6	-8.2	-9.4	-10.0
8) Augmented (SNA) primary balance	-4.7	-4.1	-5.3	-6.4
9) Fiscal impact on demand	-0.4	-0.6	+1.0	+1.0

\* Based on estimated GDP without the so-called FISIM adjustment. The future application of the new GDP numbers would decrease deficits by approximately 0.1 percentage points every year. \*\* Modification of the ESA deficit, including the revenues and expenditures of private pension funds. As of 2007, this indicator will not be applicable, and thus in the spring 2007 notification (pertaining to 2006,) Eurostat will no longer specify Hungary's ESA balance on this basis. \*\*\* Cash-based deficit of the general government excluding certain extraordinary income and expenditure, and including the income from quasi-fiscal activities recorded outside the general government. MNB estimate.

method is uncertain. Second, they will cut the deficit at most on a single occasion, and conceal developments leading to persistently high indebtedness. The effect of the latter is clearly shown in the fact that, unless new balanceimproving measures are taken, by 2007 the existing government liabilities and autonomous fiscal developments will have generated a further increase in the deficit in an amount exceeding 1 per cent of GDP. The budget is rapidly moving away from the deficit target approved in the Convergence Programme and consequently, its realisation will require significant budgetary adjustments.

#### Reasons for the high 2005 ESA deficit

This year, the ESA deficit will exceed even the upper limit of the band set up in the August 2005 *Report,* as pursuant to the recommendations and

statements made by Eurostat, the revenues realised on earlier performed motorway construction cannot be settled as deficit-decreasing revenues under the ESA method. NA Rt.'s 2005 motorway construction costs must also be recorded in the ESA balance, as neither construction activity nor its financing have been transferred to ÁAK Rt. during the year, thus they are considered to have been performed by NA Rt., which falls within the scope of the general government.<sup>22</sup> The projection published in the August 2005 Inflation *Report* for the expected ESA balance considered the methodological risk only regarding the revenues from the already existing motorway sections as we had no reliable information on the schedule and financing conditions of the construction activity.

In our main scenario, the cash-based general government deficit resulting from revenues in the social security lower than government expecta-

## Box 4-1 Delaying payments related to interest subsidies of mortgage loans

In 2005 Q2 and Q3, the balance of other credits to government increased significantly in the balances of mortgage banks. Rise in the government's debt to financial institutions was primarily due to the fact that in contrast to earlier practice, the government delays payment of the interest subsidy to housing loans. The increase recorded in the other credit of mortgage banks engaged in granting preferential housing loans against the government in the first ten months of 2005 suggests that unpaid interest subsidy may amount to HUF 50–60 billion. By way of its spokesman, the Ministry of Finance announced that the deferment would be performed in accordance with an agreement concluded with the mortgage banks, whereby the government had undertaken to reimburse the banks for their lost interest income. If the interest subsidy is paid in 2005, this delay will only affect course of the (cash-based) GFS deficit, not the ESA deficit (i.e. it modifies the GFS/ESA difference). If part of the interest subsidy is carried over to 2006, the 2005 accrualbased ESA deficit must indicate the total amount of expenditure due and payable in 2005, whereas the GFS deficit indicates only the amount of interest subsidy actually paid in 2005. Consequently, delay in payments may reduce the 2005 cash-based deficit by up to 0.2-0.3 per cent of GDP and debit next year's budget. According to currently available information, it cannot be judged if the liabilities incurred as a result of delayed payments are included in the government debt. This increases the methodological risk related to the end-2005 government debt.

<sup>22</sup> For further details see Box 1.2 in the October 2005 issue of the MNB's Report on Financial Stability.

## **Special topics**

tions overspending may be 0.5 per cent of GDP higher<sup>23</sup> than presumed by the government in September 2005, when it announced raising the ESA deficit target to 7.4 per cent. Favourable developments in certain revenue (value added taxes and income from contributions) and expenditure items at the end of the year may reduce the deficit and bring it closer to the target. Deferred payments and technical changes in settlement dates (part of certain expenditures, such as for example settlements related to housing subsidies, may be carried over to the next year – cf. the box above) can only have transient effects, and will increase the deficit in subsequent years.

