MAGYAR NEMZETI BANK

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, since August 2005 the Bank has sought to attain price stability by ensuring an inflation rate near the 3% medium-term objective. The Monetary Council, the supreme decision-making 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 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 clear insight into the operation of monetary policy and to enhance transparency, the Bank publishes the information available at the time of making its monetary policy decisions. The Report presents the inflation forecasts prepared by the Monetary Strategy and Economic Analysis and Financial Analysis Departments, as well as the macroeconomic developments underlying these forecasts. The forecasts are based on certain assumptions. Hence, in producing its forecasts, the staff 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.

The analyses in this *Report* were prepared by staff in the MNB's Monetary Strategy and Economic Analysis and Financial Analysis Departments and Financial Stability Departments under the general direction of Ágnes Csermely, Director. The project was managed by Barnabás Virág, Senior Economist of Monetary Strategy and Economic Analysis, with the help of Mihály Hoffman and Péter Bauer. The *Report* was approved for publication by Ferenc Karvalits, Deputy Governor.

Primary contributors to this *Report* include: Judit Antal, Péter Bauer, Katalin Bodnár, Mihály Hoffmann, Ágnes Horváth, András Hudecz, Gábor Kiss, Zalán Kocsis, Balázs Krusper, Rita Lénárt-Odorán, Zsolt Lovas, Miklós Lukács, Ádám Martonosi, Benedek Nobilis, Gábor Pellényi, Olivér Miklós Rácz, Zoltán Reppa, István Schindler, Róbert Szemere, Béla Szörfi, Judit Várhegyi, Timea Várnai. Other contributors to the analyses and forecasts in this *Report* include various staff members of the Monetary Strategy and Economic Analysis and the Financial Analysis Departments.

The *Report* incorporates valuable input from the Monetary Council's comments and suggestions following its meetings on 8th February and 22nd February 2010. The projections and policy considerations, however, reflect the views of staff in the Monetary Strategy and Economic Analysis and the Financial Analysis Departments and do not necessarily reflect those of the Monetary Council or the MNB.

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Summary

The more benign external environment is likely to help fuel the recovery in Hungary; however, the decline in domestic demand can be sharper and more prolonged than earlier expected

The world economy has continued to recover and conditions in financial markets have improved since the November 2009 *Quarterly Report on Inflation*. Further improvement is expected over the entire forecast period, providing additional support for a recovery in the Hungarian economy. However, lending by domestic banks may remain extremely subdued throughout 2010, amplifying the contractionary effects of inevitably pro-cyclical fiscal and monetary policy on aggregate demand, despite improving external conditions. The recovery in Hungary is likely to lag behind that of the global economy, largely reflecting the decline in domestic demand. The projection for the economy remains one of appreciable GDP growth from 2011.

The subdued demand environment continues to have a strong downward effect on prices, which may lead to an inflation rate that undershoots the medium-term target in 2011. The rise in unemployment to a historically high level is expected to exert an increasingly powerful disciplinary effect on wage decisions, which, in turn, is likely to support that process. At the same time, in the context of the global recovery, rising food and commodity prices and a slower decline in regulated prices may decelerate the disinflation process.

The heterogenous pattern of growth may lead to a further improvement in Hungary's external balance. As was the case in 2009, this is likely to help the economy operate without the need to rely on substantial foreign funding in the coming years, following a period of rapid accumulation of external debt.

International investors appear to be taking a more cautious approach to risk

International investors have become more cautious in recent months, with the rise in risky asset prices slowing. The most important financial market measures of liquidity and risk remain at levels experienced in the months before Lehman Brothers' failure. Nevertheless, these values are still worse than at the onset of the crisis in August 2007. But concerns over Greek government debt once again focused investor attention on the risks associated with the rapid accumulation of public sector debts and the sustainability of debt paths. Domestic financial market developments were driven mainly by shifts in global sentiment. Although the significant improvement in Hungary's external balance has reduced the vulnerability of the economy, weak indicators of activity continue to pose downside risks.

Domestic lending conditions remain tight; the expected turnaround in lending activity is likely to take longer to materialise

The domestic financial intermediary system continues to show little sign of a pick-up in lending activity. Over the past quarter, the fall in the sector's loan-to-deposit ratio has slowed, suggesting that the balance sheet adjustment by banks may last longer than expected. Growth in lending has been hindered by both supply and demand factors. Falling domestic demand, rising unemployment, the high bankruptcy rate and increased costs of borrowing are working to restrain demand by companies and households. The contraction in the supply of credit has been reflected mainly in the tightening of non-price terms on loans to the corporate sector and in the tightening of price terms on loans to households. The turnaround in domestic lending activity, previously expected for early 2010, may not occur before the second half of the year, thus continuing to weigh on consumption and investment by the major domestic institutional sectors.

The heterogenity in the pattern of growth has also been reflected in a significant, sustained improvement in the external balance

Simultaneously with the process of real economic and financial market adjustment accompanying the recession, Hungary's high current account deficit of the past few years had narrowed and moved to a significant surplus from the middle of 2009. The dramatic shift in the economy's external balance was driven by an improvement in the balance on trade in goods and services. The contraction in demand combining with the improvement in the outlook for exports is likely to result permanently balanced current account over the entire forecast period.

The recovery of Hungary's major export markets is expected to be slow and gradual as the temporary effects wane

The global economic recovery, which started in the middle of 2009, continued over the past quarters. In most of the world's developed economies the recession ended in Q3. Although output growth and confidence measures have continued to pick up in the most recent months, domestic demand has continued to show few signs of recovering. Accordingly, the positive shifts in GDP may have been related to one-off factors, such as the rebuilding of stocks and fiscal stimulus measures. Looking forward, the improvement in external demand may be slower than that observed in 2009 H2 as these temporary factors fade suggesting by the weak production and GDP data in the Eurozone at the end of 2009.

Despite a more benign external environment, the sharp decline in domestic demand continues to impede recovery

The benign external demand environment had a positive influence on the performance of the domestic export sector; however, this was only sufficient to slow the pace of decline in GDP up to 2009 Q3, due to declining domestic demand. The performance of Hungarian companies producing for the domestic market was significantly restrained by weak consumption and investment demand. Household consumption may be even lower than expected, especially this year, the major contributing factor being weaker lending activity over the entire forecast period. Meanwhile, companies have a large margin of spare capacity. Consequently, the sector is likely to respond to a gradual pick-up in demand by rising the use of existing assets rather than committing to additional investment projects. Accordingly, projects financed with EU funds are likely to be the only source of the expansion in whole-economy investment.

The rise in the unemployment rate is slowing; however, employment is unlikely to increase materially in 2011

The diverging trends in growth have increasingly been reflected in labour market developments. Earnings growth in the service sectors has eased from consistently high levels, while growth in manufacturing earnings has picked up steadily as foreign demand has bounced back. This trend may continue in 2010. The increase in earnings growth in the services sector is only likely to catch up with manufacturing earnings growth in 2011, along with a recovery of domestic demand. The number of unemployed rose at a moderating pace in the final months of 2009. With the prospects for demand improving, companies are seeking to maintain employment at current levels, even when their production volumes are actually falling. Consistent with this, the pace of layoffs may slow further in 2010, followed by a slight rise in employment numbers in 2011. However, the unemployment rate may remain above pre-crisis levels for quite a long while.

As the upward effects on the price level of the indirect tax increases wear off, inflation is likely to be downwards from the middle of the year

Inflation data in January of 2010 was higher than the Bank's expectations. The rise in annual inflation was mainly driven by the increases in global commodity prices, the changes in excise taxes and higher than expected rise in food prices. In the case of industrial goods, the smaller than expected price-cuts in early this year might be attributed to a deviation of the

seasonality of sales actions from their levels in past years. The downward effects of the recessionary environment continued to be clearly reflected on private services prices supporting the longer term disinflation trend. The increase in excise taxes and a number of measures affecting administered prices early this year may hold the annual inflation around 6 percent in the short term; however, trend inflation, which is closely related to changes in macroeconomic fundamentals, may continue to moderate in 2010. With the waning of the base effects of last year's indirect tax increases, the marked fall in inflation is likely to become evident in the annual indices from the middle of the year.

From 2011 the headline inflation rate may undershoot the medium-term inflation target, although the slower adjustment in inflationary expectations may result risks on the upside

On balance, provided that the key assumptions underlying the projection hold (the most important of these are that (i) the central bank base rate is held constant at 6.00%; (ii) the forint exchange rate remains at EUR/HUF 269.3; and (iii) the price of crude oil moves around EUR 80–85 per barrel), Hungarian output is likely to continue falling in 2010. GDP growth is only expected to pick up strongly in 2011. Consequently, the recovery in Hungary is likely to lag behind that of developed economies and the countries of Central and Eastern Europe.

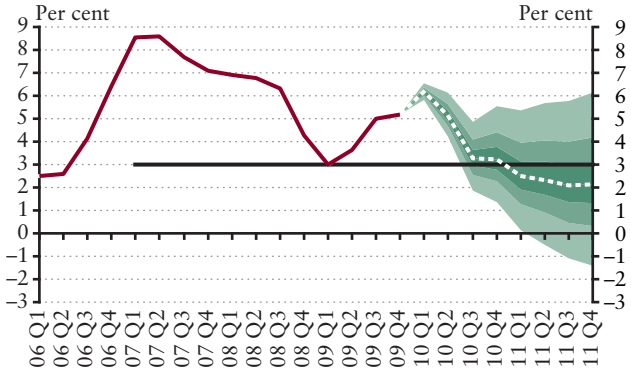
With the waning of the base effects of last year's indirect tax increases the consumer price inflation may fall close to the medium-term target from mid-2010, while the headline inflation rate may undershoot the target from the beginning of next year. The upward revisions in our inflation forecast were mainly driven by the higher oil price assumptions, the rise in regulated prices and the change of the weights in consumer basket; however, subdued demand is likely to exert downward pressure on prices over the entire forecast period.

In the current projection, a slower-than-expected recovery of external demand, a further need of fiscal adjustment affecting the 2011 government balance and a slower-than-expected adjustment of inflation expectations pose the most important risks. On the whole, in terms of inflation the balance of risks is slightly on the upside, while in terms of growth considerable downside risks point to slower growth.

The budget deficit target is unlikely to be met unless further measures are taken

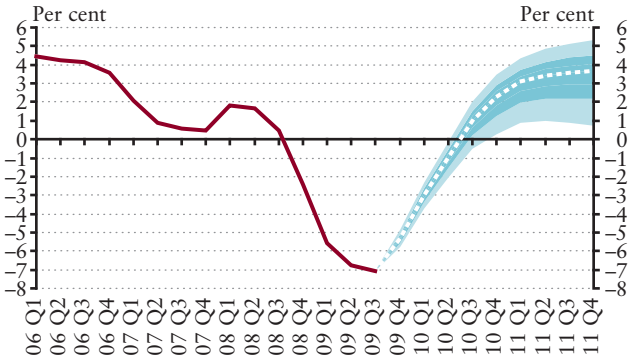
In 2010 and 2011, the general government deficit as a percentage of GDP can only be reduced to below 4 per cent if the government's stability reserves and interest reserves for contingencies are cancelled. However, further measures will be required to meet the fiscal target. It is important to note, however, that trend developments in the fiscal balance, adjusted for the effects of the economic cycle, remain downwards in the baseline projection.

Inflation projection fan chart



GDP projection fan chart

(seasonally adjusted, reconciled data)



Summary table of baseline scenario

(The forecasts are conditional: the baseline scenario represents the most probable scenario, which applies only if the assumptions presented in Chapter 3 materialise; unless otherwise indicated, it represents percentage changes on the previus year.)

	2008	2009	2010	2011
	Actual	Projection		
Inlation (annual average)				
Core inflation[1]	5.2	4.1	3.2	1.3
Consumer price index	6.1	4.2	4.4	2.3
Economic growth				
External demand (GDP based)	2.0	–4.4	1.1	2.1
Household consumption expenditure	–0.5	–8.2	–3.9	2.7
Gross fixed capital formation	0.4	–7.0	1.8	5.0
Domestic absorption	0.7	–11.0	–1.6	2.9
Export	5.6	–9.5	5.8	9.0
Import	5.7	–15.3	4.7	8.8
GDP*	0.6	–6.3	–0.2	3.4
External balance[2]				
Current account balance	–7.2	0.4	–0.4	–0.4
External financing capacity	–6.2	1.8	1.6	2.0
Government balance[2]				
ESA balance[3]	–3.8	–4.0	–4.2 (–4.0)	–4.3 (–4.1)
Labour market				
Whole-economy gross average earnings[4]	7.6	0.3	2.4	3.9
Whole-economy employment[5]	–1.2	–2.5	–0.8	0.1
Private sector gross average earnings[6]	8.5 (8.0)	4.3	3.6	3.9
Private sector employment[5]	–1.1	–3.7	–1.7	0.1
Unit labour costs in the private sector[5, 7]	5.4	8.3	–1.2	0.3
Household real income**	–0.6	–5.1	–2.7	2.0

[1] *From May 2009 on, calculated according to the joint methodology of the CSO and MNB.*

[2] *As a percentage of GDP.*

[3] *The numbers in brackets refer to the deficit achievable in case of total blocking of budgetary reserves. In our forecast we have not taken into consideration any risk from debt assumptions.*

[4] *Calculated on a cash-flow basis.*

[5] *According to the CSO LFS data.*

[6] *According to the original CSO data for full-time employees. The numbers in brackets refer to wages excluding the effect of whitening and the changed seasonality of bonuses.*

[7] *Private sector unit labour cost calculated with a wage index excluding the effect of whitening and the changed seasonality of bonuses.*

** Data are not adjusted for calendar effects.*

*** MNB estimate.*

1 Evaluation of macro-economic data

Hungarian economy still in recession in spite of an upswing in external demand

By mid-2009 the worst was over in international economic activity and recovery began in global economic processes. For the time being, the effect of the more benign external environment was reflected in the expansion of Hungarian exports. This, however, besides the further declining domestic demand, resulted in only a deceleration of the decline in Hungarian GDP. Factors determining the strong heterogeneity of the Hungarian GDP also might have an influence on the 2010 macroeconomic developments, and as a consequence, acceleration of Hungarian growth follows global trends with delay.

The demand-boosting economic policy measures taken in developed economies stabilised the global economy in an adequate manner. An upturn in economic activity was observed already starting from the second half of last year. However, this was facilitated by one-off factors like the replenishment of corporate stocks and fiscal demand-increasing measures (mainly car-scrapping schemes), and with their fading out global recovery may continue at a slower pace. Data on end-year production as well as fourth quarter GDP reinforce this: the economy of Germany and of the Euro zone was stagnating, while a decline was observed in the Czech Republic and in Romania.

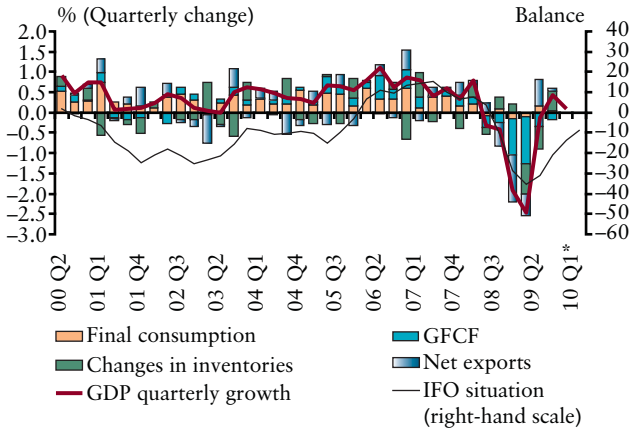
The extent and the structure of the decline in domestic GDP until end-2009 was slightly different than our previous expectations. Fourth quarter developments in GDP were more favourable than indicated in our November forecast, although according to the available information set, the difference between external and internal demand appears increasingly remarkable in domestic economic developments. In 2009 H2, the developments in external economic activity were more favourable than expected, and on the absorption side resulted in a substantial increase in exports. In parallel with this, an upswing in imports was also observed, which is mainly attributable to the relatively high import demand of exports, but filling up the gas storage capacities also played a role. Households' consumption decisions continue to be influenced by the current and expected developments in income as well as the balance sheet adjustment that is a consequence of the crisis. Accordingly, households' consumption expenditure declined considerably in 2009 H2 as well. Gross fixed capital formation was again characterised by an increasing decline in Q3, caused primarily by a significant fall in corporate and household investment.

With respect to the main economic sectors, the recovery in external markets mainly increased the value added in industry. Weak domestic demand was particularly reflected in the performance of market services – the decline is especially remarkable in the trade and tourism sector. With regard to the sectors where value added has a smaller weight, the correction of the outstanding year 2008 continued in agriculture, while the value added in construction continued to decline, mainly as a result of a fall in building investment.

Chart 1-1

Euro area growth and the IFO confidence index

(seasonally adjusted data)

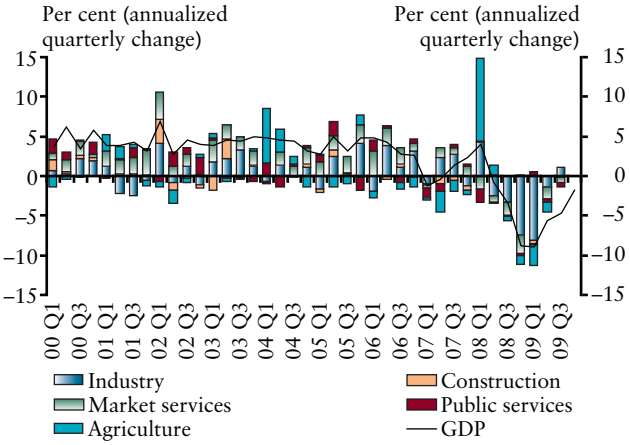


* *January.*

Chart 1-2

Contribution of the output of major sectors of the national economy to GDP growth*

(quarterly indices, based on seasonally adjusted data)



** The sum of the contributions to growth of the basic-price sectoral added values does not necessarily equal the market-price GDP. On the one hand, time series with chain-type indices are not additive, while, on the other, the balance of taxes on and subsidies to production (the difference between market- and basic-price value added) is not constant as a proportion of market-price GDP.*

Labour market developments continue to be determined by corporations' adjustment to the unfavourable profit situation. Lay-offs continued to be typical of the competitive sector in the second half of the year, although their pace declined gradually. The slowdown in wage dynamics remained typical in the past quarters, but the sharp difference between external and domestic developments in demand also resulted in substantial differences in waging. Overall, in Q3 there was no further substantial deterioration in the competitive sector's profit situation.

The disinflationary effect of the weak demand was clearly reflected in corporations' pricing decisions. Although as a result of indirect tax measures and global commodity price rises annual inflation gradually increased to over 6 per cent by early 2010, our trend inflation indicators suggested a continuation of the disinflation trend that had started in the middle of the year. Trend inflation characterising the economy amounted to around 2 per cent at end-2009.

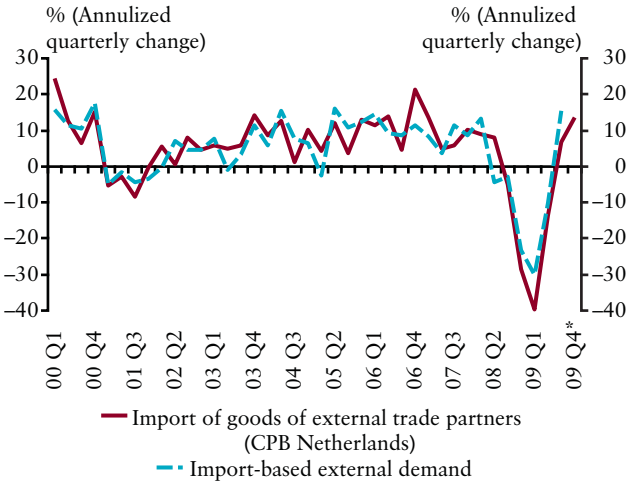
1.1 Temporary effects facilitated the improvement in external business conditions

Starting from mid-2009, international economic activity took a turn as a result of economic policy incentives. The more benign economic environment became gradually reflected not only in confidence indicators, but also in production and, eventually, in GDP figures as well. Examining the structure of growth, it is obvious that the expansion in H2 was supported by significant one-off effects. These included the replenishment of corporate stocks and the car-scrapping schemes announced by several governments. As these effects fade out, recovery from the crisis may continue more slowly in 2010. Relevant signs have been seen in the developments in recent months. Import demand in the euro area declined in October and November, while the level of industrial production as well as new industrial orders stopped increasing. Data on Q4 show that both the economy of the euro zone and Germany was stagnating, while output declined in some countries in the region. Although confidence indices have continued to improve in recent months, based on the historic relationship between the indices and economic developments, for the time being stagnation or slow recovery of production is more likely over the short term.

Chart 1-3

Changes in external demand conditions

(seasonally adjusted data)



* *October–November.*

Box 1-1: The effects of car scrappage schemes on domestic and European industrial production

In order to attenuate the impacts of the international recession, many countries introduced car scrappage schemes, in which the replacement of old cars with new ones is subsidised by the government. These programmes contributed to the stabilisation of demand and the upturn in external economic activity since mid-2009. As a small, open economy, Hungary may also have benefited from these programmes, since vehicle exports amount to more than one fifth of Hungarian goods exports. In this Box we summarise the information available to date about the international effects of car scrappage programmes, and review the channels through which they may have affected Hungarian industrial production in 2009 and over our forecast period.

According to the data of the European Automobile Manufacturers' Association (ACEA), 13 EU Member States introduced car scrappage schemes. The largest, German package offered a support of EUR 2500 per car in a total value of EUR 5 billion, which was completely used between January and September 2009. The total value of subsidies provided by the other EU Member States may have amounted to another EUR 1–2 billion in 2009–2010.

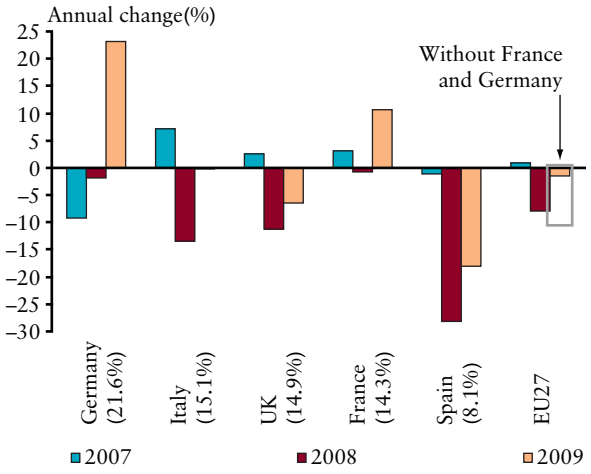
It was hoped that, in addition to long-term environmental benefits, these programmes would increase households' demand and dampen the economic downturn in the short term. Firstly, the fluctuations of automotive production are stronger than those of GDP, thus the sector was particularly hard hit by the global recession unfolding at end-2008. Secondly, automotive industry plays a central role in the global economy. In addition to providing 5–15 per cent of manufacturing value added in a number of countries, the industry also has strong supplier relationships with other sectors. In the G7 countries, a 1 euro increase in value added in the vehicle industry creates demand for products worth 3 euros.[1] Due to the high import content of car purchases and production, car scrappage schemes may have assisted the manufacturers of other countries as well.

In most countries, car scrappage schemes only moderated the fall in new car sales in 2009, although sales increased remarkably in Germany

[1] Haugh, David–Mourougane, Annabelle–Chatal, Olivier (2010):'The Automobile Industry in and Beyond the Crisis', *OECD Economics Department Working Papers,* no. 745.

Chart 1-4

Registrations of newly purchased cars in Europe*

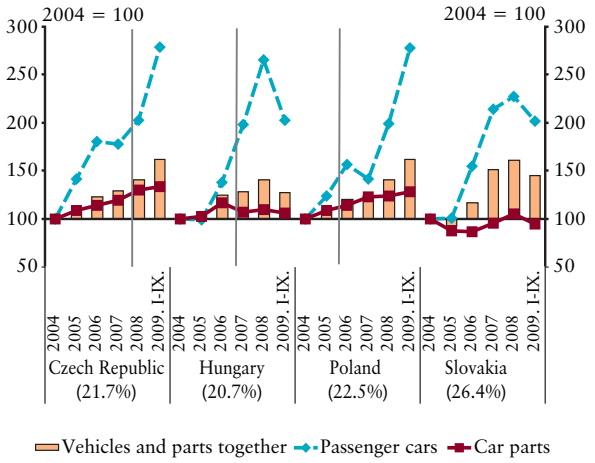


** The percentages in brackets show countries' shares of new car registrations in the EU27 in 2008.*

Source: www.acea.be.

Chart 1-5

Export market shares of regional economies on the vehicle market of the EU15*



** Export market share = exports to the EU15/total imports of the EU15 countries (including trade within the EU15) in euro terms. The share of vehicle exports within exports in 2008 is shown in brackets by the names of the countries.*

and France. The decline in car imports was even more explicit, because dealers depleted their stocks first. In the EU15 countries new registrations increased by 1 per cent, while vehicle imports fell by 23 per cent in euro terms (including trade among the EU15 countries).

The developments in export market shares indicate that Hungarian and Slovak automotive companies were less able to benefit from car-scrapping schemes than Czech or Polish ones. Compared to 2008, in the first three quarters of 2009 the share of Hungarian vehicle exports in the EU15 market declined by 9.5 per cent. The main underlying explanation may be that the car scrappage programmes primarily boosted the demand for smaller cars, which are typically manufactured in Czech, Polish and Romanian factories. The picture is more heterogeneous in parts manufacturing, depending on the car brands individual companies supply.

In addition, the car scrappage schemes may also affect developments in economic activity through various indirect channels. Firstly, the increase in car purchases in 2009 took place at the expense of other consumption items. Moreover, car purchases further reduced households' net savings. This may hinder current and future demand for other products. Secondly, consumers may have brought forward their future car purchases to receive the state subsidies. Furthermore, the replacement of used cars reduced the average age of vehicle stocks, which reduces future demand for replacement.[2] Finally, according to OECD calculations the European automotive industry has significant excess capacity, therefore the sector's investment activity may remain subdued in the medium term.

Based on market shares, Hungarian companies presumably enjoyed fewer benefits from the demand-increasing effect of the car scrappage schemes in 2009. However, if the loss of market shares is temporary, Hungary's market share may return to the pre-crisis level as the programmes come to an end. Accordingly, Hungarian vehicle manufacturing, and through that the entire industry, may even overperform compared to other countries of the region. Nevertheless, the repercussions of the programmes may reduce the demand for cars, which can slow down the recovery of the automotive industry all over Europe. This, in turn, may have an adverse effect on the dynamics of industrial production as a whole.

Examining the developments in exports of the region, significant similarities can be observed. The narrowing of export markets affected all economies of the region to a nearly identical extent. At the outset of the crisis a decline in export market share had been a general reaction. Then, starting from the middle of the year, in accordance with the recovery in external economic activity, which was mainly attributable to the car-scrapping programmes, export growth already exceeded the expansion of external demand. This was facilitated by the fact that by 2009 H2 real

[2] See: 'The Effects of Vehicle Scrapping Schemes across Euro Area Countries', *ECB Monthly Bulletin,* October 2009.

Chart 1-6

External demand and exports in the region

(seasonally adjusted data)

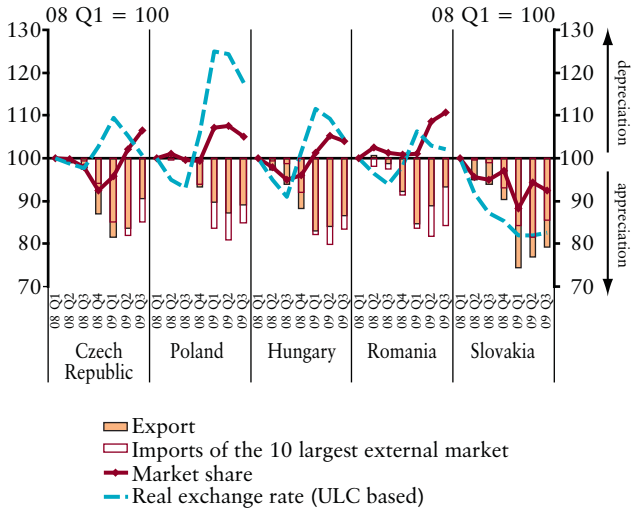


Chart 1-7

Contribution of final use items to annual changes in GDP in the region

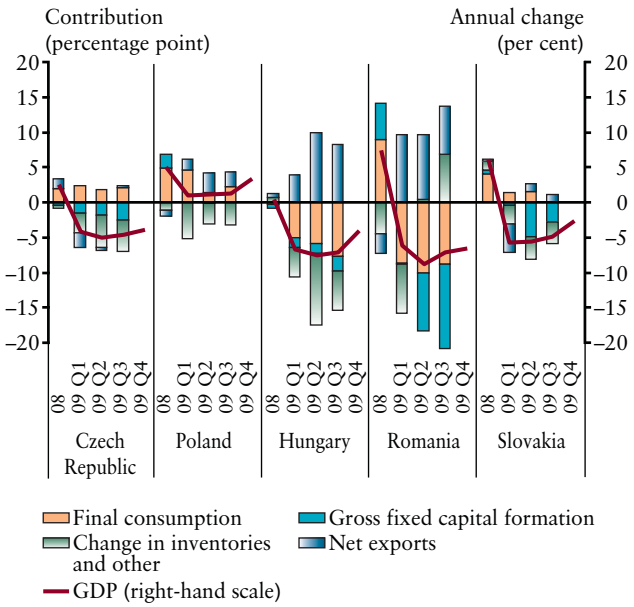
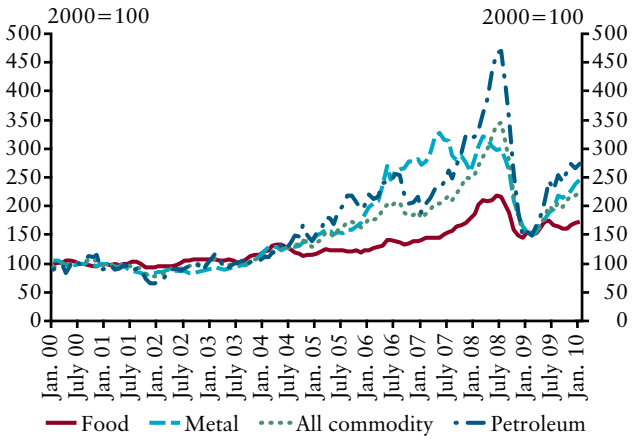


Chart 1-8

Developments in global commodity prices



exchange rates stabilised at a more depreciated level compared to year 2008. The exception is Slovakia, where due to the fixed nominal exchange rate similar shifts have not yet been observed.

Despite the similarities observed in export developments, already substantial differences can be observed in the growth paths typical from the middle of the year. The main underlying reason is the differences in households' behaviour. In the countries introducing fiscal tightening in the crisis period and showing rapid indebtedness and asset price increase preceding the crisis, the adjustment of households' balance sheets is taking place more vigorously. Accordingly, the significant decline in consumption in Hungary and Romania resulted in a fall in GDP, even in 2009 Q3 and Q4.

As a result of the turn in global economic activity and with growth prospects becoming more favourable, global commodity prices – except food – already demonstrated a notable increase in 2009 H2. For the time being, the demand created by the catching-up – typically Asian – countries, which are experiencing more rapid dynamism, may exert continuous upward pressure on commodity prices. This may only slightly be attenuated by the historically high level of inventories and storage capacities built up in developed countries. Based on futures prices, commodity price increases may continue in the coming quarters as well, causing a strengthening cost-push in domestic inflation in the short run.

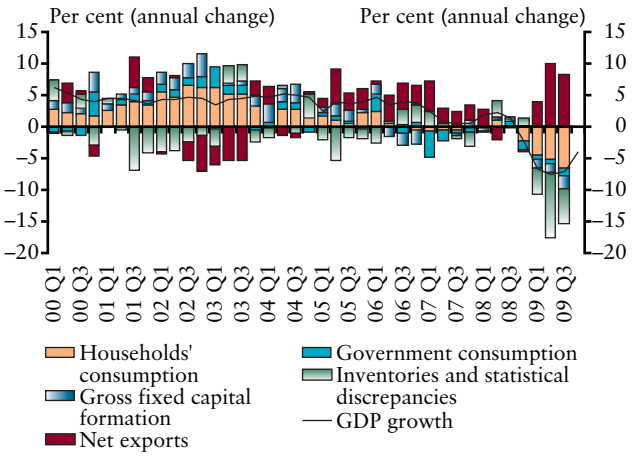
1.2 Recovering external economic activity attenuated the decline in domestic GDP

Although international economic activity already showed signs of recovery in 2009 H2, the output of the Hungarian economy continued to decline until the end of 2009 – although at a slower pace. Therefore, the upturn in the Hungarian economy is following the developed countries and the countries of the region with a delay. The main underlying reason is the weak domestic demand resulting from the balance sheet adjustments that are unavoidable with the inevitable pro-cyclical economic policy and the significant debt outstanding.

Chart 1-9

Contributions of the main final use items to changes in GDP

(annual change)

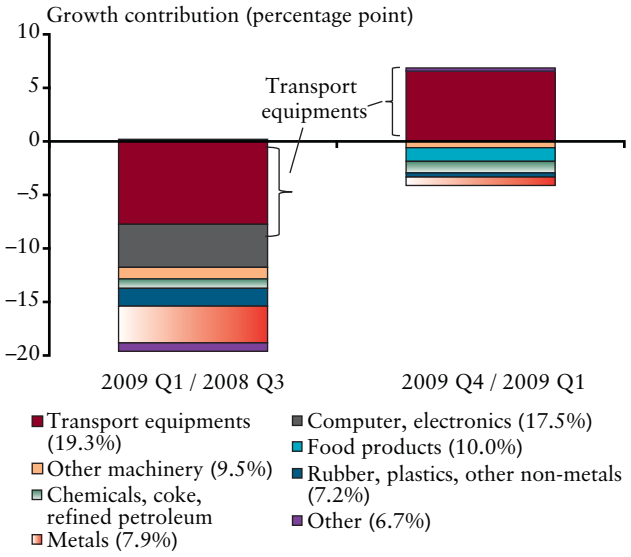


** Considering that time-series with chain-type indices are not additive, aggregation errors were distributed between the individual items according to their weight. Dynamics calculated from the resulting adjusted time series are less reliable from a quantitative perspective (they differ from the original data); nevertheless, the chart may still accurately reflect prevailing trends.*

As a result of the upturn in demand and following five quarters of decline, the value added of industry increased again. This upswing mainly stemmed from manufacturing export sales, but domestic sales stabilised as well. In the past quarters, within manufacturing production it was the automotive industry, which had suffered the heaviest losses in the crisis period, that benefited most from the recovery in the external environment, as a result of the car-scrapping schemes introduced in the EU. In December, however, output declined in a wide range of sectors. However, because of end-year temporary shut down of production plants, December data generally involve more uncertainty. The fact that a decline in production was observed in most European economies calls attention to the fragility of the global economic upturn. Confidence indices (Ifo, Zew) indicate a more restrained expansion of international, especially German, economic activity in the coming months, which is also reflected in the halt of new industrial orders in Germany in recent months. The slower recovery of external demand, compared to 2009 H2, may also have a similar effect on developments in domestic industrial production.

Chart 1-10

Contributions of major subsectors to the changes in manufacturing production



Within market services, the decline in the trade and tourism sector was especially remarkable, which is mainly explained by weak household consumption. The relatively slighter fall in the transport and telecommunication sector may be attributable to the demand for goods supply created by the recovering industry and foreign trade. In spite of the extremely subdued domestic lending activity, the value added of the Hungarian financial intermediary system increased perceptibly in 2009 as well, which is unparalleled in the region.

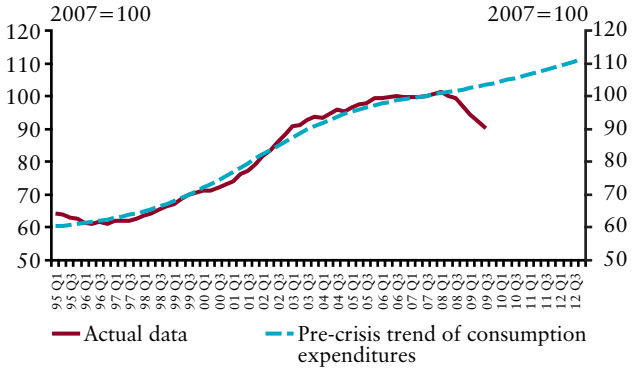
Of the sectors that have a lower weight in value added, the correction following the exceptional production of 2008 continued in agriculture. Although government investment

in infrastructure, which was mainly financed from EU sources, attenuated the effect of the declining building investment, the value added of the construction industry continued to decline in the second half of the year.

On the absorption side of GDP, in 2009 H2 households' consumption expenditure might have declined even stronger than we had expected. Compared to the peak in 2007, the consumption rate of the household sector declined by approximately 5 percentage points until Q3. According to international crisis experiences, households' consumption behaviour changes significantly in crisis periods. Balance sheet adjustment of the sector is a several-year process, at the end of which the consumption of households may be as much as 10–13 per cent below the trend typical before the crisis[3]. For the time being, domestic data are broadly in line with these experiences.

Chart 1-11

Household consumption expenditure and the consumption trend preceding the crisis*



** The trend preceding the crisis was calculated on the basis of our consumption forecast published in the May 2008 Quarterly Report on Inflation. This may have been our last forecast that was not affected by the loan tightening due to the global money and capital market crisis, although it already contained the effects of the government measures taken in 2006 and 2007.*

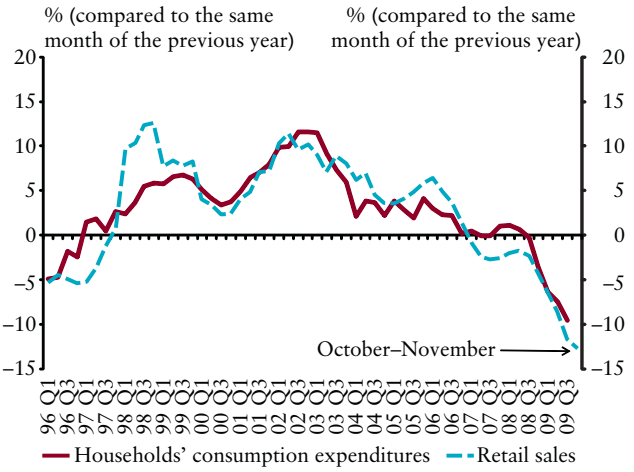
However, we have not yet experienced any signs of a turn in the consumption path. Retail sales were indicating continuous deterioration in consumption in the last months of 2009. In addition to the unfavourable consumption figures, the sector's financial savings were also somewhat below our expectations, which suggests a lower than expected level of income. Moreover, the effect of the lending activity of the banking sector may have played an even more decisive role in the developments in consumption. Earlier we had expected a stagnation in lending activity in 2009 (i.e. the amount of new loans to be equal to the repayment in the given quarter). This assumption had proven to be true in the first half of the year, but in the second half – and particularly in the last months – we observed less favourable data than expected. The deterioration in lending was influenced by both demand-side and supply-side factors. On the supply side the higher risk-aversion of the bank sector may play a dominant role, while on the demand side the weak current income situation and the strengthened precautionary motive in the consumption-savings behaviour of households can be relevant.

The narrowing of lending covered not only the loans extended by the banking sector, but also the activity of financial enterprises, thus households faced a lending environment that was much less benign than our forecasts. The shift in lending activity projected for early 2010 may even be postponed to the second half of the year; therefore, no major shift in consumption expenditure is expected for early 2010.

Chart 1-12

Consumption expenditure and retail sales

(annual index, volume)



Gross fixed capital formation, the structure of which continues to be heterogeneous, was again characterised by a deepening decline in Q3. Machinery investment of the corporate sector declined significantly, while construction investment fell only slightly, due to infrastructural investment related to the public sector. The decline in total economy investment performance was greater than in the previous quarters, which may primarily be explained by

[3] For more details see the IMF World Economic Outlook, October 2009, Chapter 4.

the fall in housing investment of the household sector. In parallel with the improvement in external economic activity, the capacity utilisation of the corporate sector seems to be moving from the bottom it hit in early 2009, although it remains historically very low. As a result of the protracted recovery surrounded by substantial uncertainties, corporate investment may remain subdued in the short term, while a further decline in household investment may be caused by the aforementioned tightening in the lending environment. At the beginning of 2010 as well, an upswing in activity can only be expected in investment funded from EU sources.

Box 1-2: Revision of CSO national account's data

The Central Statistical Office issued its latest National Accounts publication containing the comparative data for the period between 1995 and 2007 in November 2009. The February issue of the *Quarterly Report on Inflation* has already been compiled on the revised information base; the most important changes concerning GDP statistics are presented below.[4]

The current publication contains more innovations and more important ones than usual. The experts of the Statistical Office made corrections on two sections of the time series. The period between 2000 and 2007 had already been considered methodologically homogeneous earlier as well; therefore, only the developments requested by Eurostat were carried out for this period. The most important change was the accounting of inventory holding gain/loss.

For the period between 1995 and 1999 more substantial changes were made. The methodological developments introduced in recent years were referred to the period preceding the base year of 2000 in a consistent manner, making the time series between 1995 and 2007 comparable. A total 31 various methodological changes were introduced, three of which affected the level and changes in volume of the gross domestic product significantly. The level of GDP was primarily increased by the inclusion of illegal activities and the application of the new FISIM (Financial Intermediary Services Indirectly Measured) methodology. The changeover from the earlier base indexing to chain indexing resulted in a major change in volume indices.

In addition to the National Accounts publication, the usual revision of annual and quarterly data for 2008 was also carried out, which resulted in the most significant changes in the year 2008 figures.

Table 1-1

Changes in the final use of GDP

	Household final consumption expenditure		Actual final consumption of government		Gross fixed capital formation		Exports		Imports		GDP	
Revision	**before**	**after**	**before**	**after**	**before**	**after**	**before**	**after**	**before**	**after**	**before**	**after**
1996	–3.8	–3.5	–4.2	–3.5	6.8	3.8	12.0	11.1	9.4	9.1	1.3	1.0
1997	1.9	1.6	5.7	0.1	9.2	6.5	22.4	20.9	23.1	22.3	4.6	4.3
1998	4.4	4.3	–0.3	0.5	13.2	11.5	17.6	16.5	23.8	22.9	4.9	5.2
1999	5.6	6.4	1.8	2.8	5.9	6.0	12.3	11.1	13.3	12.3	4.2	4.2
2000	5.5	4.1	1.2	0.2	7.7	7.2	22.0	19.7	20.3	18.0	5.2	4.9
2001	6.4	6.6	0.9	0.9	4.7	4.7	8.1	8.1	5.3	5.3	4.1	4.1
2002	10.7	10.8	5.5	5.5	10.4	10.5	3.9	3.9	6.8	6.8	4.4	4.4
2003	8.3	8.4	4.1	4.1	2.2	2.1	6.2	6.2	9.3	9.3	4.3	4.3
2004	2.5	3.0	–0.1	–0.1	7.9	7.9	15.0	15.0	13.7	13.7	4.7	4.9
2005	3.4	3.2	–0.1	–0.1	5.8	5.7	11.3	11.3	7.0	7.0	3.9	3.5
2006	1.9	1.9	4.9	4.9	–3.7	–3.6	18.6	18.6	14.8	14.8	4.0	4.0
2007	0.5	0.3	–4.5	–4.3	1.8	1.6	16.4	16.2	13.4	13.3	1.2	1.0
2008	–0.5	–0.5	–1.9	–0.3	–2.6	0.4	4.8	5.6	4.7	5.7	0.6	0.6

[4] A detailed description of the changes is downloadable from the website of the CSO, from page 1303 of the publication entitled *National Accounts of Hungary, 1995–2007*. http://portal.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/monsz/monsz9507.pdf.