The 2006 ESA deficit target is unlikely to be achieved without further balance improving measures

The budget bill specifies a 6.1 per cent deficit target. According to the ESA statistical accounts this is in fact equal to a 6.6 per cent target since the expenses relating to the Gripen purchase are not accounted for in the ESA deficit target.<sup>24</sup> Procurement of the Gripen fighter aircrafts, however, (in a way consistent with the statistics of the balance of payments and the financial accounts of the national economy) should be accounted for at the time of their arrival, in line with the view of the European Commission. The assessment of the planned deficit target is hindered by the fact that – in contrast to this year – the cost of the new motorway construction comprising a major part of government-financed investments has fallen outside the budget and its accounting for according to ESA methodology is problematic (see below).

The government's deficit target is expected to be significantly exceeded in the absence of further balance improving measures. Therefore, a 7.8 per cent ESA deficit seems most likely according to our baseline projection. Our projection for the

## Table 4-5

The MNB's projected 2006 ESA balance relative to the official ESA deficit target of the government (as a percentage of GDP)

Methodological risk	9. Expected ESA deficit with methodological risks	7.8-8.9
	8. Methodological risk (motorway construction included in the ESA-deficit)	1.1
	7. Expected ESA deficit (5+6)	7.8
Performance risk	6. Assumed slippage	1.2
	5. Planned ESA-deficit (3+4)	6.6
Target interpretation	4. Settlement of accounts with the procurement of Gripen fighters	0.5
	3. Government's deficit target adjusted for private pension funds (1+2)*	6.1
	2. Adjustment for private pension funds	1.4
	1. Deficit target according to national definition*	4.7
		1

\* Official deficit target of the government pursuant to the draft budget bill.

<sup>&</sup>lt;sup>23</sup> Excluding cash-based revenues earned in relation to the privatisation of the Budapest Airport expected this year. The annual fiscal projection published on 15 November 2005 on the website of the Ministry of Finance indicates a major increase in revenues for December in the line dedicated to revenues raised from the sale of government property. This is presumably related to the sales of the Budapest Airport. We assume that no part of the revenues realised from the sales of the Budapest Airport can be settled in the ESA balance; so that it increases the ESA-GFS difference.

<sup>&</sup>lt;sup>24</sup> According to the submitted draft budget bill, under a time schedule of arrival in 2006. See Page 344 of draft act T/17700. The statistical adjustment performed in relation to this procurement may subsequently change in function of further specification of the conditions and the actual arrival date of the aircraft.

2006 cash based deficit - in the absence of additional measures – foresees a deficit of around 8.0 per cent as opposed to a 6.9 per cent deficit planned by the government. The budget bill planned next year's targets relying on the budget figures from 2005 which were optimistic in several respects (income from contributions, pension expenses, family support expenditures, and local governments' expenditure). Furthermore, in our view, budget institutions will not be able to finance next year's wage increases for government employees.<sup>25</sup> Thus, when looking at central government targets we assumed that building up 'chapter-based' general government reserves of around 0.3 per cent of GDP will not be effective during the year, but this amount will be spent (it will partly be used to cover the promised wage increase).

A major part of the so-called performance risks (see line 6 in the table above) incorporated in our baseline projection is due to our larger deficit projection of social security and local government sub-systems. In the case of social security we think that the contributions have been overplanned, while expenditures underplanned (especially those related to pharmaceuticals and pensions). As far as local governments are concerned, a reduction in central government financing will probably lead to an increase in deficit, and thus the deficit of this sub-system may evolve in line with the usual cycle (at around 0.5 per cent of GDP).

Budget developments planned for 2006 are simultaneously characterised by attempts to decrease both the tax burden and expenditures. The easing of the tax burden would be carried out primarily through a lower standard VAT rate and the reduction of lump-sum health contributions. In our estimate, the primary effect of the tax reduction plan would amount to 1.8 per cent of GDP, while second round effects – as savings on expenditures will also appear in the budget due to a lower VAT rate – combined with the effect of measures taken to increase tax revenues will reach an estimated 0.7 per cent of GDP. Thus, the net effect of tax changes is estimated to amount to 1.1 per cent of GDP which means that the central government will collect 1.1 per cent less tax from the other sectors of the economy.<sup>26</sup>

The government is planning to counterbalance this easing in taxes with intensive tightening on investments, keeping the same nominal level of institutional and chapter expenditure in total and reducing the level of local government financing, while significantly increasing family support expenditures. As far as the central budget is concerned, major investments would only take place when co-financed by the European Union except for motorway construction which would be realized in a form falling outside the accounts of the general government. It is still uncertain how Eurostat will assess this. The reduction of the GDP-proportionate expenditure targets at the chapter level and of government institutions could lead to a situation where the institutions would try to shift a part of their expenditure liabilities for next year to the following year and/or they will not comprehensively discharge all their tasks.<sup>27</sup>

A major reduction in financing the local government sub-system (we foresee an approximately

<sup>&</sup>lt;sup>25</sup> The government's wish to increase wages has been announced already, but no agreement has been reached in this regard with interest representation organizations.