A comparison of the volume indices of the final use of GDP shows that while the period between 1995 and 1999 underwent significant changes, the time series between 2000 and 2007 changed only slightly, some tenths of a percentage point. Overall, the application of the methodological changes did not have a significant effect on the level of GDP.

Year 2008, however, reveals major subsequent revisions. A restructuring took place mainly in the internal structure of the final use of gross domestic product; there was no substantial revision of GDP as a whole. The level of household consumption and, to a lesser extent, that of public consumption increased, while transfers from the state declined. With regard to other components of domestic use, the level of gross fixed capital formation also rose markedly. However, total domestic use still did not change so significantly, because the inventory and statistical errors items together offset more than half of the change. The levels of exports and imports also became much higher, but on the whole net exports declined.

Chart 1-13

Capacity utilisation in manufacturing

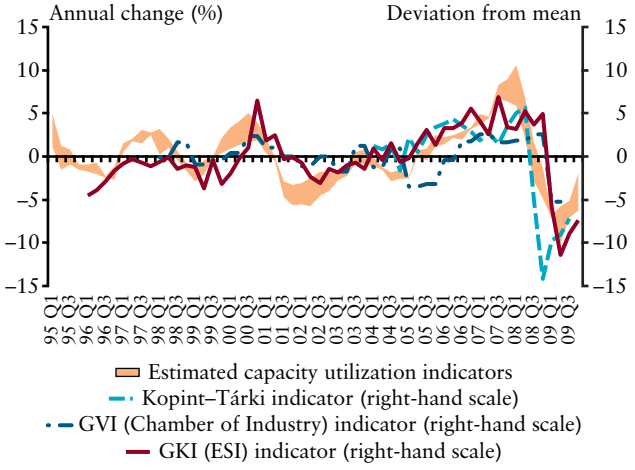
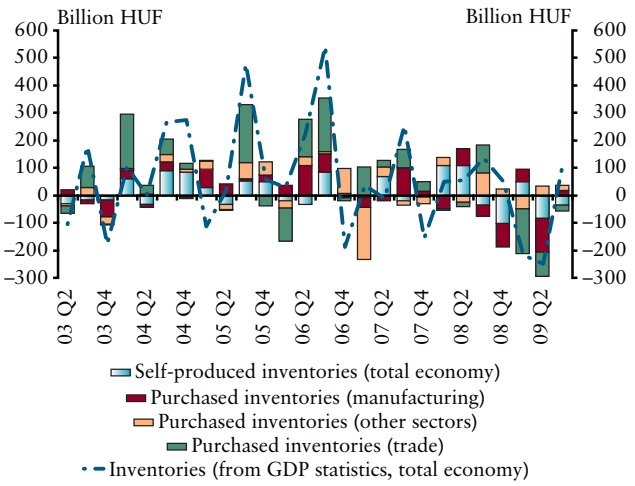


Chart 1-14

Developments in whole-economy inventories

(quarterly change in inventories at current prices)



The correction of the depletion of stocks experienced in 2009 H1 as a reaction to the crisis started in the second half of the year. Accordingly, an increase took place mainly in the inventories of the trading sector. In the short term, we expect this process to continue and presume a further positive adjustment in the level of inventories.

While in Q2 the weak performance of the competitive sector was somewhat offset by the favourable contribution of the public sector, government consumption expenditure fell again in Q3, which may be attributable to further cost-saving measures.

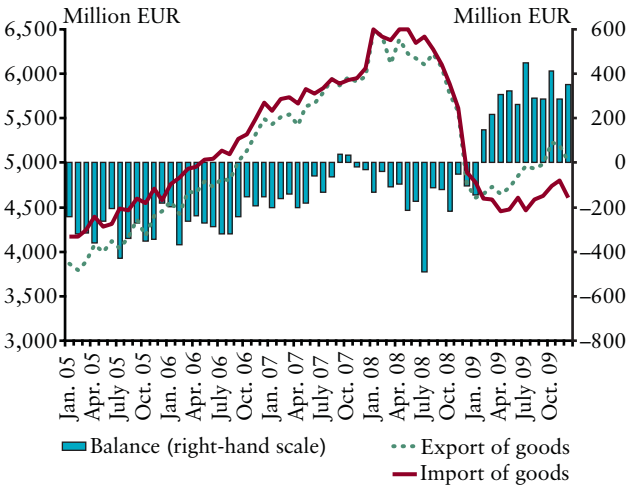
As a result of the benign external demand, net exports made a positive contribution to GDP growth in the second half of the year. This was primarily a result of the higher than expected increase in exports, although stemming from the high import demand of exports, growth in imports also exceeded expectations. The strengthening of the gas import in H2 also contributed to this process: due to the decline in

prices during the year foreseen by importers, the seasonality of the gas import was not as usual. Moreover, filling up the newly created gas storage capacities also started. The improvement observed in the balance of services in 2009 took place while imports were declining more strongly than exports. The export of services related to shopping tourism improved the balance of tourism mainly in the first half of last year, while domestic households' trips abroad may have declined due to more subdued incomes and a more devalued forint exchange rate in 2009 H2.

In recent months, foreign trade prices were characterised by increasing euro-based export prices and stagnating import prices; consequently, the terms of trade improved gradually in H2. It is also true, however, that the level of the annual change is entirely attributable to developments in the prices of energy.

Chart 1-15

The value of foreign trade in goods and the balance of trade in goods



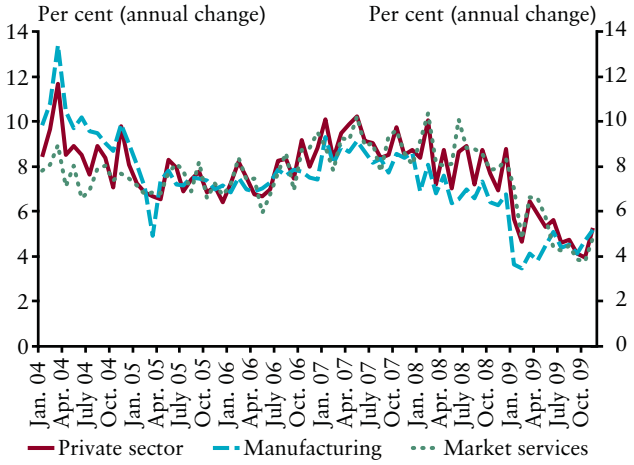
1.3 As a result of labour market adjustment, corporations' profit situation did not continue to deteriorate

In H2 as well, the behaviour of companies was determined by stabilisation of the profit situation, which had deteriorated significantly as a result of the crisis. The pace of lay-offs already slowed down in the last months of the year, while examining the competitive sector as a whole, a further deceleration in wage dynamics was observed.

Chart 1-16

Wage developments in the competitive sector

(annual index, seasonally adjusted data)

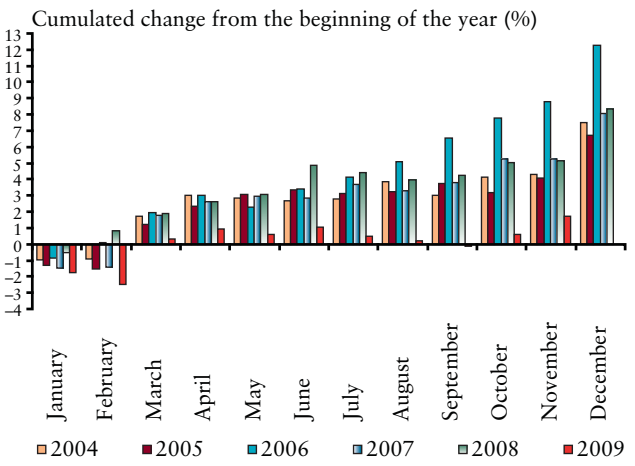


Significant differences can be observed in the developments in gross average earnings across sectors. Rapid wage adjustment was seen in manufacturing at the onset of the crisis, then, as a result of the improving external economic activity and in line with the increase in hours worked, wage dynamics picked up in H2. However, since early 2009 there has not been any major increase in wages in market services, which are more sensitive to the developments in domestic demand and which demonstrated a permanently rapid increase in wages earlier. The National Council for the Reconciliation of Interests recommended the preservation of the purchasing value of net earnings for 2010, which, according to our forecast, may be consistent with an approximately 1.5 per cent increase in gross average earnings. Although according to our experience – as opposed to the agreements on gross wages – the recommendations regarding the net real wage had less coordinating power in the wage decisions of the competitive sector in the past, the proposal based on the current very low gross wage may indicate the stabilisation of the more subdued pace of wage increase. Subdued wage increases by companies are also reflected in the findings of the survey of the Hay Group conducted in December 2009.[5]

Chart 1-17

Increase in regular wages in the market services sector

(cumulated change from previous December)



Although the number of employees in the competitive sector continued to decline significantly in 2009 Q3, the pace of downsizing has already decelerated in recent months. In 2009 as a whole, the fall in the number of employees in the competitive sector was moderate compared to the loss in output; consequently, labour productivity declined. This indicates that companies have responded to the decline in demand with only limited lay-offs, particularly since mid-2009, when the prospects already improved gradually, and they keep part of the labour, especially the skilled employees that are difficult to replace, in reserve (labour hoarding). This was reflected in a significant increase in the ratio of part-time employees in H1, as well as in the decline in the hours worked by full-time employees and in a fall in overtime. In H2 there seems to be a shift in both indicators in manufacturing, which is related to the more favourable external economic activity.

[5] According to the survey, just 60% of the companies questioned modified wages in 2009; the average pay rise of all the companies amounted to 2.4%. The pay rise envisaged for 2010 is 3.2%; nearly 60% of the companies intend to modify wages.

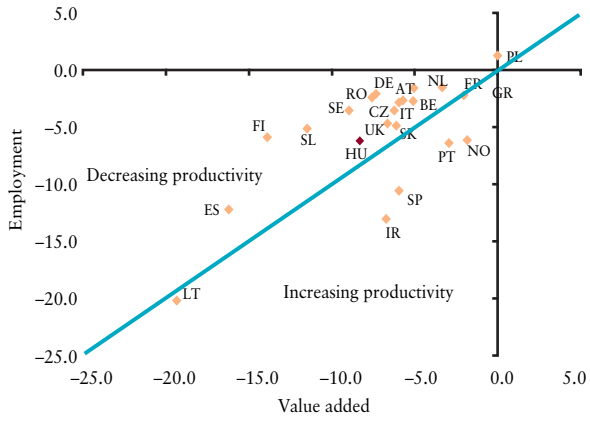
Box 1-3: Labour hoarding during the crisis

In 2009 Q3, the output of the private sector, excluding agriculture, declined by 8.3 per cent compared to the same period of the previous year, while employment declined to a lesser extent, by 6.2 per cent. Consequently, per capita productivity fell by approximately 2 per cent. Deterioration in productivity was typical in most European countries in the crisis period (Chart 1-18).

Of course, the deterioration does not result from a decline in technological development, but from a lower utilisation of the labour kept by companies, i.e. employers retain more employees than they would need over the longer term to produce the output of the given period. Labour hoarding is mainly attributable to the fact that searching for, training and dismissing suitable labour force and reorganising production is a time-consuming activity entailing significant costs for companies.

Chart 1-18

Employment and value added in the private sector excluding agriculture



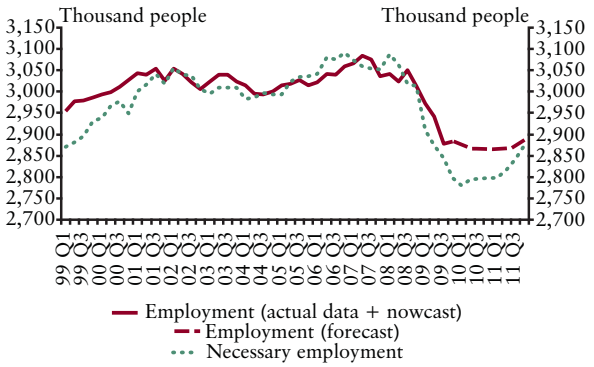
Note: percentage change compared to Q3 2008.

The magnitude of labour hoarding may be affected not only by the costs of adjustment, but also by companies' expectations. In the event that future developments in demand are surrounded by high uncertainties, companies may tend to wait with their adjustment decisions, while if they consider the shock to demand to be only temporary, very often they may believe that adjustment is not necessary. However, quantifying the effect of expectations raises particularly many problems in models.

Lower capacity utilisation is reflected in the lower per capita number of hours worked (in the introduction of four-day working weeks in some cases) or simply in a decline in the amount of work to be done during working hours. The necessity of adjusting the number of employees may significantly be reduced – and increasing the scope for action and competitiveness of a company may, of course, facilitate a turnaround – if employees are willing to accept a reduction of their earnings, causing the profitability of companies to decline only to a lesser extent while excess capacities are maintained. In the case of hourly wages or performance-based waging this adjustment takes place partly automatically.

Chart 1-19

Employment and necessary employment at equilibrium capacity utilisation in the private sector



In addition to our forecast for the number of employees in the competitive sector, Chart 1-19 shows how many employees would be needed in the case of an equilibrium capacity utilisation to produce the value added of the given quarter.[6] It can be seen that employment adjusted itself to the decline in demand relatively quickly in the first year of the crisis. Towards the end of the year, however, although the number of employees still exceeded the equilibrium value, the pace of lay-offs decelerated significantly, and we believe that this slower pace may remain typical in the future as well. The underlying reason is that, while during the initial adjustment many may have been of the opinion that one must get prepared for a fall in demand that lasts for years, recently, with the approach of the expected turn and with

[6] This latter value is based on the NEM (Quarterly Forecasting Model) estimate. According to the approach applied in the model, production is the function of the amount of the available (private and state-owned) capital, the number of employees, the level of technological development and capacity utilisation. Fixing all the other variables, the value of any factor can be determined. The above indicator is the value received as a result for employment if the level of production, capital, development and capital utilisation are fixed at the current level, while the magnitude of labour utilisation is fixed at the equilibrium level.

employment closer to the equilibrium, it may already be worthwhile for more companies to keep their employees with a temporarily lower workload.

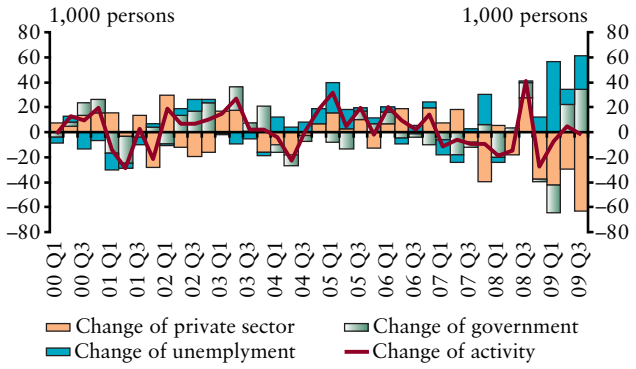
Maintaining higher than equilibrium employment also means that following the upswing the dynamics of employment growth may also lag behind what would stem from the equilibrium, as companies will start to increase the number of their employees only after being able to supply the retained labour with work. Consequently, employment could increase only after the utilisation of the labour capacities kept on reserve by companies has reached the equilibrium value. The chart, however, shows that in our forecast we expect some slight increase earlier than that.

The underlying reason is that in our opinion the magnitudes of labour hoarding may be different depending on the features of individual companies' and jobs. Therefore, labour hoarding may be more typical of jobs that require more specific knowledge and in the case of small enterprises capable of more flexible adjustment in terms of wages and intensity of work. Accordingly, while labour hoarding continues to be typical of some areas, in other areas even capacity expansion may become necessary.

Chart 1-20

Changes in the number of whole-economy employees

(based on LFS statistics, quarterly changes, seasonally adjusted data)

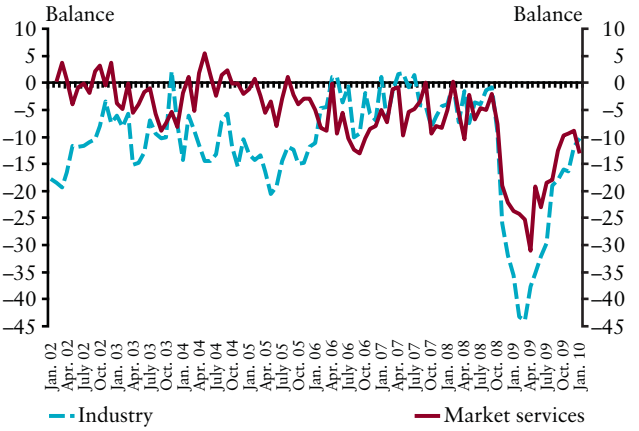


The monthly magnitude of mass lay-offs continued to decline in recent months, and was close to the levels typical before the crisis. Accordingly, we may continue to expect a fall in employment over the short run, although the intensity of lay-offs will decline steadily. In line with the expected developments in demand, employment processes that are heterogeneous at sectoral level may remain typical in the coming quarters as well. This is indicated by the employment-related sub-components of the ESI indicator. In recent months the sub-index relating to expectations has been improving only in industry, while it has halted in the case of services.

The number of employees declined to a lesser extent in the total economy, the underlying reason for which is the increase in public sector employees within the framework of the government's 'Pathways to Work' programme.

Chart 1-21

Expectations regarding changes in employment according to the ESI indicator

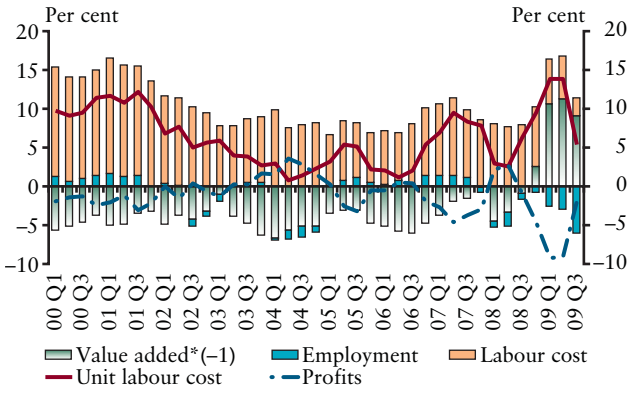


Source: Eurostat.

Chart 1-22

Unit labour cost in the competitive sector

(annual change, seasonally adjusted data)



Nevertheless, the unemployment rate increased to above 10 per cent in Q3. The unemployment rate may continue to grow this year, although at a slower pace than earlier.

In line with labour market developments, the dynamics of the unit labour cost, which had been extremely high earlier, already moderated in Q3, both in the competitive sector as a whole and in the major subsectors.

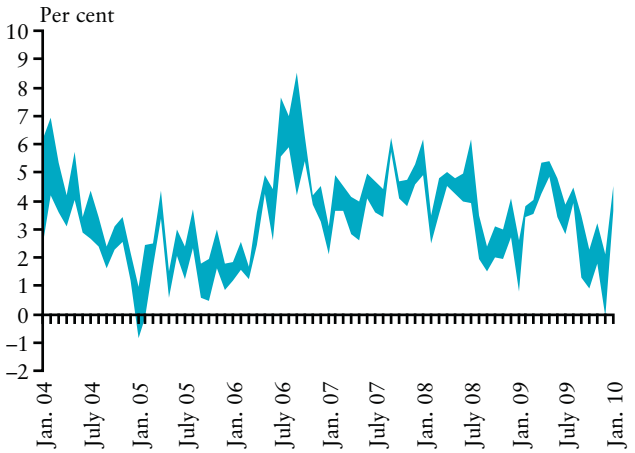
1.4 Trend indicators continue to suggest a low inflation environment

Consumer inflation, which had grown to a level of around 5 per cent as a result of the mid-year indirect tax measures, exceeded 6 per cent in January 2010. However, the unfavourable economic environment continues to have a substantial price-reducing effect. Accordingly, inflation trend indicators still reflect a historically low inflation environment.

Chart 1-23

Indicators of underlying inflation*

(annualised month on month growth rate)



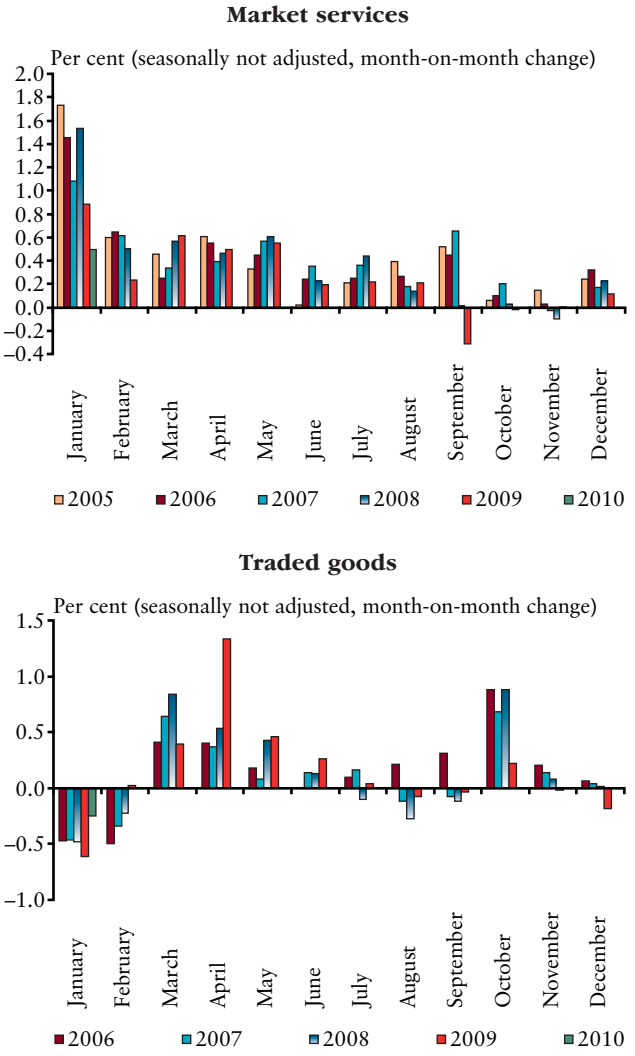
** See more details about the methodology of these indicators in the November 2009 Inflation Report box 1-2.*

Of the most important items determining core inflation, the inflation of industrial products and the services sector was stable until the last quarter of 2009. Among market services, last year's disinflation tendency continued in January, while we observed stronger-than-expected annual price rises in the case of industrial products. Pricing in the services sector shows strong seasonality in the first months of the year; this means that pricing decisions in the sector are made in the first months of the year. Given that the level of price increases early this year lagged considerably behind those seen in past years, and assuming the generally observed seasonality of pricing decisions, we expect a continuing disinflationary process in the sector. In the case of industrial goods, the smaller than expected price-cuts in early this year might be attributed to a deviation of the seasonality of sales actions from their levels in past years. Facing moderate demand, firms already announced most of their sales in December, when turnover is relatively better. Taking into account that the factors determining the pricing of the sector (exchange rate, imported industrial goods inflation) did not change significantly in the past months, we expect a further slow-down in the inflation of traded goods as the above-mentioned timing effect fades out .

Chart 1-24

Inflation of market services and traded goods

(not seasonally adjusted one-month change, excluding VAT effects)

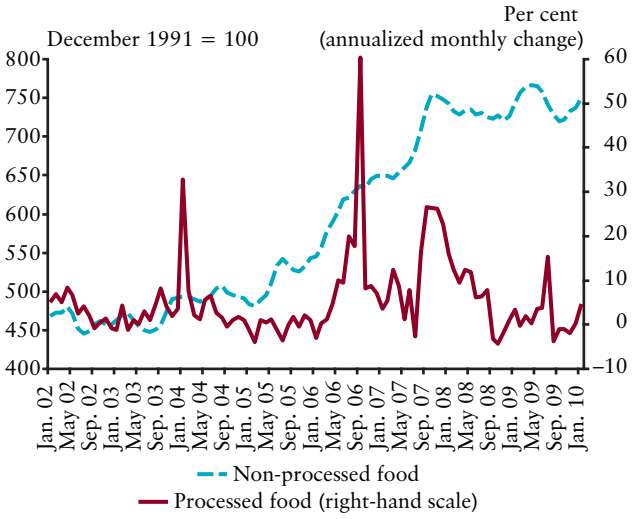


The price level of food has been sinking since mid-2009; however, December and January data indicate the end of the deflation period in this product group. Based on futures prices, a gradual increase of food prices can be expected, which might accelerate domestic food inflation, too.

Chart 1-25

Inflation of processed and non-processed food

(seasonally adjusted, annualised quarterly change)

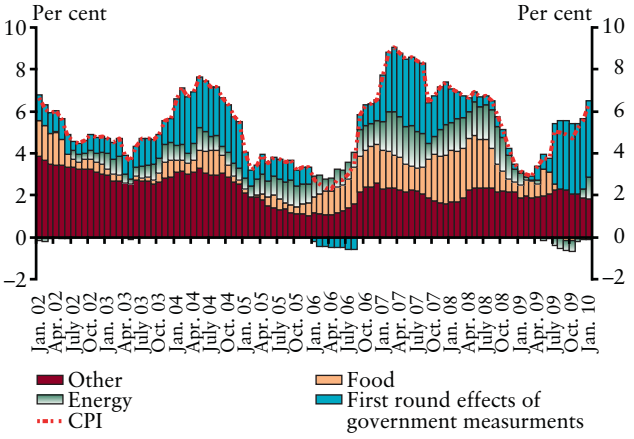


The developments in vehicle fuel prices increased the consumer price index significantly; the base effect of the decline in prices at end-2008 played a dominant role in this. In the first months of this year we expect further price increases in this product group as a result of raising the excise tax and an increase in global oil prices.

Decomposing the effects of the most important factors influencing inflation, in the second half of last year it was clearly the government measures that caused the significant increase in the annual price index, although in the last months of the year growing energy prices also contributed to the increase in the price index. Excluding these items, inflation that can be deduced from basic macroeconomic developments declined slightly but steadily in 2009 H2. In the short term, with the fade-out of the aforementioned effects related to the altered seasonality of traded goods' pricing, similar developments are expected to continue. Mainly due to the adjustment of market services prices, trend inflation is expected to continue to decelerate, while annual price indices may remain close to 6 per cent in the first months of 2010, as a result of global commodity price increases, the indirect tax measures entering into force in early 2010 and the correction expected in food prices. As the temporary price level increasing effects of the indirect tax increase in July 2009 fade out, the annual price index may decline considerably from mid-2010 on.

Chart 1-26

Factors determining inflation

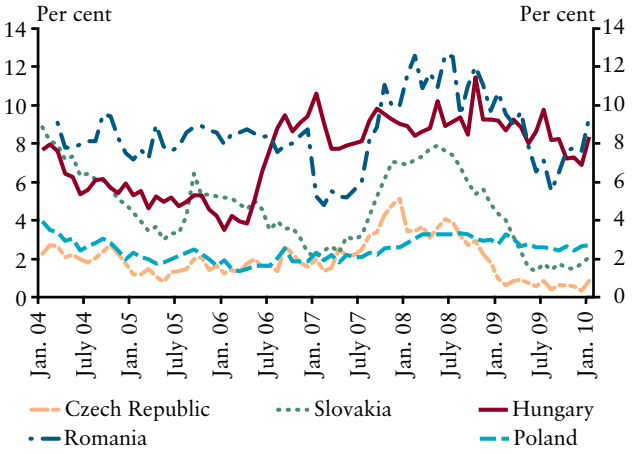


In parallel with the fall in demand and trend inflation developments, inflation expectations continued to moderate in 2009 H2. In a regional comparison, estimates regarding domestic inflation expectations still exceed those of countries with a low inflation environment. However, early this year expectations rose sharply, the underlying reason for which may be the repeated increase in the excise tax at the beginning of the year, to which households' expectations reacted more than average.

Chart 1-27

Inflation expectations in the region*

(annual index)



**MNB estimation. For methodological description please see the Box 1-1 in August 2009 Inflation Report.*

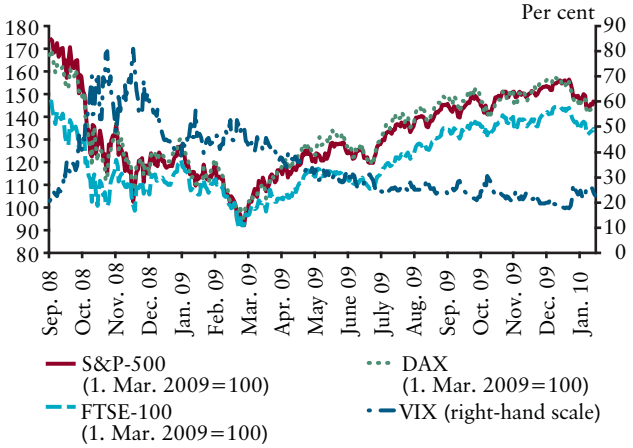
2 Financial markets and lending

2.1 Jittery sentiments in the global financial markets

Since the November *Report* investor sentiment has had its ups and downs in the global markets, and the earlier dynamic upswing has lost steam. Major US and European stock exchange and commodity price indices have declined slightly, while risk indicators – and, hence, the volatility of stock index options and FX options in respect of major currencies – have risen somewhat. At the same time, most stock exchange indices and risk indicators have remained at a level seen before the Lehman meltdown. Advanced economies have been experiencing a period of abundant liquidity; yield spreads in the short-term interbank and government securities markets and LIBOR-OIS spreads were lower than they were in the autumn of 2007 at the onset of the crisis. Nevertheless, financial market conditions remain fragile with conditions aided largely by the surplus liquidity provided by central banks.

Chart 2-1

Major stock market indices and the VIX index*



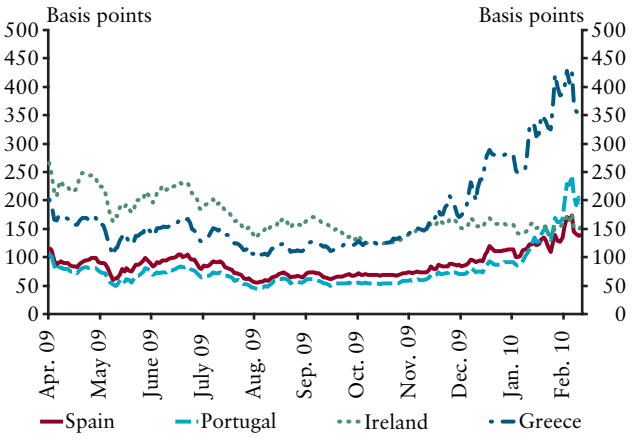
** The VIX index represents the 1-month implied volatility of the S&P-500 index. An increase in the VIX index is associated with greater perceived risk.*

At the beginning of the period under review, risk appetite was dampened by the debt restructuring of Dubai World and the downgrading of Greece. The fiscal woes of Greece remained in the focus of attention during the rest of the period. Though market actors find the government's consolidation programme satisfactory, doubts concerning whether it can be implemented are widespread.

Events in Greece affected global financial markets via a number of channels. Worries concerning Greece's sovereign solvency and a bleak outlook on the eligibility of Greek government securities as ECB collateral led to a sharp rise in yields on government securities and CDS premiums. Political tensions in the euro area and the recurrent issue of the optimum currency areas added to the uncertainty surrounding the longer-term integrity of the euro zone. This is the aspect that contributed most to a significant, approximately 10 per cent fall in the exchange rate of the euro. Even more generally, worries about Greece shed light on the issue of sovereign debt, which grew during the crisis, and the risks to fiscal sustainability. This translated into higher risk premiums in countries with a higher rate of indebtedness, and this may become an important consideration in investors' risk assessment. In the period surveyed the risk perception of the peripheral countries of the EMU and West European countries with higher sovereign debt also worsened.

Chart 2-2

5-year CDS spreads in EMU peripheral countries



One of the reasons why the pick-up in the global financial markets slowed down was that, relative to the slow pace of recovery expected in developed countries, the earlier strong upswing in the financial markets could have been exaggerated and premature. An ailing labour market and subdued lending in advanced economies continued to pose a serious risk to the sustainability of economic growth, and the fact that some of the current favourable trends were attributable to temporary factors – e.g. stronger inventory-building and fiscal stimuli to the private sector – bids caution. Based on the data disclosed since the end of 2009, recovery in the USA seems to be stronger than in Europe, which also contributes to a weaker euro.

In the context of a slow recovery, central banks in advanced economies started to withdraw monetary policy stimuli in a step-by-step manner. Although key policy rates may remain at the current low levels for a longer period of time, the number of policy instruments has been reduced in several countries. Most of the Fed's instruments providing temporary liquidity and introduced during the crisis will expire in February and March, and the asset purchase programme is also scheduled to finish in March. Both the Fed and the Swiss National Bank terminated the liquidity swap contracts that they had concluded with foreign central banks. The ECB held the last 1-year auction of long-term repo operations (LTRO) in December; the final 6-month LTRO auction has been slated for March. In February the Fed widened the difference between the Fed Funds rate and the interest rates of its credit facilities. Due to the surplus liquidity provided during the crisis, monetary policy focus is now shifting to liabilities-side instruments. The Fed is considering reducing excess reserves pumped into the banking system earlier by conducting reverse repo transactions and/or introducing interest-bearing deposits with maturity in the range of 1-6 months.

Both global and country-specific factors contributed to the risk perception of CEE countries; regional effects remained moderate

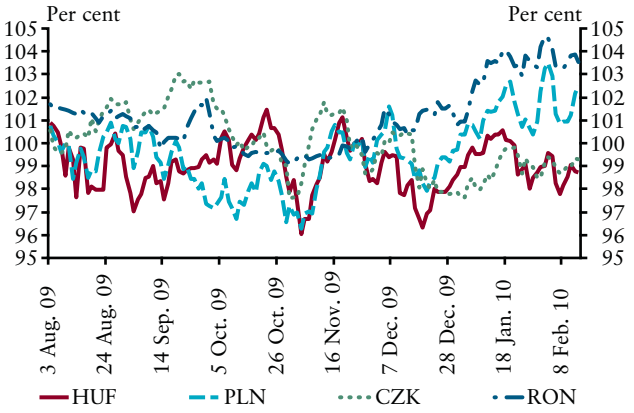
International investor sentiment remained a major factor in developments in the financial markets of the CEE region. In late December and early January a benign international climate led to a rise in stock markets and FX markets; in contrast, the second half of January saw a marked decline due mainly to heightened worries over Greece. This trend was also reflected in the indicators of risk perception, i.e. CDS spreads and FX bond premiums, in this period. In general, considering the period as a whole, country-specific events resulted in mixed trends in stock market indices. At one end of the spectrum, there was an 11 per cent plunge in the Shanghai Stock Exchange index as a consequence of market actors' speculative transactions in response to news of expected fiscal tightening; at the other end, stock markets in the Baltic States experienced a spell of marked rise. As regards FX rates, the picture is less mixed: emerging market rates depreciated mostly by 5-10 per cent vis-à-vis the US dollar. However, developments in the exchange rates of the currencies of the CEE countries vis-à-vis an ailing euro were mixed.

Similar to last autumn, regional events did not have any significant cross-border impact in the period surveyed. Co-movement between the financial markets in some CEE countries was due to global factors. A deteriorating outlook regarding the IMF programmes in Romania and Ukraine hardly, if at all, affected the rest of the countries in the region last November; likewise, the improving outlook for the continuation of these programmes has hardly had any impact on the neighbouring countries since the November *Report*.

Chart 2-3

Exchange rates of CEE currencies

*(23 Nov 2009 = 100)**



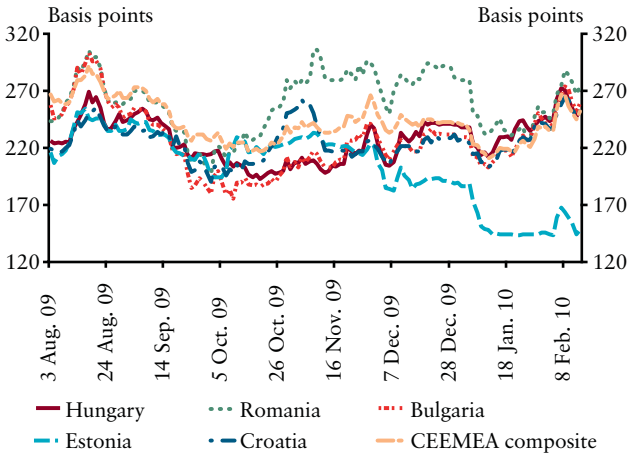
** Higher values represent an appreciation of the exchange rate.*

Global trends set a general course for movements in market indicators, and country-specific events proved to be important factors in financial processes in this period. The expected continuation of the IMF programmes after the general elections in Romania mitigated worries about the financing of the budget, which led to a significant fall in CDS premiums and market yields. Improved risk perception helped the National Bank of Romania to resume the easing cycle. Market optimism in Latvia was led by the Parliament's approving a draft bill needed for the fiscal tightening that foreign creditors stipulated. Another favourable development was that the 2009 budget deficit in Estonia was low, which increases the likelihood of the fulfilment of the Maastricht criteria and the adoption of the euro scheduled for 2011. In contrast, country-specific events did not improve the risk perception of the Visegrád countries: CDS premiums increased slightly over the period.

That the budget can be financed from the market to an increasingly large extent suggests recovery from the crisis. Stabilisation in the domestic bond markets continued, and the fact that there were also a number of long-term FX bond issuances during this period was a favourable development. Poland issued bonds with maturity of 15 years in an amount of EUR 3 billion; Turkey issued USD-denominated bonds

Chart 2-4

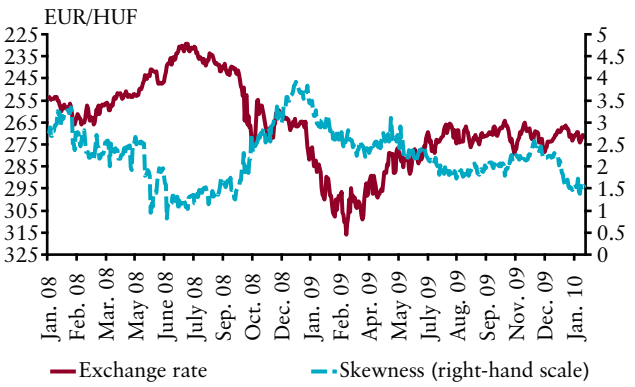
Five-year CDS in selected emerging European countries*



** The CEEMEA series depicts the 5-year CEE sovereign CDS spreads' composite index (SovX) calculated by ITraxx.*

Chart 2-5

EUR/HUF exchange rate and skewness of exchange rate expectations in the direction of weakness*



** The skewness of exchange rate expectations is calculated as the quotient of (1-month 25-delta) risk reversal spreads and 1-month implied volatilities. The risk reversal spreads show the difference of OTM call and OTM put options' volatilities. Risk reversal spreads rise when the perceived probability of a greater depreciation (relative to that of a greater appreciation) increases, since in this case the probability of the call option's payout increases vis-à-vis the payout of the put option. While risk reversal spreads measure the 'nominal' skewness of exchange rate expectations, the skewness measure corrects for changes in the general level of volatility.*

with maturity of 30 years in an amount of USD 2 billion. Hungary and Lithuania also issued dollar FX bonds with maturity of 10 years in an amount of USD 2 billion each.

Compared to other emerging regions, however, the fact that Eastern Europe had been hit harder by the crisis has been reflected in monetary policy cycles. While tightening cycles are expected to commence in the majority of the countries in Asia already in the first quarter of 2010, and in Latin America in the second quarter, they are expected to occur in the East European region only in the second half of the year. Since the previous *Report,* of the emerging European countries, the Czech Republic, Turkey, Romania, Serbia, Russia and Hungary have still been experiencing rate cuts.

Global investor sentiment dominated developments in domestic financial markets

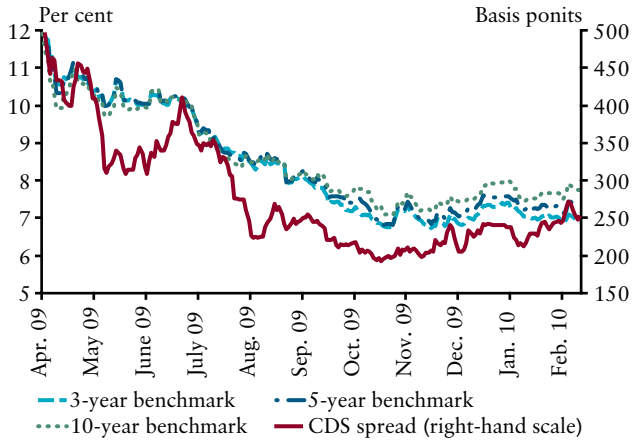
As in the past, global investor sentiment played a key role in shaping Hungary's risk perception and developments in the foreign exchange and forint fixed income markets.

Similar to the preceding months, the EUR/HUF exchange rate was trading inside the EUR/HUF 265-280 band. In keeping with a more bland risk appetite, the exchange rate weakened in early December and late January; foreign investors closed carry trade positions in the spot HUF and FX swap markets. In late December and early 2010 trends were exactly the opposite: foreign investors then emerged in the spot market as buyers, and the exchange rate strengthened to EUR/HUF 267. The exchange rate's volatility was subdued and, based on FX option prices, indicators of forward-looking volatility were close to pre-crisis values. There was also some reduction in the depreciation-sided skewness of FX rate expectations.

A slight deterioration in Hungary's risk perception was reflected in a rise in the 5-year CDS premium of approximately 40 basis points. The default spread moved within a range of 200 to 275 basis points. Risk perception was shaped mainly by general global sentiment. Investors' worries about Greece were reflected in a general change in global sentiment; events in Greece affected the CDS premium in Hungary to the same extent as in other countries with a similar risk rating. Favourable changes in the risk perception of Romania, Ukraine and the Baltic states did not generate any material change in Hungary's risk perception. The relative position of the Hungarian CDS spread slightly worsened compared with a number of other countries in the region, which was attributable mainly to events in those countries. Based on market analyses, the overall favourable developments in the budget and external balances remained positive factors in respect of Hungary's risk perception; in contrast, indicators related to marked external and government debts, as well as a business cycle that was weak even in a regional comparison, were negative factors. An increasing number

Chart 2-6

Reference yields on selected maturities and the 5-year CDS spread



of comments refer to the upcoming general elections as a risk factor.

Short-term yields continued to decline in the secondary market of government securities. Long-term yields moved fundamentally in conjunction with risk indicators: they increased by approximately 50 basis points in early December, which was counterbalanced only partially by a decrease in early January. Overall, benchmark yields with maturity of over 1 year rose by 13-44 basis points, while their short-term counterparts dropped by 30-32 basis points.

The volumes issued by the Government Debt Management Agency (ÁKK) during the period surveyed were similar to those in earlier months. Demand was uneven at the auctions; in keeping with changes in global investor sentiment, bid-cover ratios ranged between 1.02 and 5.75. Similar to earlier months, mainly short-term securities were issued. Higher swap spreads of longer-term government bonds indicate the lower liquidity of these instruments. No material change has been seen in the liquidity indicators of the government securities market since the last *Report*.