<sup>&</sup>lt;sup>26</sup> In comparison to a hypothetical assumption ('neutral' case) that the 2006 tax revenues would rise in proportion to the increase in tax bases, or in other words, the tax burden would remain unchanged in proportion to GDP.

<sup>&</sup>lt;sup>27</sup> According to the budget bill, the carry-over holding cannot be less at the end of next year than the opening amount at the beginning of the year. In our estimate, this measure means the shifting forward of liabilities of around 2 per cent of GDP. A delay in fulfilling payment obligations represents an extraction of funds from the economy and thus at the same time it poses a permanent future risk of meeting Maastricht fiscal criteria.

## **Special topics**

0.5 per cent cut in funds provided that the personal income tax blocking is effective) is considered to be a risky measure, as the government is expecting a major adjustment in a segment of the general government for the control of which it lacks effective means.

# Calculation of the planned 2006 ESA deficit is doubtful

The government plans to transfer the construction of the new motorway sections from NA Rt. to another company not classified under the general government in the currently applicable statistics. Whether the company commissioned with the construction of motorways actually falls within or outside the general government will be decided by Eurostat on the basis of criteria defined in advance (corporate management, ownership structure, the ratio of market revenues to costs, etc.). Until a decision is made by Eurostat, in the 2006 ESA deficit this carries a considerable upside risk amounting to 1.1 per cent of GDP, also reflected in our projection band between 7.8 and 8.9 per cent. Regardless of the above, as the investment depends on government decision and the company will presumably be in government ownership, this item is included, as always, in the so-called augmented SNA deficit on account of its economic effect.<sup>28</sup>

# Projection on the 2006 cash-based deficit involves considerable risks

The 2006 deficit is expected at around 8 per cent in our baseline case and is surrounded by risks amounting to nearly 1 per cent on each side. These risks involve the expected revenues, open-end expenditures and the uncertainty of the efficiency of cuts and freezes on central expenditures.

The risk carried in targeted tax revenues are higher than usual, as several types of tax will undergo major changes and new tax items will be introduced. The margin of error is higher than usual for the given interval, especially when the effects of newly introduced taxes are estimated.

As the government has made the responsibilities of cutting expenditures an institutional compe-

## Table 4-6

Uncertainty surrounding the MNB's 2006 projection (as a percentage of GDP)

Tax revenues are higher than assumed in the central projection.	+0.3	Tax revenues remain below the central projection.	-0.3
More income is realised from contributions on account of a better 2005 base.	+0.2	Measures taken to reduce spending are performed only in part.	-0.3
Part of the general government reserves assigned to chapters can be frozen.	+0.2	Higher-than-expected open-end expenditures.	-0.1
Local governments' cash-based deficit is lower.	+0.1	Investment spending by local governments exceeds expectations, due to investment cycle.	-0.1
Impact of favourable developments on the balance	+0.8	Impact of unfavourable developments on the balance	-0.8
GFS deficit in a favourable case	-7.2	GFS deficit in an unfavourable case	-8.8

Central projection on the GFS balance: -8.0 per cent

<sup>28</sup> See the related OECD study: Koen – van den Noord: 2005. OECD Working Paper 417.

tence, it has become more difficult to assess to what degree the expenditure reduction targets are achievable. In the draft bill, the appropriations of institutional expenditures have practically been frozen, which may generate tension among institutions during the performance of their tasks.

Although it is not included in the above table, a factor that may considerably increase the deficit is the eventual payment of quasi-fiscal debts. Large transport companies characteristically engaged in quasi-fiscal activities (MÁV and BKV) are expected to incur a loss next year as always, and particularly the former company will be credit insolvent without government guarantees. For this reason, the risk of an interim debt assumption or consolidation must be taken into consideration. Such a transaction would increase the cashbased (and ESA) deficit by as much as 1 or 2 per cent of GDP (it affects the augmented deficit measure and the demand impact indicator continuously).