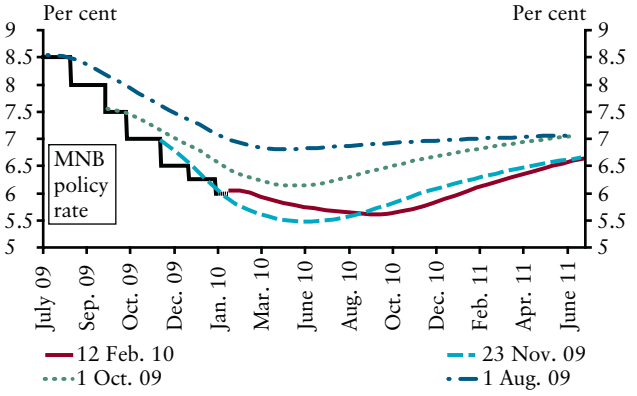
Resuming the autumn trend, non-residents' securities portfolio shrank in December, which was reflected in large volumes of sales in the secondary market and in bill maturities. Following a trough at the end of 2009, non-residents' government securities position strengthened. Non-residents were active at government bill and bond auctions, and also emerged as buyers in the secondary market. In late January the ÁKK issued an FX bond in an amount of USD 2 billion. The bond was offered at 265 basis points above the US benchmark bond with maturity of 10 years; the spread – in conformity with risk perception, which by that time had improved significantly since the summer of 2009 – was much lower than that of the FX bond issued in July.

In keeping with trends in the preceding months, the interbank HUF cash rate was mostly in the lower section of the interest rate corridor. However, the rate departed from the bottom of the range in December. This was probably due to the widening of the interest rate corridor from ±50 basis points back to ±100 basis points, which, in turn, is likely to have contributed to an improved liquidity of the interbank HUF market. The asymmetry in the utilisation of the O/N central bank deposit and loan instruments decreased. At both short and long maturities, HUF yields implied from quotes in the FX swap market was close to actual HUF yields at the corresponding maturities. In January, the MNB discontinued the CHF/EUR swap tenders. There had been no outstanding amounts since last August. The use of the MNB's 3- and 5-month EUR/HUF swap instruments also fell behind the available volume significantly.

The Monetary Council proceeded with the easing cycle which it started in July; however, reduction in the base rate was more moderate. The Council reduced the 2-week key policy rate by 25 basis points at its rate setting meeting in December and by another 25 in January; as a result the key

Chart 2-7

Future path of the two-week key policy rate implied from money market yields*



** Policy rate expectations are calculated from interbank yield curves (FRA and IRS quotes; spline estimation technique).*

rate now stands at 6 per cent. The interbank yield curve suggests that market participants' expectations concerning the floor of the base rate cycle has not decreased further, and that the base rate is expected to stand at 5.5 or 5.75 per cent at the end of the cycle. Yields suggest that expectations are for a tightening cycle to commence at the end of the year.

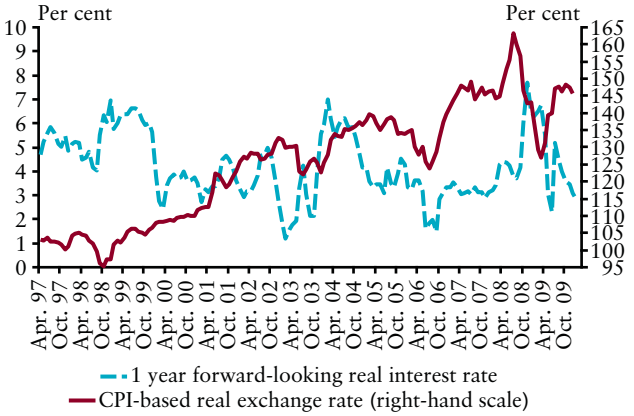
2.2 Easing monetary conditions, strict lending standards

Monetary conditions have eased somewhat since the last *Report*. The real exchange rate weakened slightly, and the real interest rate continued to decline from the high level in July which was the result of a technical impact.[7] In addition to the traditional indicators, the non-price factors of lending continued to play a key role in developments in monetary conditions. Strict lending criteria are expected to prevail in both the corporate and the household segments in the quarters to come.

Decline in the real interest rate was due fundamentally to lower nominal yields on the one-year horizon; in addition, somewhat heightened inflationary expectations were also a contributor. Although, compared with earlier fluctuations, the real exchange rate has not changed significantly since November, this also contributed to the easing of monetary conditions. A 2 per cent weakening of the nominal exchange rate was dominant in the shift. The rate of inflation in Hungary and that in the euro area were not materially different.

Chart 2-8

Developments in monetary conditions



[7] When calculating the real interest rate, we use the monthly average of the fixing of the benchmark yield on government securities with maturity of one year and inflation expectations one year ahead calculated by means of Reuters' monthly analyst survey. In July expectations reflected the incorporation of the VAT increase in the CPI index, and in August its exclusion from the index, which, as a technical factor, modified the real interest rate thus computed. The indicator would be able to reflect fundamental changes accurately only if the impact of the VAT increase were filtered; however, the data needed for this were not available to us.

2.3 A heavier-than-expected slump in lending, with a turning point drifting further away

At the end of 2009, processes in lending suggested significant deterioration relative to earlier expectations. In the fourth quarter of 2009 there was no turning point in lending; on the contrary, it contracted to an extent larger than expected, with the turning point itself drifting further away. The accelerated contraction in lending affected both the corporate and the household sectors. In the case of the corporate sector, consistently low domestic demand and a still high bankruptcy rate continued to dampen demand for loans. In contrast, more favourable external demand and lower interest rates could have had a boosting effect on it. However, for the time being the impact of the latter could not be felt. Although banks had not eased their lending conditions of non-pricing nature, interest on new EUR and HUF loan contracts already started to reflect lower funding prices. The loan portfolio of the corporate sector as a whole continued to shrink faster than earlier in the last quarter of 2009. Measured cumulatively, the portfolio of corporate deposits declined slightly; as a result, trends in deposit collection did not have as sharp an outline as lending.

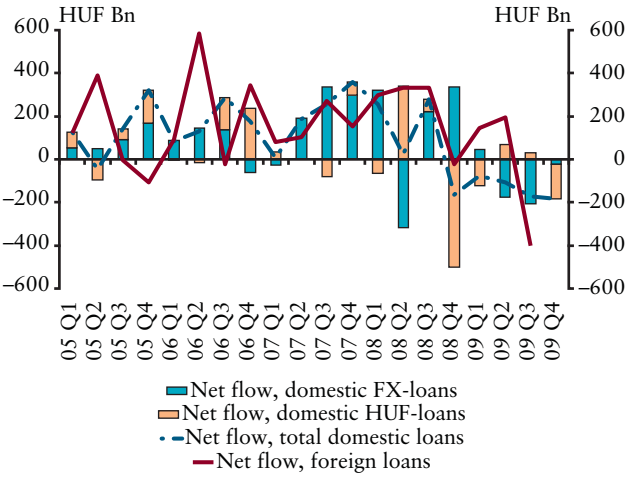
Trends in lending to households also suggest deterioration. While the portfolio of only non-bank loans shrank in the first half of 2009, that of bank loans started to shrink as well in the second. The rate of shrinking accelerated in the case of both bank and non-bank loans, which led to a delay in the occurrence of an expected turning point in lending. Demand for loans remained rather subdued due to high employment, lower real income and a high debt service. In the case of new loans for house pruchase, EUR interest rates remained unchanged, while HUF interest dropped significantly in the last quarter. As a result, the difference between the two was below 3 basis points. This process only had a limited effect on the amount or composition of the loans already disbursed. What is especially worrying was that the rate of the placement of household deposits remained low at the end of 2009. The portfolio of new deposits was much more modest in 2009 than a year before. This poses a significant risk to lending, preventing banks from adjusting their balance sheet, as a result of which banks have to curb lending even further. We expect contraction in lending to last longer. Corporate and household lending is only likely to pick up at the end of 2010 or in 2011.

Trends in corporate borrowing and the placement of corporate deposits

The portfolio of loans awarded by domestic banks to non-financial corporations shrank further by HUF 183 billion in the 4th quarter of 2009. This confirmed that the portfolio of corporate loans had shrunk to an extent greater than expected, and that a turning point expected to materialise at the end of 2009 was drifting further away. Most of the net decrease in Q4 was due to a slimmer HUF loan portfolio and, within that, a lower proportion of short-term loans.

Chart 2-9

Net quarterly increase in corporate loans granted by domestic banks and the quarterly volume of corporations' borrowing abroad



Note: Credit institutions and the Hungarian branches of non-resident credit institutions. Net increase of the loan portfolio, seasonally unadjusted and adjusted for the rolled-over exchange rate impact.

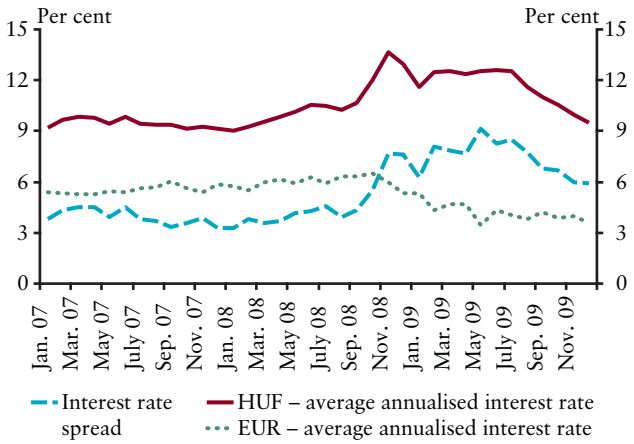
Note: Data on borrowing abroad are available until 2009 Q3.

Source: MNB.

Interest rates on new loan contracts co-moved with the key policy rate. However, their level was still high above the interest rate on EUR loans. For the time being, lower funding costs cannot compensate for lack of demand attributable to weak economic performance. The share of HUF loans in new contracts for loans is not expected to

Chart 2-10

Average interest rate on newly contracted corporate loans

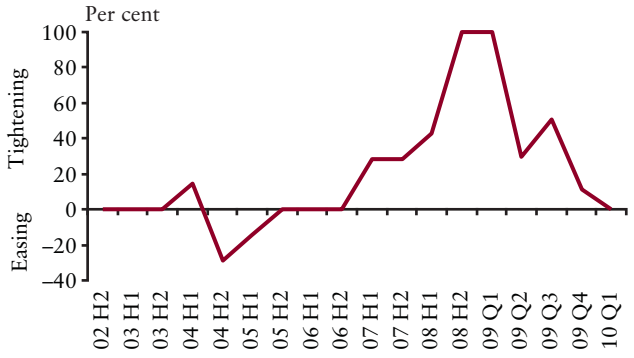


increase materially, because, despite interest rate convergence, the difference between HUF and EUR interest rates is still too high to be able to increase the share of HUF loans.

As well as real economic processes, banks' strict lending criteria of non-pricing nature also contributed to subdued corporate lending. According to the MNB's lending survey, although, relative to the previous period, banks did not tighten their lending criteria any further, easing is yet to materialise. As banks' risk appetite had not improved, no turning point was experienced in corporate financing. This was also attributable to the fact that, except for a pick-up in external demand, there were no other factors on the demand side that could have boosted demand materially. This is corroborated by the fact that the banks included in the lending survey also reported unchanged demand for loans.

Chart 2-11

Trends in the criteria of non-price nature of loans to non-financial corporations in the banking sector



Note: Difference in the proportion of respondent banks reporting tightening/easing.

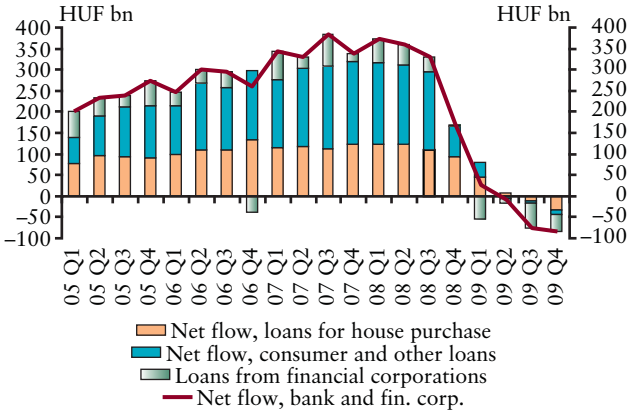
Companies continued to further reduce their deposit portfolio in the last quarter of 2009. It applies to 2009 as a whole that, measured cumulatively, the corporate sector slightly reduced its deposit portfolio. The annual decrease was the result of the withdrawal of HUF deposits, which was only partially counterbalanced by the placement of FX deposits.

Trends in household borrowing and the placement of household deposits

Household lending had also deteriorated significantly by the last quarter of 2009. Contrary to expectations that either there would be no change at all or there would only be a slight increase in lending, like the portfolio of non-bank loans, that of bank loans shrank quickly. Thus, contraction in lending will be deeper in this segment as well, and the turning point is drifting further away. The weak income position of households and a high debt service are likely to prevent a take-off in lending; as a result, contraction is likely to be deeper and more protracted than expected in this segment as well.

Chart 2-12

Net quarterly increase in the loans granted by the domestic banking sector and financial enterprises to households



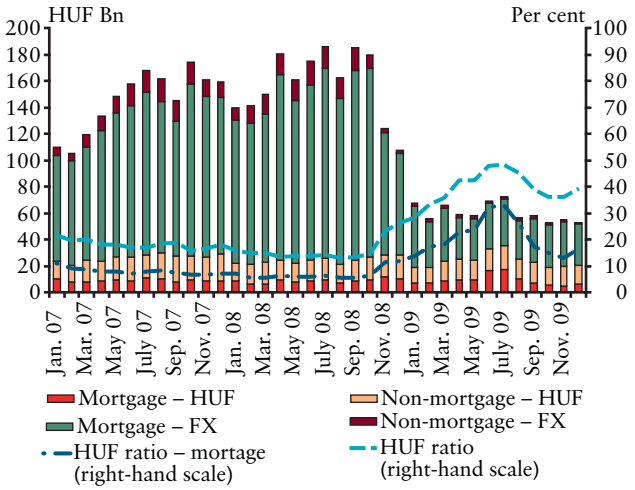
Note: Net increase of the loan portfolio of credit institutions, the Hungarian branches of non-resident credit institutions and financial enterprises, seasonally adjusted and adjusted for an exchange rate impact.

Source: MNB.

Data on newly disbursed household loans also attest to the fact that lending to households fell significantly. It is also clear that it was the share of mainly FX loans in the new loans that shrank at the start of this year; as a result, that of HUF loans in the new disbursements grew. Increase in the share of HUF loans was boosted by subsidised HUF loans; conversely, the discontinuation of subsidies led to another fall in HUF loans in the second half of 2009. An increasingly

Chart 2-13

Composition of new household loans

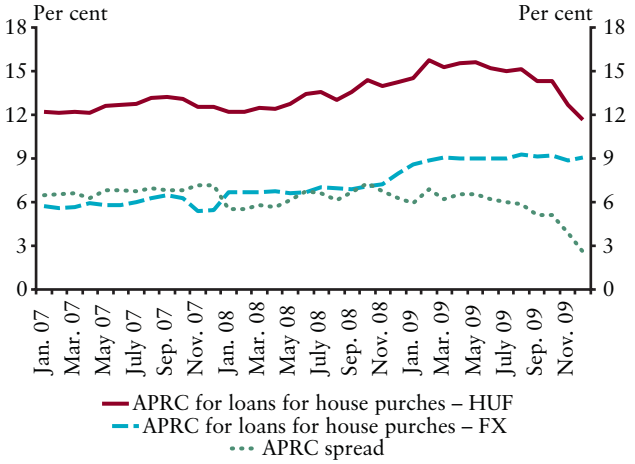


Note: Credit institutions and the Hungarian branches of non-resident credit institutions. Seasonally not adjusted data.

Source: MNB.

Chart 2-14

Average ARPC on newly disbursed loans



Note: Credit institutions and the Hungarian branches of non-resident credit institutions. Interest on FX loans is the weighted average of interest on CHF and EUR loans.

Source: MNB.

high number of banks started to offer new benchmarked HUF mortgage loan products in the last quarter. Interest statistics on newly disbursed home loans revealed that ARPC on HUF loans had been converging to that of FX loans at an increasingly high speed. The difference between the APCR's of the two loan types had dropped to below 3 percentage points by the end of the year. If the price of HUF loans continues to decrease and that of FX loans remains unchanged, HUF loans may soon become a competitive alternative to FX loans, as a result of which the share of HUF loans in lending may start rising again. Later this year an increase in the share of HUF loans in mortgage loans might also be driven by a government decree on prudent lending stipulating that differentiated loan collateral limits should be applied (a 75 per cent LTV limit in the case of HUF loans, 60 per cent in the case of EUR loans and 45 per cent in the case of other FX loans).

Though the household deposit portfolio grew by HUF 102 billion in the last quarter of 2009, this was rather moderate growth when seasonal effects are taken into account. What is particularly worrying is that the annual cumulative growth of the deposit portfolio (HUF 363 billion) was less than half of the corresponding 2008 amount.

Unfavourable trends in lending to and collecting deposits from households and corporations restrained banks' adjusting their balance sheets to a considerable extent. A dynamic, over 10 percentage point fall in the loan-to-deposit ratio from a 160 per cent level in the first half of 2009 slowed down and got stuck at above 143 per cent in the second. This adds to the risk that banks' lending will remain subdued and growth of the loan portfolio will be permanently low.

3 Inflation and real economy outlook

The more favourable economic conditions may accelerate the recovery of the Hungarian economy from the recession. However, due to the prolonged process of banks' balance sheet adjustments and pro-cyclical policy stance, domestic demand may continue to decline significantly even in 2010, which could result in a delayed and more restrained recovery process in Hungary compared to regional and developed economies. Substantial economic growth is not expected to take place until 2011.

The upward revision in our CPI forecast was mainly driven by the higher imported inflation and a technical factor coming from the changes in the weights of consumer basket. However in line with our new real economic forecast the persistently weak domestic demand exerts a downward pressure on prices over our entire forecast horizon. Accordingly, the disinflation trend will continue until the end of 2010 and a pick-up in domestic demand is not likely to generate a turnaround until 2011. As a result, from the second half of 2010 inflation may drop close to the medium-term inflation target, and from the end of the year it may continuously undershoot the target across the whole policy horizon.

Box 3-1: Changes in our basic assumptions

Overall, the changes of our basic assumptions result higher inflation relative to the November issue of the *Quarterly Report on Inflation*. As a result of the cutting cycle, the central bank base rate has been lowered by an additional 1.0 percentage point, and it currently stands at 6.0%. The exchange rate of the forint is similar to our previous assumption; however, the USD/EUR cross rate has exhibited some strengthening, which somewhat increased the effect of rising oil prices. The slope of the oil price path increased slightly over our forecast horizon.

Table 3-1

Changes in our basic assumption relative to the November report*

	November 2009			February 2010			Change compared with November (%)		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
Central bank base rate (per cent)**	7.00	7.00	7.00	6.25	6.00	6.00	–0.75	–1.00	–1.00
HUF/EUR	280.0	268.7	268.7	280.6	269.3	269.3	0.2	0.2	0.2
USD/EUR (cent)	139.4	148.1	148.1	139.3	142.8	142.8	0.0	–3.6	–3.6
BRENT oil price (USD/barrel)	61.4	78.4	82.5	61.6	79.4	84.8	0.4	1.3	2.8
BRENT oil price (EUR/barrel)	43.7	52.9	55.7	43.9	55.6	59.4	0.4	5.0	6.5
BRENT oil price (HUF/barrel)	12,184	14,219	14,971	12,260	14,970	15,990	0.6	5.3	6.8

** Annual averages, based on the monthly average exchange rate of Janury 2010 and the crude oil futures price.*

*** End-of-year values based on constant interest rate assumption, the change compared to November is presented in percentage points.*

3.1 Continuing decline in domestic demand hinders domestic recovery

According to the forecasts of major international institutions, expectations regarding global economic activity continued to improve significantly in the last quarter. The positive shifts affected mainly the United States and certain emerging countries (primarily China and India), while only minor shifts were observed in the case of the key export partners of Hungary (the euro area) compared to our previous assumptions. The improving external demand may persist during the whole forecast horizon. Growth of the developed countries has been bolstered by some one-off fiscal measures. As these measures phase out, the global economy is expected to slow down compared to the second half of 2009. The developed countries' fiscal stimuli have not only had an effect on the strength of Hungary's external demand, but also changed its structure. Without an equal pick up in domestic demand, the phasing out of the fiscal stimuli would cause a decrease in vehicle sales, which plays a dominant role in Hungarian exports. This may result in a weaker increase in Hungary's market share compared to the previous months. However, the impact of this may be somewhat offset by the effect of the real exchange rate, which is more devalued than in previous years.

Developments in household consumption continue to be determined by changes in real earnings, expected income path, the uncertainty surrounding these earnings and the lending activity of the banking sector. Income developments across our forecast horizon are predominantly determined by firms' labour market adjustments and government measures.

While measures pertaining to personal income tax will generate significant excess income, this effect will be offset by other government measures (in particular the decline in cash transfers received from the budget and taxes imposed on cafeteria benefits), thus fiscal policy continues to be restrictive towards households in 2010. A further personal income tax easing expected for 2011 may become a major contributor to income expansion. However, possible offsetting measures taken by the government to balance its budget pose a significant risk to growth. While wage dynamics in the private sector may remain restrained over our entire forecast horizon, there will be a parallel increase in real wages in the context of a lower inflation environment from as early as 2011. Although the rise in unemployment may come to a halt in the second half of 2010, most firms are already hoarding labour and are not expected to execute any substantial staff expansion in the first phase of the recovery. As a result, the unemployment rate may remain persistently high across our forecast horizon. The generally high unemployment rate will increase the uncertainty surrounding expected income, which, through the increased role of precautionary considerations, may lead to a further strengthening of households' balance sheets.