# Currently available information foreshadows a further increase in the deficit in 2007

We quantified the determinations and risks that are the anticipated consequences of trend-like processes and the government measures (decisions) announced so far. Our estimates were based on the following assumptions:

- We quantified the impacts of tax cuts, the anticipated decrease in revenues of the measures included in the information material titled 'The 13 steps of the 5-year programme of tax cuts' published by the Government's Spokesperson Office (using our estimates).
- In quantifying 2007 expenditures related to the family support scheme, relying on past experience, we assumed that they would not be valorised.

- In calculating the loss of one-off revenue items, we assumed the abolition of the financial institutions' corporate tax in 2007 and we estimated a GDP-proportionate decrease in replenishing the compensation fund for gasoline.
- We prepared our own estimate for changes in the accrual-based balance of interest payments.
- In other areas unaffected by determinations, revenue and expenditure items are assumed to grow along with GDP, as any departure from this assumption presupposes measures.

In response to the determinations of which we are currently aware, the 2007 ESA deficit would be a further 1.1 per cent of GDP higher than previous year, based on our current estimates. The government measures (tax cuts) announced would add significantly to the 2007 deficit, and factors beyond the government's control would be unable offset.

We also disclosed the balance of the determinations for 2007 in our August *Report*. At that time, we identified the anticipated impact as -0.2 per cent of GDP. As we noted in our August *Report*, our estimates for the impacts of the tax measures then were based on the impacts disclosed on the website of the Prime Minister's Office that we accepted as a given. Aware of the 2006 changes in the tax regime, we were now able to produce a comprehensive estimate for their anticipated impacts. Relative to what was disclosed in our August *Report*, the major changes are as follows:

- We estimate the net loss in revenues attributable to the implementation of the 5-year programme of tax cuts will be higher than the estimate put forth by government (difference: -0.2 per cent).
- Pension and pharmaceutical expenditures due to the measures announced in the meantime – revised up our estimate for a higher deficit (difference: -0.4 per cent).
- Our perception of local governments' investment cycle has also changed. Due to a decline in cen-

## Table 4-7

#### Disclosed measures and current trends affecting the ESA balance in 2007

(as a percentage of GDP)

	2007
Impact of the announced programme of tax cuts	-1.4
Second round effects of the programme of tax cuts	+0.3
EU-related and customs duties	+0.1
Loss of temporary income	-0.2
Pension and pharmaceutical expenditures	-0.1
Family support-related spending	+0,1
Other additional expenditures	-0.1
Local governments' investment cycle	+0.1
Changes in the net balance of interest payments	+0.1
Total of determinations*	-1.1

\* Negative numbers denote deterioration in the balance (rise in the deficit), relative to 2006.

tral funds committed to local governments, the 2006 basis may be lower. As a result, a reversal in the cycle in 2007 is likely to reduce the deficit to a lesser extent (difference: -0.1 per cent).

• Based on our forecast for the net balance of interest payments, our estimate now shows a smaller improvement than earlier (the difference being: -0.1 per cent).

## 4. 3 Developments in external balance

The external borrowing requirement as the sum of the current account balance and the capital account balance was EUR 1.54 billion in 2005 Q2, with the deficit on current account balance amounting to EUR 1.7 billion. Following a continuous fall since 2004 Q2, brought about mainly by a slow expansion in goods imports, the seasonally adjusted external borrowing requirement calculated in this manner, i.e. 'from above', fell to 6.6 per cent of GDP. As noted in the August *Report*, the spectacular fall in the external borrowing requirement calculated 'from above' is still not in harmony with developments in the borrowing requirement of both the general government and households and real economic trends.

Thanks to changes in the methodology applied to the balance of payments statistics, uncertainties over external equilibrium processes became explicit. Under the former methodology, the balance of payments statistics accounted for differences in data on trade in goods from corporate data provision and cash flow reports as trade receivables or liabilities. The differences between the two statistics are, in principle, attributable to those in methodology (corporate reports use the accrual method of accounting, while their bank counterparts are cash flow-based), i.e. the lag between the time of the delivery of goods and the date of payment. Thus, economically, it is safe to assume that the scale of the difference cannot be independent of the volume of trade in goods. However, since Hungary's accession to the EU the difference between the statistics has reached a level that is no longer justifiable by methodological differences. The data for the trade deficit published by the CSO lagged significantly behind the amount that is in line with the financial balance. As a result,

corporate trade receivables grew in a manner that cannot be justified economically. The above bias is eliminated by a change in methodology where any difference between the two statistics that is beyond what is justifiable methodologically has been recorded in the "errors and omissions" row of the balance sheet since 2004 Q2.