The most marked shift in our assessment of the consumption path reflected our changed assumptions about the expected lending activity. Compared to our previous view – which

Chart 3-1

Market share and changes in the real exchange rate

(annual change)

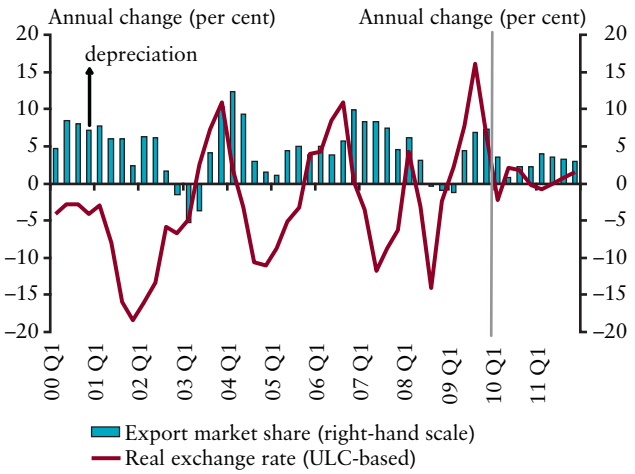
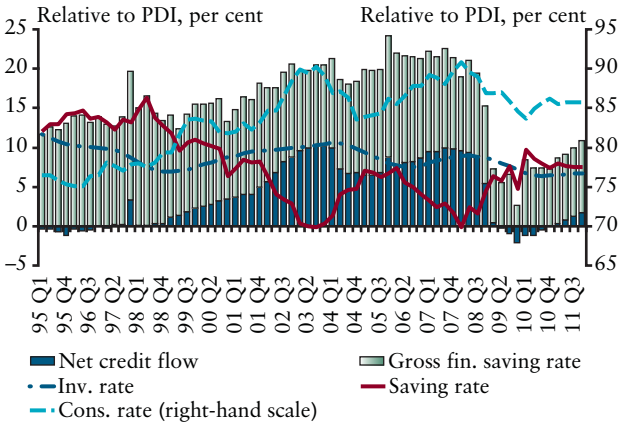


Chart 3-2

Trends in the use of household income



forecasted a turnaround at the beginning of 2010 – we expect lending activity to deteriorate further this year. The shift is explained by both demand and supply reasons. The restructuring of banks' balance sheets may last longer than we assumed previously, which is justified from the supply side by the banking sector's low risk appetite, a weaker-than-expected build-up in its deposit base, and a deteriorating loan portfolio. On the demand side, unfavourable developments in the income situation, substantially increased borrowing costs and the strengthening of precautionary motives may contribute to a weaker credit demand than previously assumed. Restrained lending activity results in poorer-than-expected household consumption over our entire forecast horizon.

Our projection about the private sector's investment activity has remained unchanged. During the period of the crisis the corporate sector accumulated a substantial amount of unused capacities. Thus in the first phase of economic recovery firms may respond to an upswing in demand by increasing their capacity utilisation, while their investment activity may remain restrained. Despite of the better foreign environment this process may also be driven by persistently tight lending conditions. In line with the expected differences in growth affecting the upturn in demand, service sector investment may remain subdued over our entire forecast horizon, while the investment projects of industrial companies may pick up significantly from the beginning of 2011. As regards the manufacturing sector, we continue to expect a number of large-scale investment projects to be implemented (e.g. the Mercedes factory in Kecskemét). Reflecting tight lending conditions, a continuing decline in real earnings and sustained high unemployment rates, the significant decline observed in household investment in 2009 may continue in 2010 as well, to be followed by a slight adjustment only in 2011. Although the government is gradually reducing investment projects financed from own funds, the increasing efficiency of the disbursement of EU-funds may in fact contribute to an expansion of government investment over our entire forecast horizon.

Chart 3-3

Household loan portfolio

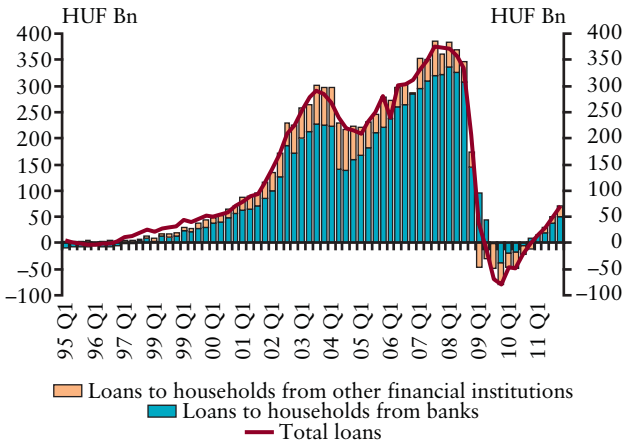


Table 3-2

Our forecasts for the main absorption items of GDP

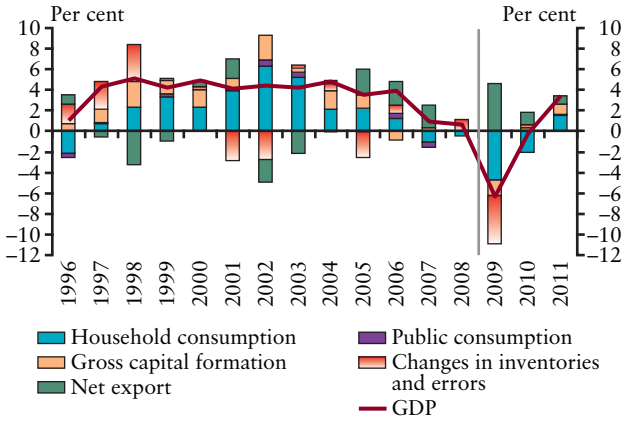
(annual change)

	2008	2009	2010	2011
	Fact	Forecast	Forecast	Forecast
Household final consumption expenditure	–0.5	–8.2	–3.9	2.7
Social transfers in kind	–1.1	–3.6	–0.6	1.7
Actual final consumption of households	–0.6	–7.2	–3.2	2.5
Actual final consumption of government	–0.3	–0.2	–0.4	0.6
Actual consumption, total	–0.6	–6.3	–2.8	2.2
Gross fixed capital formation	0.4	–7.0	1.8	5.0
Changes in inventories	1.0	–4.7	0.2	0.0
Gross capital formation	4.8	–26.3	3.2	5.2
DOMESTIC USE	0.7	–11.0	–1.6	2.9
EXPORT	5.6	–9.5	5.8	9.0
IMPORT	5.7	–15.3	4.7	8.8
External trade balance of goods and services	0.0	4.6	1.2	0.8
GROSS DOMESTIC PRODUCT	**0.6**	**–6.3**	**–0.2**	**3.4**

Overall, our GDP forecast moderately increased for 2010 and remained largely the same for 2011. The upturn in external economic activity may accelerate domestic economic recovery; however, in the context of declining domestic demand, which continues this year as well, the process may be somewhat delayed and less pronounced in Hungary. The decline in domestic demand this year is driven by the combination of an inevitably pro-cyclical economic policy and the subdued lending activity of the financial intermediary system. We maintain our previous assumption that substantial GDP growth cannot be expected until 2011.

Chart 3-4

Composition of GDP growth

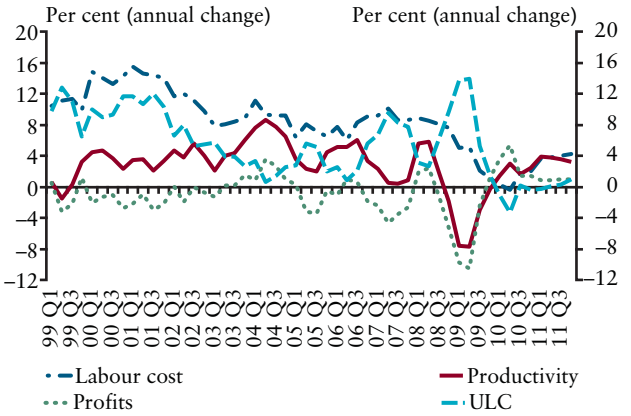


3.2 We expect sustained high unemployment

Firms are still intent on recovering the profit losses realised during the crisis mainly through labour cost adjustments. We expect this adjustment to affect wages, rather than staff numbers. Wage adjustments in the private sector may continue over our entire forecast horizon. This projection appears to be reconfirmed for 2010 so far by the OÉT (National Council for the Reconciliation of Interests) wage negotiations[8], where a recommendation for a record low wage increase was adopted this year. The expected duality in demand developments can also be observed in the difference in wage dynamics. The deceleration of wage growth may be particularly strong in the service sector, while the upswing in export sales is expected to further accelerate wage growth in the manufacturing sector. Following an upturn in domestic demand, in 2011 wages in these two sectors may fall into line with one another once again.

Chart 3-5

Unit labour cost and its components in the private sector



Labour hoarding moderated the growth in unemployment during the period of the crisis; however, this phenomenon also mitigates the expansion of employment during the upswing phase. Labour hoarding may continue to characterise the service sector over our entire forecast horizon, while employment in the industrial sector may slightly increase as early as 2011. As a net result of these two effects the domestic unemployment rate may peak at around 11 per cent in the second half of 2010, to be followed only by a slight decline in 2011.

[8] See more details about the role of OÉT wage recommendations in formulating the expectations of market participants in November 2009 *Inflation Report,* box 3-3.

3.3 Inflation may drop below the target from 2011

Compared to the November issue of the *Quarterly Report on Inflation*, changes in our basic assumption and regulated prices would justify a higher projection; however, the impact may be partly offset by a stronger decline in consumption.

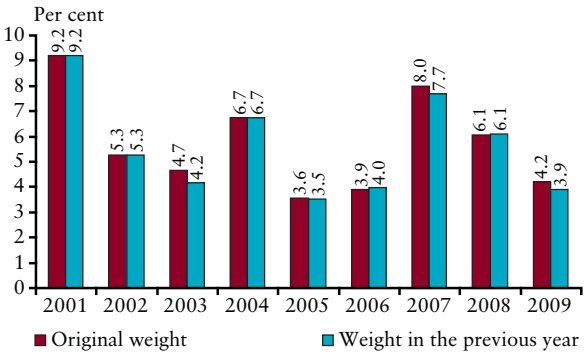
Box 3-2: The effect of the update of weights on annual inflation

The Central Statistical Office modifies the weights of representative items included in the consumer basket once a year, in January. These weights are formed on the basis of households' consumption expenditure structure observed two years earlier, i.e. in 2008 in this case. The advantage of this method is that the consumer price index shows the inflation of the latest available consumer basket. Every January, the update of weights results in a one-off change in the level of the consumer price index, which would not happen if weighting remained unchanged. The update of weights usually does not result in any major difference between two consecutive years, but on some occasions the use of different weights may lead to a significant deviation.

The weight of representative items is influenced by consumption behaviour as well as the price changes of products and services in the consumer basket. In the past 15 years, market services accounted for an increasing portion of household expenditures, while the consumption of traded goods and food declined gradually. The underlying reason is that households spend an increasing part of their income, which is growing in the convergence period, on services. The growing share of products and services with regulated prices was a result of the increase in the relative prices of this product group, as in the past 15 years the increase in regulated prices typically exceeded the rate of inflation.

Chart 3-6

The effect of expenditure weight update on the consumer price index



There was no significant change in the case of vehicle and market energy, nor with alcohol and tobacco aggregates.

The update of weights does not cause any major problem in a system that is gradually converging – presumably towards the consumption structure of developed countries. If a substantial shift occurred in the structure of consumption, the effect on the consumer price index

Table 3-3

Changes in weights of the main aggregates of the consumer basket

(per cent)

	1995	2000	2005	2009	2010
Traded goods	30.9	28.3	28.5	28.1	26.5
Market services	16.5	19.4	21.7	22.2	22.5
Food	21.9	19.1	18.1	17.5	17.3
Regulated prices	14.0	17.5	16.3	15.9	16.7
Vehicle and market energy	7.1	6.3	6.2	7.0	7.6
Alcohol, tobacco	9.6	9.4	9.2	9.2	9.5

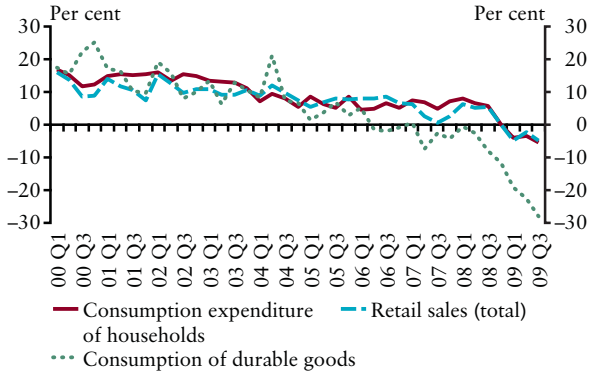
would not be negligible anymore. In 2008, the price increase of energy items and the global financial crisis that erupted in the second half of the year affected households' consumption structure to a significant extent. The decline in lending during the crisis reduced the demand for traded goods, particularly for consumer durables, so their weight fell, while the weight of energy items, having lower price elasticity than traded goods, increased in the consumer basket.

The change in the structure of consumption affects the accuracy of our forecast as well, since we assume unchanged weights for the forecast period. As a consequence of the magnitude of the change in the structure of consumption in 2008, taking the updated weights into account, ceteris paribus, resulted in a more than 0.1 percentage point increase in our forecast for 2010 and 2011.

Chart 3-7

Change in consumption expenditures, retail sales and consumption of durable goods

(annual changes, current prices)

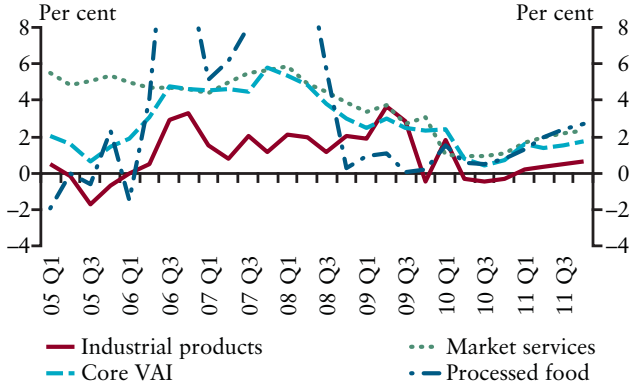


Regarding pricing decisions, falling domestic demand is continuing to exert a significant downward pressure on prices in 2010. Consequently, we expect the disinflation path to continue this year for trend inflation. Similarly to the developments in 2009, inflation will decline primarily in the area of market services. Decelerating inflation in the service sector continues to be justified by both cost and demand side factors. The drop in domestic demand constrains price increases, which is already visible from the – seasonally important – first month of the year. This process is supported by the low wage dynamics, which is an important element of the sector's costs. Wage adjustment is expected to continue in our whole forecast horizon. With a stable low imported inflation, prices of industrial goods may decrease further this year.

Chart 3-8

Trend inflation developments

(seasonally adjusted, quarterly growth)



Futures contracts are pricing an increase in food prices, which is consistent with the strengthening of the world economy. Following the restrained inflation observed in 2009 for processed food, we now expect a moderate acceleration, which puts upward pressure on processed food prices, too. In the case of processed food prices, energy prices are also inflationary above the impact from higher unprocessed prices. The weaker domestic demand will have an effect in this product group, too. However, the strength of this effect is expected to be moderate, due to the low price elasticity of food compared to industrial products and services.

However, domestic demand and the economy are expected to pick up as early as 2011. At the same time, output will continue to fall behind the level that would be justified by the available resources. The output gap remains negative even in the following year. Nevertheless, it is conceivable that as economic growth picks up firms will be able to support the recovery of their profitability through price increases as well, which may result in a general, slight acceleration of trend inflation compared to this year.

Based on stock exchange futures prices, in the context of a rebound in global economic activity global commodity prices are expected to rise. The increase in oil prices can be observed in domestic fuel prices with immediate effect, and could lead to a gradual increase in regulated prices as well. Regulated price inflation is also expected to be increased further by the abolition of retail gas price subsidies, and a hike in network charges in the case of gas and power.

Table 3-4

Details of our inflation forecast*

	Weight	09 Q1	09 Q2	09 Q3	09 Q4	10 Q1	10 Q2	10 Q3	10 Q4	11 Q1	11 Q2	11 Q3	11 Q4
Unprocessed food	5.8	3.1	11.1	3.9	1.7	0.6	–3.0	3.3	6.1	4.1	4.3	4.4	4.4
Vehicle fuel and market energy	7.6	–11.5	–9.9	–5.0	5.5	20.1	14.9	8.4	9.0	2.6	2.2	1.8	1.4
Regulated prices	16.7	8.1	8.0	8.6	7.1	6.6	7.1	6.8	7.3	7.3	7.1	4.8	4.1
Core inflation	70.0	3.3	3.2	5.2	4.9	5.2	4.5	1.9	1.4	1.2	1.1	1.3	1.5
Consumer price index	100.0	3.0	3.6	5.0	5.2	6.2	5.1	3.3	3.2	2.5	2.3	2.1	2.1

** Aggregates are calculated by chain linking.*

Expected developments in trend inflation will be reflected in the annual price index only after the temporary price-increasing effect of the indirect tax increases has phased out. In the first half of this year CPI inflation may significantly overshoot the inflation target; however, base effects may drive the price index near to the 3 per cent target from July. From the end of 2010 this is expected to be followed by a below-target consumer price increase until the end of our forecast horizon.

3.4 Inflation and growth risks

In addition to our baseline scenario, we quantified the effect of three risk paths, which may have a significant impact on our forecast.

We continue to believe that the upswing in external demand is fragile. As the government support packages of developed economies run their course, the growth dynamics of demand in our main export markets may be even more restrained than last year. Accordingly, in contrast with our baseline projection, in our alternative scenario we assume that the economic recovery will be a prolonged process, and that GDP in our main export partners will continue to stagnate in 2010. It is not only through the sales of the export sector that the less favourable demand outlook affects the Hungarian economy. The more subdued economic environment restricts the rise in global commodity prices as well, while the risk appetite of the European banking sector may remain low over the longer term. In terms of domestic developments, these effects would lead to lower imported inflation and a more restrained domestic lending activity than we assumed in our baseline scenario. Overall, for the Hungarian economy this scenario would result in a weaker GDP path and lower inflation than indicated in the baseline projection.

Although our indicators estimating the developments in inflation expectations have gradually declined in the past six months, their current level continues to exceed the similar values of the countries in the region with sustained low inflation. This phenomenon may be explained by the unfavourable domestic inflation record and significant one-off shocks, which continue to keep Hungarian inflation high. Although in the recessionary environment our trend inflation indicators gradually decelerate, as a result of indirect tax measures, regulated price increases and rising global energy prices the annual inflation rate continues to overshoot the medium-term inflation target significantly. Considering that inflation in Hungary has not resided around the 3 per cent inflation target for any length of time since the political transition, it is difficult to foresee the extent to which the inflation target can determine the price and wage-setting decisions of economic participants once the economy returns to the expansionary phase. While this risk path indicates significant upside risks in the inflation baseline scenario, it has a nearly neutral effect on the GDP path.

Our third risk path attempts to quantify the materialisation of the fiscal convergence path undertaken for 2011. To achieve the target, we assumed that it would not be possible to implement further reductions in personal income tax as promised and additional restrictions may be required on the expenditure side as well. In 2011 this would imply significant downside risks to the economic growth outlook, while its effect on inflation would be close to neutral.

On the whole, in terms of inflation the balance of risks is slightly on the upside, while in terms of growth considerable downside risks point to slower growth. The moderate inflation risks were deduced from the balance of the expectation and external demand scenarios, while in the case of growth both alternative scenarios – those focusing on external economic activity and the required budget adjustment – pointed to slower growth.