#### Chart 4-4

Corporate and external lending capacity (as a proportion of GDP)\*





Revision, i.e. the explicit disclosure of differences in statistics, allows for the possibility that the external borrowing requirement 'from below', arising from the financial balance, can be quantified. In contrast to a steady decline in the external borrowing requirement as the sum of the current account balance and the capital account balance, the seasonally adjusted external borrowing requirement 'from below' was 8 to 10 per cent of GDP in the last year. The seasonally adjusted external borrowing requirement calculated 'from below' and corrected for imports brought forward due to Hungary's EU accession and the bias of data on imports caused by the phasing out of warehousing remained 9 to 9.5 per cent as a proportion of GDP in 2005 Q2, a level practically unchanged since 2004 Q4.

The GDP-proportionate external borrowing requirement remained unchanged against a backdrop of a moderate rise in the general government borrowing requirement. Following a sharp rise in the borrowing requirement in 2005 Q1, no moderation materialised in Q2, with the borrowing requirement exceeding 11 per cent of GDP. Meanwhile, increase in households' net financial savings, decelerating since 2003 Q2, came to a halt. Simultaneously, corporate borrowing requirement – consistent with the external borrowing requirement calculated 'from below' – declined somewhat.

## Table 4-8

GDP-proportionate current account balance and the financial position of the individual sectors

	2002	2003	2004	2005	2006	
		Estimates		Projections		
I. Consolidated general government*	-8.9	-8.6	-8.3	-9.5	-10.3	
II. Private sector (=1+2)	2.3	0.0	-1.7	0.4	1.2	
1. Households	2.7	0.2	2.0	3.0	3.2	
2. Corporations	-0.4	-0.1	-3.7	-2.6	-2.0	
External financing capacity "from below" (= I+II = -B+C)	-6.6	-8.5	-10.0	-9.2	-9.2	
External financing capacity "from above" (=A+C)	-6.9	-8.8	-8.5	-7.4**	-8.4**	
A. Current account balance	-7.2	-8.8	-8.8	-8.1**	-9.1**	
– in EUR billions	-5.0	-6.4	-7.1	-7.0**	-8.3**	
B. Financial account balance	6.9	8.5	10.3	9.8	9.9	
C. Capital account balance	0.3	0.0	0.3	0.6	0.8	

\* In addition to the fiscal budget, the consolidated general government includes local governments, APV Rt., institutions attending to quasi-fiscal duties (e.g. Hungarian Railways and Budapest Transport Company), the MNB and authorities implementing capital projects initiated and controlled by the government and formally implemented under PPP schemes.

\*\* Uncertainties over calculations related to trade statistics point to higher current account deficit and external borrowing requirement.

Under our projection the GDP-proportionate general government borrowing requirement may increase substantially, amounting to 9.5 per cent of GDP in 2005. The same may hold true for the increase in the household sector's net savings. Based on what was experienced in H1, the annualised corporate borrowing requirement, calculated 'from below', may also be somewhat lower. External borrowing requirement, calculated from 'from above', may fall to 7.4 per cent of GDP. However, the external borrowing requirement, calculated from 'from below' and consistent with debt figures, is unlikely to fall below 9 per cent of GDP. In 2006, due to an anticipated marked rise in general government borrowing requirement and one-sided risks implied in external equilibrium trends, GDP-proportionate external borrowing requirement is expected to rise by 1 percentage point. General government borrowing requirement may reach 10.3 per cent of GDP, while households' GDP-proportionate net financial savings is only likely to increase moderately. Due to

methodological risks implied in the trade deficit, we expect that in 2006 the accrual-basis trade deficit will approximate to cash flow trade deficit, the latter being more in line with financing trends. This may also increase the external borrowing requirement.

#### Table 4-9

#### Current account balance to GDP\*

(as a proportion of GDP, in per cent, unless otherwise indicated)

	2001	2002	2003	2004	2005	2006	2007	
		Fa	act		Forecast			
1. Goods and services balance	-1.5	-2.4	-4.5	-3.1	-2.0**	-3.2**	-2.7	
2. Income balance	-5.5	-5.6	-5.1	-6.1	-6.4	-6.3	-6.3	
3. Balance of current transfers	0.8	0.8	0.8	0.3	0.3	0.4	0.5	
I. Current account balance (1+2+3)	-6.2	-7.2	-8.8	-8.8	-8.1**	-9.1**	-8.5	
Current account balance in EUR billions	-3.6	-5.0	-6.4	-7.1	-7.0**	-8.3**	-8.3	
II. Capital account balance	0.6	0.3	0.0	0.3	0.6	0.8	0.8	
External financing capacity (I+II)	-5.6	-6.9	-8.8	-8.5	-7.4**	-8.4**	-7.7	

\* The forecast for 2006 and 2007 includes imports arising from the recognition of the lease fee paid by the Hungarian Army for Gripen fighter planes and amounting to approximately 0.5 per cent of GDP.