Chart 3-9

Fan chart of the inflation projection

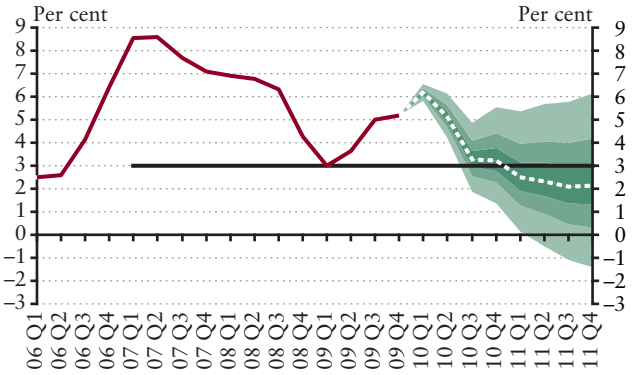


Chart 3-10

Fan chart of the GDP projection

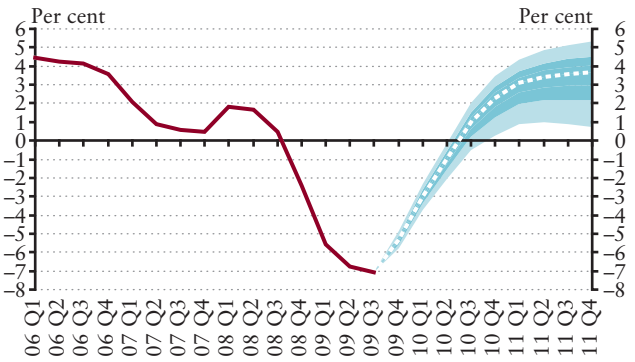


Table 3-5

Changes in our forecast relative to November 2009

	2008	2009		2010		2011	
	Actual	Projection					
		November	**Current**	November	**Current**	November	**Current**
Inflation (annual average)							
Core inflation[1]	5.2	4.1	**4.1**	3.0	**3.2**	1.3	**1.3**
Consumer price index	6.1	4.2	**4.2**	3.9	**4.4**	1.9	**2.3**
Economic growth							
External demand (GDP-based)	2.0	–4.6	**–4.4**	0.9	**1.1**	2.1	**2.1**
Household consumer expenditure	–0.5	–8.1	**–8.2**	–3.0	**–3.9**	3.1	**2.7**
Fixed capital formation	0.4	–8.1	**–7.0**	1.4	**1.8**	4.3	**5.0**
Domestic absorption	0.7	–10.1	**–11.0**	–1.6	**–1.6**	2.9	**2.9**
Export	5.6	–12.3	**–9.5**	3.6	**5.8**	8.6	**9.0**
Import	5.7	–16.5	**–15.3**	2.7	**4.7**	8.4	**8.8**
GDP*	0.6	–6.7	**–6.3**	–0.6	**–0.2**	3.4	**3.4**
External balance[2]							
Current account balance	–7.2	–0.5	**0.4**	–1.5	**–0.4**	–1.4	**–0.4**
External financing capacity	–6.2	1.5	**1.8**	0.1	**1.6**	0.9	**2.0**
Government balance[2]							
ESA balance[3]	–3.8	–4.0	**–4.0**	–4.3 (–3.8)	**–4.2 (–4.0)**	–4.3	**–4.3 (–4.1)**
Labour market							
Whole-economy gross average earnings[4]	7.6	0.8	**0.3**	2.5	**2.4**	3.8	**3.9**
Whole-economy employment[5]	–1.2	–2.7	**–2.5**	–1.2	**–0.8**	0.3	**0.1**
Private sector gross average earnings[6]	8.5 (8.0)	4.4	**4.3**	3.7	**3.6**	3.8	**3.9**
Private sector employment[5]	–1.1	–3.8	**–3.7**	–2.2	**–1.7**	0.4	**0.1**
Private sector unit labour cost[5, 7]	5.4	8.8	**8.3**	–1.2	**–1.2**	0.4	**0.3**
Household real income**	–0.6	–4.1	**–5.1**	–1.7	**–2.7**	2.0	**2.0**

[1] From May 2009 on, calculated according to the joint methodology of the CSO and MNB.

[2] As a percentage of GDP.

[3] The numbers in brackets refer to the deficit achievable in case of total blocking of budgetary reserves. In our forecast we have not taken into consideration any risk from debt assumptions.

[4] Calculated on a cash-flow basis.

[5] According to the CSO LFS data.

[6] According to the original CSO data for full-time employees. The numbers in brackets refer to wages excluding the effect of whitening and the changed seasonality of bonuses.

[7] Private sector unit labour costs calculated with a wage indicator excluding the effect of whitening and the changed seasonality of bonuses.

** The table contains data excluding calendar effects.*

*** MNB estimate.*

Table 3-6

Our forecasts compared to other projections

	2008	2009	2010	2011
Consumer Price Index (annual average growth rate, %)				
MNB (February 2010)	6.1	4.2	4.4	2.3
Consensus Economics (January 2010)[1]	–	–	2.9 – 4.0 – 4.5	2.1 – 2.9 – 3.5
European Commission (November 2009)	6.0	4.3	4.0	2.5
IMF (October 2009)	6.1	4.5	4.1	2.5
OECD (November 2009)	6.0	4.5	4.0	3.0
Reuters survey (January 2010)[1]	–	–	3.5 – 4.1 –4.8	1.9 – 2.9 – 3.5
GDP (annual growth rate, %)				
MNB (February 2010)[4]	0.6	–6.3	–0.2	3.4
Consensus Economics (January 2010)[1]	–	–	(–1.5) – (–0.2) – 0.5	1.5 – 2.4 – 3.0
European Commission (November 2009)	0.5	–6.5	–0.5	3.1
IMF (October 2009)	0.6	–6.7	–0.9	2.5
OECD (November 2009)	0.4	–6.9	–1.0	3.1
Reuters survey (January 2010)[1]	–	–	(–0.7) – 0.0 – 1.0	1.5 – 2.7 – 4.0
Current account balance (per cent of GDP)				
MNB (February 2010)	–7.2	0.4	–0.4	–0.4
European Commission (November 2009)	–8.4	–1.3	–1.7	–1.8
IMF (October 2009)	–7.8	–2.9	–3.3	–3.4
OECD (November 2009)	–8.2	–1.6	–1.8	–2.6
Budget balance (ESA-95 method, per cent of GDP)				
MNB (February 2010)[6]	–3.8	–4.0	–4.2 (–4.0)	–4.3 (–4.1)
Consensus Economics (Janurary 2010)[1]	–	(–3.8) – (–4.0) – (–4.5)	(–3.8) – (–4.4) – (–6.5)	(–2.7) – (–3.6) – (–4.8)
European Commission (November 2009)	–3.4	–4.1	–4.2	–3.9
IMF (October 2009)	–3.4	–3.9	–3.8	–2.8
OECD (November 2009)	–3.4	–4.3	–4.1	–3.6
Reuters survey (January 2010)[1]	–	(–3.8) – (–4.0) – (–4.5)	(–3.6) – (–4.7) – (–7.0)	(–2.8) – (–3.8) – (–5.5)
Forecasts on the size of Hungary's export markets (annual growth rate, %)				
MNB (February 2010)	3.5	–13.2	3.6	5.4
European Commission (November 2009)[2]	3.3	–12.8	2.1	4.5
OECD (November 2009)[2, 3]	2.0	–12.0	3.5	6.4
Forecasts on the GDP growth rate of Hungary's trade partners (annual growth rate, %)				
MNB (February 2010)	2.0	–4.4	1.1	2.1
European Commission (November 2009)[2]	2.0	–4.4	1.1	1.9
IMF (January 2010)[2]	2.0	–4.2	1.3	2.3
OECD (November 2009)[2, 3]	1.5	–4.1	1.4	2.2
Forecasts on the GDP growth rate of euro area (annual growth rate, %)				
MNB (February 2010)[5]	0.6	–4.0	0.7	1.3
European Commission (November 2009)	0.6	–4.0	0.7	1.5
IMF (January 2010)	0.6	–3.9	1.0	1.6
OECD (November 2009)	0.5	–4.0	0.9	1.7

The projections of the MNB are 'conditional', which means that they cannot always be directly compared with the projections of other institutions.

[1] For Reuters and Consensus Economics surveys, in addition to the average value of the analysed replies (i.e. the medium value), we also indicate the lowest and the highest values to illustrate the distribution of the data.

[2] Values calculated by the MNB; the projections of the named institutions for the relevant countries are adjusted with the weighting system of the MNB, which is also used for the calculation of the bank's own external demand indices. Therefore, these figures may deviate from the figures published by the specified institutions.

[3] OECD did not publish any information about Romania, therefore Romania is not included in our OECD forecast.

[4] Data not adjusted for calendar-day variations.

[5] Aggregate based on Euro area members included in our external demand indices.

[6] The numbers in brackets refer to the deficit achievable in case of total blocking of budgetary reserves. In our forecast we have not taken into consideration any risk from debt assumptions.

** Data from a special survey, which reported only the average of polled analysts' responses.*

Sources: Eastern Europe Consensus Forecasts (Consensus Economics Inc. [London], December 2009, January 2010); European Commission Economic Forecasts (November 2009); IMF World Economic Outlook (July 2009 and October 2009); IMF Country Report No. 09/304 (October 2009); Reuters survey (December 2009, January 2010); OECD Economic Outlook No. 86 (November 2009).

3.5 Developments in the general government balance

In 2009 the declining trend of the ESA deficit came to a halt, and according to our baseline projection, the deficit may increase in 2010. However, if the budget reserves are unused, a deficit of around 4 percent may be achieved in 2010–2011. Risks both from the macroeconomic developments and from those items which projected by experts point to a larger deficit. This implies that – even if we assume that the reserves will not be fully spent –, further measures may become necessary to achieve the deficit target this year.

In our *Report* we introduced a new indicator to capture the long-term component of the items shaping the fiscal balance. Our new, cyclically adjusted SNA-type indicator is more in line with the notion of structural deficit – which better captures the underlying economic trends –, as it attempts to handle distortions arising from cyclical fluctuations and the differences in statistical accounting. This approach filters out temporary effects from the official budget, such as subsequent debt assumptions, capital revenue from those returning from the private pension fund scheme or the effect of the early purchases of tobacco excise bands (labels) carried forward from 2010.[9] However, for the sake of consistency, deficit is augmented by the other side of the story, e.g. quasi-fiscal losses incurred by MÁV and BKV and the self-reversing effect of excise bands purchases. Since the official deficit reflects a classic capital expenditure item spread out over time, PPP investment projects are also added to the deficit, otherwise there would be an unjustifiable difference between the public investment and the PPP-investment.

Despite more or less constant ESA deficit levels it is evident that the structural position of the budget improved significantly both in 2009 and 2010, by a total of 1.8 percent of GDP. As it is difficult to predict the size of quasi-fiscal activities, when preparing our forecast for 2011 we faced a challenge. Therefore we focused our efforts on estimating the determinations for this period.

In 2009, adjusted for the effects of the business cycle and temporary, augmented items, a structural deficit of around 3.9 percent is derived, which implies an improvement by 1 percentage point, and can be considered as a more permanent improvement of the fiscal position. Changes in the ESA deficit in 2009 were negligible, which reflect the fact that the business cycle deteriorated the balance by nearly 2 percentage points in itself, but it was offset by the above mentioned 1-percentage-point permanent improvement on the one hand, and the temporary measure of 0.7 percentage points on the other hand.

In 2010, the structural position of the budget will improve further by 0.8 percent of GDP; however, the ESA figure does not indicate an improvement. The gap is explained by the continuing deterioration of the unfavourable cyclical effect; however, this effect is partly offset by the fact that the central bank's losses for the specific year will be reflected in the ESA accounting with a one-year lag.

Based on our current understanding of the determinations and projecting a constant ESA deficit, in 2011 the structural balance could improve by an additional 0.5 percent. Although cyclical effects on the items included in ESA appear to be unchanged, provided that our technical assumption proves to be true and there will be no new PPP contracts, the structural indicator may improve further as PPP investment projects – which amounted to more than 0.5% of GDP in 2009 – will phase out completely by 2011.

While the EU funds significantly increase the level of revenues in the budget, the level of the government's investment expenditures – owing to the restructuring of expenditures – fall significantly behind (even including the PPP programs), which improves the level of structural deficit considerably across the entire forecast horizon.

According to our forecast, the ESA deficit may be close to the government's target in 2009 at around 3.8–4 percent, depending on the year in which the payments from those re-entering the public pension system are taken into account based on the ESA accounting.[10] As was the case in our November issue of the *Quarterly Report on Inflation*, we continue to assume that these revenues – which exceed 0.2

[9] There were no adjustments based on the augmented SNA deficit methodology to exclude income from the sale of the Kyoto emission quota and the VAT refund payable under the ruling of the Court of Justice of the European Communities. On the other hand, these two temporary items largely offset the effect of one another in 2009.

[10] In addition, in 2009 the direction of a lower or a higher deficit is also surrounded by some uncertainty. The preliminary data pertaining to the general government in the financial accounts would be consistent, from the financing side, with a deficit of 4.0 percent.

Table 3-7

Developments in the balance indicators of the general government[11]

(per cent)

		2008	2009	2010		2011	
		Fact	Prel.	With reserves	Cancelled reserves	With reserves	Cancelled reserves
1. ESA balance*	Fact/projected	**–3.8**	**–4.0**	**–4.2**	**–4.0**	**–4.3**	**–4.1**
	Official target	–3.4	–3.9	–3.8	–3.2	–2.8	–2.6
2. Temporary, augmented items**		0.0	–0.7		–1.2		–0.4
3. Augmented (SNA) balance	3= 1+2	–3.8	–4.7		–5.2		–4.5
4. Cyclical component		1.1	–0.8		–2.1		–1.9
5. Cyclically adjusted augmented (SNA) balance**	5= 3 - 4	**–4.9**	**–3.9**		**–3.1**		**–2.6**
memo: ESA primary balance	*1- interest exp.*	**0.3**	**0.5**		**0.2**		**0.1**

** In our forecast we have not taken into consideration any risk from debt assumptions.*

*** We assume the full phasing-out of PPP-investments, this improve deficit in 2010 and 2011 by 0.3 and 0.2 percent, respectively.*

percent of GDP – will be settled in 2010, thus our November forecast of a 4-percent ESA deficit may prove to be true for 2009. According to our baseline projection, the ESA deficit of the general government exceeds 4 percent both in 2010 and 2011; however, if stability and interest rate reserves are cancelled, the deficit may stabilise at 4 percent. If the deficit path corresponding to the government targets achieved, the structural deficit indicator could in fact drop below the level of 1.5 percent, the medium-term fiscal objective (MTO); however, based on our forecast, further measures are required to meet the target.

In 2010, as a result of changes in the macroeconomic developments and Constitutional Court decisions, the revenues of the general government may fall behind the budget bill figure by a total of 0.7 percent of GDP. 0.4 percentage point of the deterioration is the result of a budget revenue shortfall generated by macroeconomic developments, while the cancellation of the taxation of property and family allowances under a court ruling translates into a shortfall of 0.3 percentage points. In addition to the differences on the revenue side, in our projection we assume a higher local government deficit as well as higher spending, such as expenditure overruns of budgetary units and chapters, and subsidies for the MÁV and BKV. All together, these items could generate expenditure overruns of nearly 0.5 percent. Local government deficit may be higher by 0.2 percentage points. In view of the fact that the budgetary units and chapters partly responded to last year's restriction by a temporary postponement of expenditures – i.e. the accumulation of carried-over appropriations –, we envisaged an overrun of 0.2 percentage points in respect of the expenditures of budgetary units and chapters. Increased support to MÁV and BKV can be around 0.1 percentage point.

Effects pointing to a higher deficit level add up to around 1.2 percent of GDP, a two-third of which is offset by various items, thus our baseline projection assumes a budget bill overrun of 0.4 percentage points. Savings in interest expenditures may add up to 0.1 percentage point, public pension fund re-entries could yield an extra revenue of 0.2 percentage points, the effective blocking of stability reserves may reduce the deficit overrun by an additional 0.4 percentage points, while miscellaneous items may further improve the balance by 0.1 percentage point. The cancellation of the remaining reserves (0.2 percent) would reduce the deficit to 4.0 percent, in which case the deficit would exceed the target by 0.2 percentage points only.

The budget currently contains four types of reserves: general reserves, special earmarked reserves, stability reserves and interest rate risk reserves. Based on experiences of recent years as well as the fact that complying with the determinations is a necessity, we may conclude that general reserves and special reserves are budgetary items and as such, they are likely to be incurred as actual expenditures and therefore are not suitable for managing risks. Our forecast assumes that 0.1 percent of the general reserves will be used to offset the aforementioned, BKV-related excess

[11] Stability and interest rate risk reserves account for the difference between our indicators calculated including reserves and excluding reserves.

expenditure. Additional utilisation is expected to cover unforeseen expenditures (e.g. flood). Stability reserves (0.4 percent of GDP) are intended to manage revenue risks, while interest rate risk reserves (0.2 percent) cover interest overruns. Currently we assume that the stability reserves were blocked in an effective way, since an unlikely level of tax overshooting was set as the condition of using them. Interest rate reserves will also remain; however, as we currently expect savings in this area, these reserves may also become cancellable, in which case only a slight deficit overrun may be expected.

Based on the measures adopted thus far – such as the PIT reduction amounting to 0.6 percent of GDP –, the conditions are not in place for a deficit reduction in 2011. On the basis of previous trends, in our baseline projection we assumed that the growth in discretional expenditures would be slightly restrained in next year's budget and that the investment cycle of local governments would reach a declining phase. Since we expect the risk reserve to drop to 0.2 percent in 2011, in the lack of additional measures, the cancellation of the reserve will not be sufficient to achieve the envisaged deficit reduction.

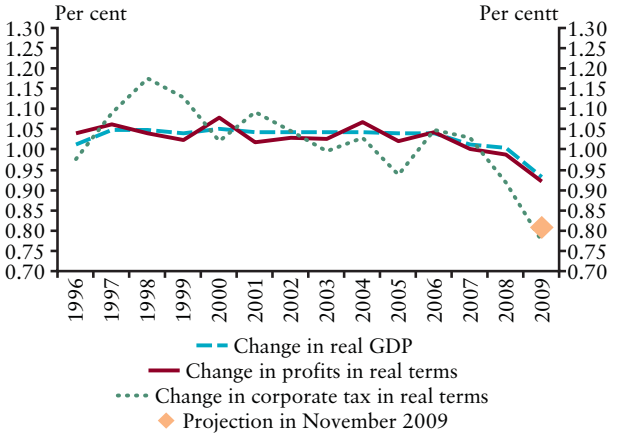
Macroeconomic and cyclical developments – the key determinants of the revenue side – have become more unfavourable for 2010-2011 than we assumed.

Although the highest fall in GDP was observed in 2009, a part of the cycle's negative revenue effect will materialise with a lag. Indeed, last year the negative effect of the cycle was mitigated by the composition of growth as wages and consumption – the items determining the main revenues – decelerated at a slower rate than GDP. However, the effect of the fall in revenues was only temporarily mitigated by this: in 2010 the deceleration of wages and consumption can exceed that of GDP. While we anticipated this development in our November forecast, our current expectations regarding the cyclical effect point to a higher decline in consumption and a somewhat smaller decline in wages.

In addition, we updated our assumptions about the effect of the business cycle to reflect the realisation of tax revenues for 2009. Overall, changes in tax revenues were in line with our expectations; their structure, however, proved to be slightly different than we expected: cyclical effects resulted in more favourable VAT revenues, while corporate income taxes fell behind expectations.[12] Although such deviations of

Chart 3-11

Volume changes in corporate income tax, GDP and profit



the two tax categories offset one another in 2009, both of them point to a more negative cyclical effect for 2010–2011.

We envisaged that, in the context of a significant economic recession, corporate income tax developments would diverge from their previous trend, namely that they basically tend to follow changes in the nominal GDP. However, the reduction of corporate income taxes (CIT) by over 20 percent exceeded our November forecast by a few percentage points. This may partly reflect a composition effect. At the whole economy level, while corporate profit is computed as the combined balance of profit-maker and loss-maker companies, CIT payments are determined by profit dynamics alone (the losses of loss-maker companies are carried forward). On the assumption that the negative effect of 2009 would also continue in 2010 and would start to decline in 2011, we increased the negative cyclical component by 0.2 percent of GDP for 2010 and by 0.1 percent of GDP for 2011, and reduced revenues accordingly.

Regarding VAT, in the second half of 2009 the level of VAT revenues exceeded our expectations. Since this trend is not explained by the changes observed in household consumption and retail turnover, firms' endeavour to sell from inventory may be an alternative explanation. Indeed, this activity does not involve a VAT refund at the time of the sale, as it has been refunded earlier, after the original purchase. However, the decline in inventories may partly be a cyclical process; i.e. parallel to a rebuilding of inventories this phenomenon may be reversed and lead to a shortfall in net VAT revenues. As a consequence, we had to supplement the cyclical component of consumption to adjust for the cycle of inventories. While this adjustment improved revenues and

[12] While both effects are related to the cycle, none of them can be captured by means of the standard method of cyclical adjustment, which relies on the cyclical component of the major tax bases (wages, profits, consumption).

Chart 3-12

Composition of the cyclically adjusted balance improvement

(As a percentage of GDP)

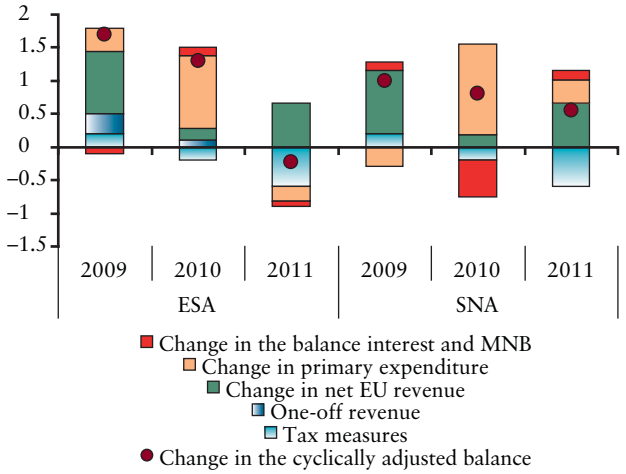
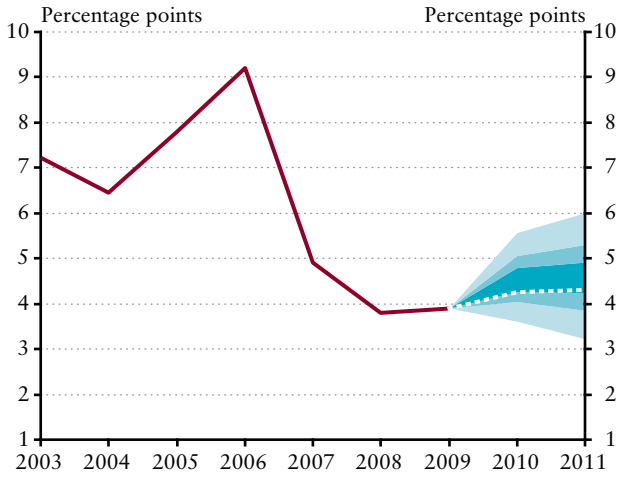


Chart 3-13

Fiscal fan chart



the cyclical component by 0.2 percent of GDP for 2009, it decreased them by 0.1 percent for 2010 and 2011 respectively.