\*\* Uncertainties over calculations related to trade statistics point to higher current account deficit and external borrowing requirement.

In respect of the structure of the current account balance, the real economic deficit in 2005, as a result of the trend-like decline experienced over the past one year, may decrease significantly, to an extent unjustified by real and financing trends. As a result of a rapid rise in the net external debt and the significant amounts of dividend paid, the deficit of the balance of income to GDP may slightly increase. Overall, the ratio of the current account deficit to GDP may fall 0.7 per cent short of the corresponding figure recorded in 2004. It is expected that in the course of 2006-2007 the uncertainty surrounding trade statistics will gradually decline, and 2006 the accrual-based trade deficit will approach the level indicated by cash-flow data, more consistent with the economic developments, while the one-off deficit-increasing effect of the Gripen lease also appears in the balance. In 2007, however, slowing consumption and capital formation may again reduce deficit in the balance of the real

economy. The current account deficit may be around EUR 8.2-8.3 billion in 2006–2007.

#### Financing the current account deficit

In 2005 Q2, the significance of non-debt generating financing further decreased within deficit financing. Less than 20 per cent of the external financing requirement was financed from the inflow of net non-debt generating funds, and the remaining amount increased net external debt. Although the amount of non-debt generating capital flowing to Hungary increased in comparison to the previous quarter, the outflow of capital also rose. The primary underlying reason for this increase in the outflow of non-debt generating capital is Hungarian companies' expansion in the region. The substantial amount of shares sold by non-residents also contributed to the drop in nondebt generating financing. As regards debt-generating financing, following significant purchases of government securities and HUF deposits in the first quarter, non-residents reduced their stocks held in government securities and HUF deposits by altogether EUR 235 million in 2005 Q2. As a result of a methodological revision, the corporate sector's net borrowing from the rest of the world changed with retrospective effect. In addition to a slower increase in the corporate sectors' trade loan receivables of the corporate sector against the rest of the world, their net liabilities to the rest of the world have become broadly flat after a period of marked decrease. In 2005 Q2, banks collected a substantial amount of funds in foreign exchange, in excess of EUR 1 billion, used primarily for financing foreign exchange-based home loans to households. Following a temporary slowdown in 2005 Q1, households' HUF exchange rate exposure has increased by roughly EUR 1 billion.

## **Table 4-10**

#### External financing requirement

(EUR millions)

		20	04	2004	2005		
	Q1	Q2	Q3	Q4		Q1	Q2
1. External borrowing requirement (=1.1+1.2)	-1378	-2247	-1589	-1662	-6876	-1374	-1536
1.1 Current account balance	-1324	-2249	-1766	-1797	-7136	-1545	-1701
1.2 Capital account balance	-54	2	177	135	260	171	165
2. Financing	1245	2649	1552	2954	8400	2963	2276
2.1 Direct capital investment	445	465	1282	659	2852	663	602
2.1.1 Direct capital investment abroad	-353	-229	-57	-217	-856	-412	-741
2.1.2 Direct capital investment in Hungary	798	694	1339	876	3708	1074	1344
2.2 General government loan transactions	904	74	1353	1468	3799	2051	751
2.2.1 MNB loan transactions	-738	-25	-61	-26	-848	-475	37
2.2.2 Government loan transactions (excluding government securities)	861	690	450	1579	3579	2051	908
<i>2.2.3.</i> Non-residents' government securities purchases	781	-592	964	-85	1068	475	-194
2.3 Net capital funding of the private sector	34	2018	-378	1240	2915	685	1214
2.3.1 Credit institutions' liabilities	306	1934	106	1029	3375	864	1287
2.3.2 Portfolio investments (equity securities)	322	98	99	314	833	-175	-308
2.3.3 Corporations' net foreign borrowing	-594	-14	-582	-103	-1293	-5	235
2.4 Balance of errors and omissions	-138	92	-706	-413	-1166	-436	-341
3. Changes in international reserves (1+2)	-133	402	-32	1292	1528	1589	689

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