The ongoing improvement of the cyclically adjusted augmented (SNA) deficit largely reflects an increase in EU revenues and restrained primary expenditures

The cyclically adjusted augmented (SNA) deficit deems all expenditure cuts temporary in nature where quasi-fiscal expenditure occurred in reality, but it was settled outside of the government sector as corporate investment or as an item generating corporate losses. In a broader approach we might want to examine whether the actually restrained spending of budgetary units have a permanent effect or only a temporary one; however, the examination of this issue is outside of the scope of our analysis.[13]

EU revenues improved both the ESA and the SNA deficit in 2009, because these expenditures financed by EU revenue, made possible to cut expenditures not financed by the EU. On the other hand, only the ESA deficit was improved – in a temporary way – by the outsourcing of expenditures into a quasi-fiscal spending (increasing PPP investment) and by one-off revenues (early purchases of excise bands, re-entries from private pension funds). The key factor in 2010, however, is a decline in primary expenditures, while temporary adjustments include one-off revenue effects (self-reversing effect in excise duties and re-entries from private pension funds) and the significance of PPP investment slowly decrease. In 2011 the increase in EU revenues will offset the effect of the tax reduction. Although the spending of the EU funds will be reflected already on the expenditure side as well, the expected phasing out of PPP investment will reduce quasi-fiscal expenditures.

Risks slightly tilt toward a higher ESA deficit for 2010–2011

As shown by the fiscal fan chart presenting the risks, our baseline projection of the ESA deficit is somewhat asymmetrical towards a higher deficit in 2010 and 2011.

The main determinants of the uncertainty distribution – the macroeconomic developments and expert items – both point to the materialisation of a higher deficit than expected in our baseline projection. This is mainly the result of an asymmetry around GDP in the macroeconomic forecast, which points to a lower growth. As regards expert items, it is important to note that our baseline projection includes the interest rate reserves, thus a potential cancellation of these reserves would automatically imply a downside risk to deficit. However, this is more than offset by the risk that a part of MÁV and BKV debts may be assumed, and therefore may be included in the ESA deficit.

[13] In 2009 the government exercised tight control on the expenditure side, and in our baseline projection we assumed that, for the most part, this would have a permanent impact. Although budgetary units slightly overrun their budgeted appropriations, but overall expenditure overrun became less sizeable than we expected. Nevertheless, since this partly reflects an increase in the stock of unused appropriations, we assume that the previously identified risks are still relevant.

3.6 External balance

The external financing capacity of the economy may prove to be long-lasting

In the second half of 2009 the improvement in the external equilibrium position continued. Parallel to the real economic and financing adjustment accompanying the recession, the high current account deficit, which characterised the Hungarian economy in recent years, fell sharply; moreover, the current account balance recorded a surplus for Q2 and Q3. Indeed, households and firms spent less on consumption and investment than the shortfall in their incomes. In Q3, the year-long, dynamic improvement in balance resulted in a financing capacity of around 5 per cent of GDP (seasonally adjusted data).

The increasing surplus of the balance of goods and services reflected an improving export performance. As opposed to the previous phase of balance improvement, export developments contributed positively to the increase in the external financing capacity in 2009 Q3. Parallel to the recovery in external demand, export sales increased slightly, while the import demand of the economy did not decline further. Although domestic demand continued to fall, filling up the gas storage facilities and the increasing import demand stemming from the rebound in export performance translated into a rise in imports.

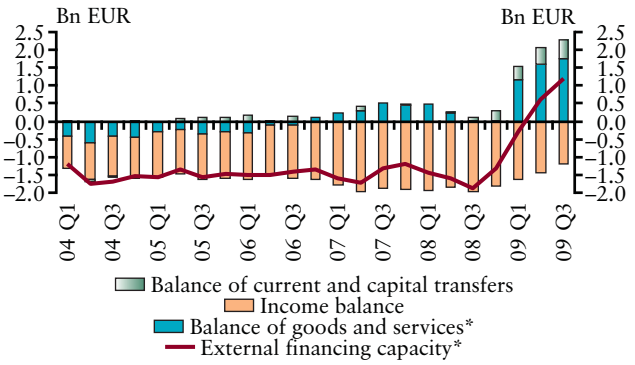
With respect to income flows, first of all it should be stressed that the interest income balance improvement observed previously came to a halt in Q3, which may be the result of a deceleration of the decline in external funding costs. Secondly, the deteriorating profits of firms in foreign ownership[14] continue to play a major role in the continuously shrinking deficit of the income balance.

Evaluating the external equilibrium developments of 2009, the pace of the adjustment seems to be even stronger than we expected. The rebound of external markets resulted in a higher foreign trade surplus in Q3. In addition, based on the data received thus far, the usage of current transfers from the European Union may have surpassed the level we expected in our previous projections. Therefore we reckon that the current account balance shifted into surplus in 2009.

Chart 3-14

Components of the external financing capacity

(seasonally adjusted values)



** Adjusted by the difference caused by imports brought forward on account of the EU accession and by the import increasing impact generated by customs warehouses terminated due to the EU accession and by the Gripen fighter aircraft purchases.*

Note: Seasonal adjustment of the time series was made with direct adjustment. Therefore, the sum of the components of the external financing requirement does not necessarily equal the adjusted values of the external financing requirement.

In the next two years the external financing capacity of Hungary may persist together with a slight current account deficit. We expect a further, albeit moderate increase in the surplus of the balance of goods and services, which may reflect a further fall in consumption and a somewhat more dynamic export performance. However, this balance improving effect may be mitigated by the slow rise we expect in the profits of firms in foreign ownership, which may generate an increasing income outflow as early as this year. Furthermore, the assumed graduation in interest expenditures may be a contributing factor to that. The steadily high external financing capacity may reflect the increasing usage of EU transfers.

The remarkable improvement in external balance mirrors the abrupt boost observed in the financing position of the private sector in 2009. However, according to recently received data, net savings of the household sector were lower compared to our previous expectations, which may be in connection with the larger drop in the disposable income of the sector. In addition, in the background of the

[14] The figures of income flows related to direct investment are based on estimates in the preliminary balance of payments statistics for 2009. The estimate will be replaced by data based on corporate reports in September 2010.

Table 3-8

Structure of the current account

(As a percentage of GDP unless otherwise indicated)

	2003	2004	2005	2006	2007	2008	2009	2010	2011
	Fact/Preliminary fact						Forecast		
1. Balance of goods and services	–3.8	–2.9	–1.2	–0.9	1.2	0.7	6.6	6.8	7.1
2. Income balance	–5.0	–5.2	–5.7	–6.2	–7.5	–7.3	–6.1	–6.8	–7.1
3. Balance of current transfers	0.8	–0.2	–0.3	–0.3	–0.5	–0.6	–0.1	–0.4	–0.4
I. Current account balance (1+2+3)	*–8.0*	*–8.3*	*–7.2*	*–7.5*	*–6.8*	*–7.2*	*0.4*	*–0.4*	*–0.4*
Current account balance in EUR billions	*–5.9*	*–6.8*	*–6.4*	*–6.7*	*–6.9*	*–7.6*	*0.3*	*–0.4*	*–0.4*
II. Capital account balance	*0.0*	*0.1*	*0.7*	*0.7*	*0.7*	*1.0*	*1.4*	*2.0*	*2.4*
External financing capacity (I+II)	**–8.0**	**–8.2**	**–6.5**	**–6.7**	**–6.1**	**–6.2**	**1.8**	**1.6**	**2.0**

adjustment taking place, borrowing and financial asset transactions did not evolve in line with our assumptions. Decreasing incomes coupled with more subdued asset accumulation. Indeed, while there was a surge in bank depositing in Q2 and Q3, a substantial amount of government securities and shares were also sold. In addition, in Q4 savings of the sector accumulated at a lower pace than we experienced in the same periods of the year in the past. Thus stronger liquidity constraints must have determined the developments in financial assets rather than the generation of precautionary savings. Along with this low level of financial asset accumulation, the borrowing of households was also below former expectations.

Throughout 2010 the financing capacity of households may continue to improve. We forecast a decline in net savings of the sector only together with recovering consumption. The continued high level of the corporate sector's financing capacity may reflect a more favourable external demand and a gradually increasing usage of EU transfers. Accordingly, based on our current projection the financing need of the general government may be more than offset by the net savings of the private sector through the forecast horizon.

Developments in financing – decelerating banking sector balance sheet adjustments

The banking sector's balance sheet adjustments and the decline in their external liabilities – both of which had played a key role in external financing developments in the first half of the year – continued regarding Q3 as a whole.

Table 3-9

GDP-proportionate net financing capacity of individual sectors

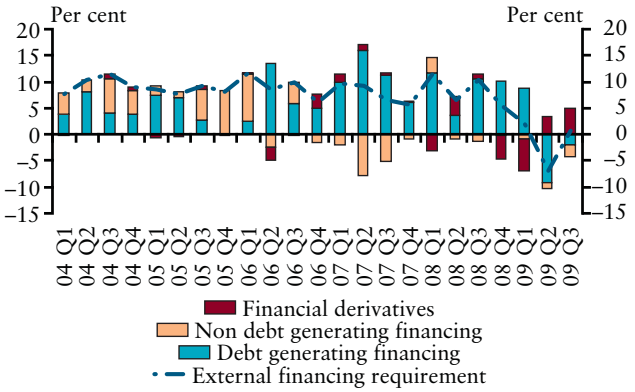
	2003	2004	2005	2006	2007	2008	2009	2010	2011
	Estimation						Forecast		
I. Augmented general goverment*	–8.3	–8.3	–9.4	–9.5	–5.8	–3.8	–4.7	–5.2	–4.5
II. Households	0.1	2.3	4.3	3.3	1.5	1.2	3.3	4.5	4.1
Corporate sector and ˝error˝ (= A - I.- II.)	0.2	–2.2	–1.4	–0.5	–1.8	–3.7	3.2	2.4	2.4
A. External financing capacity, ˝from above˝ (=B+C)	–8.0	–8.2	–6.5	–6.7	–6.1	–6.2	1.8	1.6	2.0
B. Current account balance	–8.0	–8.3	–7.2	–7.5	–6.8	–7.2	0.4	–0.4	–0.4
– in EUR billions	*–5.9*	*–6.8*	*–6.4*	*–6.7*	*–6.9*	*–7.6*	*–0.4*	*–0.4*	*–0.4*
C. Capital account balance	0.0	0.1	0.7	0.7	0.7	1.0	1.4	2.0	2.4
D. Net errors and omissions (NEO)**	0.3	–1.4	–1.9	–2.3	–1.6	–2.2	–0.5	–0.5	–0.5
External financing capacity ˝from below˝ (=A+D)	–7.8	–9.6	–8.4	–9.1	–7.7	–8.4	1.2	1.1	1.5

** In addition to the central government, the augmented general government includes local governments, ÁPV Ltd., institutions discharging quasi-fiscal duties (MÁV, BKV), the MNB and authorities implementing capital projects initiated and controlled by the government and formally implemented under PPP schemes. The forecast related to the financing needs of the general government does not include stability and interest rate risk reserves.*

*** In our forecast for the 'errors and omissions' item of the balance of payments we assumed that the cumulated figure for the last four quarters would remain unchanged.*

Chart 3-15

Forms of financing as a percentage of GDP

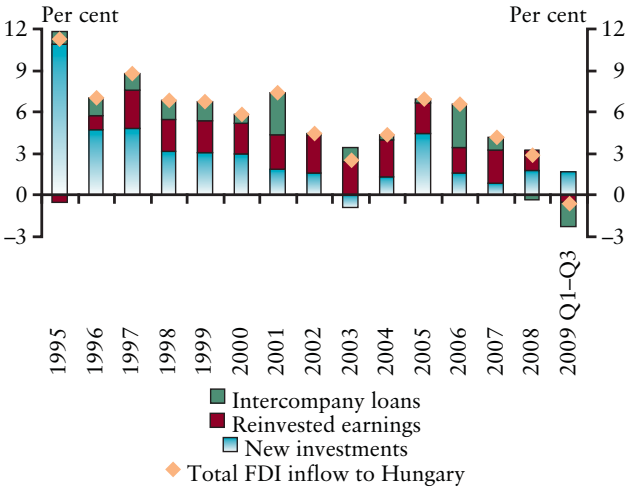


During this period along with restrained lending activity, the private sector's intensive deposit accumulation and the banking sector's derivative transactions,[15] banks' reliance on external funds decreased. At the same time, from the end of Q3 the process of banks' balance sheet adjustment began to decelerate. Household and corporate deposit accumulation became increasingly moderate, thus the outflow of liabilities from banks came to a halt.

Despite a substantial decline in banks' liabilities, net external debt declined only slightly. A contributing factor was bank's restrained external lending. On the other hand, the outflow of debt-type liabilities waas also moderated by the fact that – for the first time since the onset of the crisis – foreign investors purchased Hungarian government papers in excess of matured securities. At the end of the quarter, forint denominated net external debt[16] stood at around 54 of GDP.

Chart 3-16

Components of FDI inflow in Hungary as a percentage of GDP



In the first three quarters of 2009, FDI inflow – which consists of new investment, reinvested earnings and intercompany transactions – declined significantly compared to previous years, which could be partly attributed to reinvested earnings. In the context of low corporate profits the level of reinvested earnings was also lower; thus in 2009 they played a less significant role in financing. The substantial decrease in intercompany liabilities of resident firms was also a contributing factor. Although such transactions tended to be rather volatile in the past, the moderation of intercompany borrowings may have reflected the sector's declining credit demand and the shrinking financing opportunities. It should be noted that the unfavourable investment environment did not appear to influence new FDI inflow in Hungary.

[15] Most of them are forint/FX swaps; therefore, in times of significant fluctuation in the forint exchange rate, a co-movement of net derivative financing and exchange rate changes is usually experienced. In 2008 Q4 and 2009 Q1, parallel to the depreciation of the exchange rate of the forint, derivative transactions considerably reduced the balance of the financial account through closed transactions and margin calls. In 2009 Q2 the exchange rate of the forint already strengthened, while the transactions related to derivative transactions reduced the dependency on foreign sources.

[16] Debt indicator calculated without intercompany loans and financial derivatives.

4 Appendix: Evaluation of our inflation forecasts for 2009

In line with previous years' practice, this year we attempt again to review the extent to which our projections for the previous year materialised. This type of analysis is intended to identify the factors which contributed to potential errors in our forecast, so that based on the conclusions drawn we can attempt to improve the accuracy of our forecasting models. As before, we evaluate our forecasts within the framework of a relative and an absolute analysis. In our relative analysis we compare our projections with the inflation projections of market participants, while the purpose of our absolute analysis is to decompose our forecast errors.

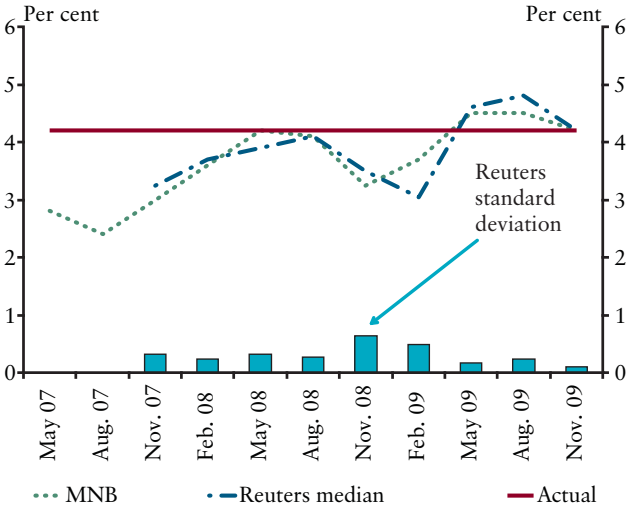
When assessing the forecasts it is important to emphasise that those prepared by the MNB are conditional forecasts. We only have technical assumptions regarding certain variables relevant to our forecast (e.g. interest rates, exchange rate, global commodity prices, fiscal policy). In this respect our projections may not be fully comparable to the unconditional forecasts of market analysts.

Our first forecast on inflation for 2009 was issued in May 2007. The inflation path for 2009 was subject to a number of significant shocks, often with conflicting effects. These were mapped remarkably well in our own projections. Up to November 2007 we expected inflation to be around the medium-term inflation target. Between February and August 2008, in the context of rising energy and food prices, we raised our forecasts above the 3 per cent target. The first time we could expect the effects of the crisis to materialise was in November 2008 – at this time, in consideration of the assumed disinflation effect of sharply falling demand, we readjusted our forecast to a level close to the target. The initial plans of a potential VAT increase were drawn up in February 2009 and we responded by raising our inflation forecast. In May 2009 we raised our forecast above 4 per cent in view of an indirect tax increase – which proved to be final – that was higher than the one in February. In August and November 2009 we slightly lowered our forecast, primarily in order to adjust for the lower actual figures resulting from the stronger-than-expected disinflation effect of falling demand. This was also reflected in the weaker-than-expected carry-over effect of VAT.

Comparing the MNB's forecast to the median of the projections of analysts participating in the Reuters survey, we can note that they included nearly identical forecast errors up to 2008. However, from November 2008 we were more efficient in incorporating into our forecast[17] all information relevant to the inflation path. Consequently, from November our forecasts reacted more quickly to the significant shocks on inflation and we managed to incorporate the impact of these shocks into our projections with less error. In the context of the crisis we projected a somewhat lower inflation in November 2008, and then in February 2009 we were quicker to calculate with the effects of indirect tax increases. It is also noteworthy that the standard deviation in the projections of market analysts was rather considerable in both months, which makes us conclude that the analysts incorporated new information into their forecasts gradually, rather than all at once. From May 2009 we expected a stronger disinflation than market analysts resulting from the fall in demand, and subsequent facts proved our assumption correct. Overall, the forecasts of the MNB proved to be somewhat more precise than market projections, which is confirmed by the fact that the mean average error (MAE) of the inflation forecast for the year 2009 is 0.44 of a percentage point for the MNB and 0.52 of a percentage point for the Reuters survey.[18] The more precise central bank forecast results are largely due to the projections prepared after November 2008.

Chart 4-1

Forecasts of the MNB and the analysts participating in the Reuters survey for 2009 average annual inflation*



** In November 2008 the MNB published a band; the chart indicates the average of the edges of the band.*

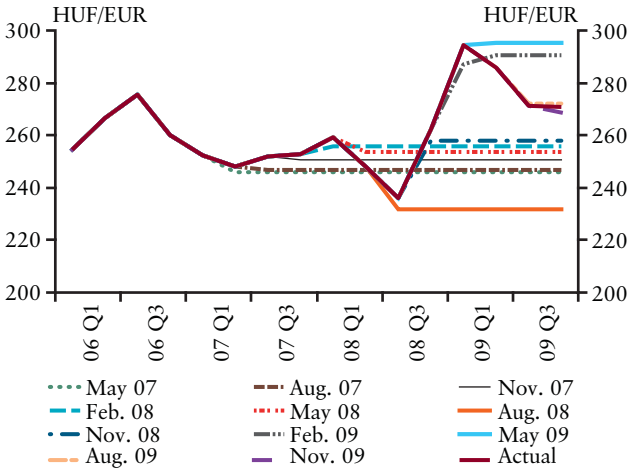
In the context of rule-based assumptions, when evaluating our inflation forecasts it is worth distinguishing the effects of certain basic assumptions (oil prices, HUF/EUR exchange rate) from those of other variables (economic activity,

[17] In November 2008 the MNB defined an inflation band as a forecast; for the sake of simplicity, we applied the median of the band for the purposes of our charts and calculations.

[18] Calculated from November 2007, the date from which both forecasts are available.

Chart 4-2

Changes in our assumptions about the HUF/EUR exchange rate and euro denominated oil prices



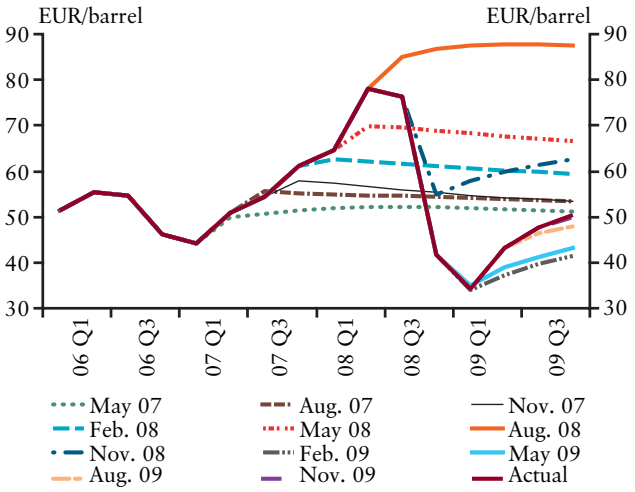


Chart 4-3

Average inflation forecast error for 2009 and its decomposition

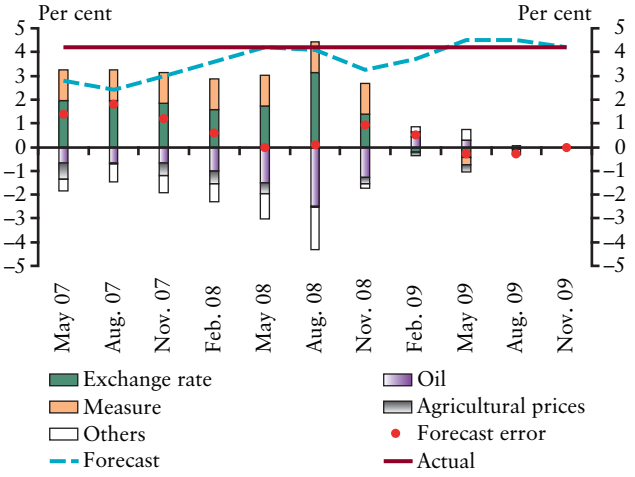
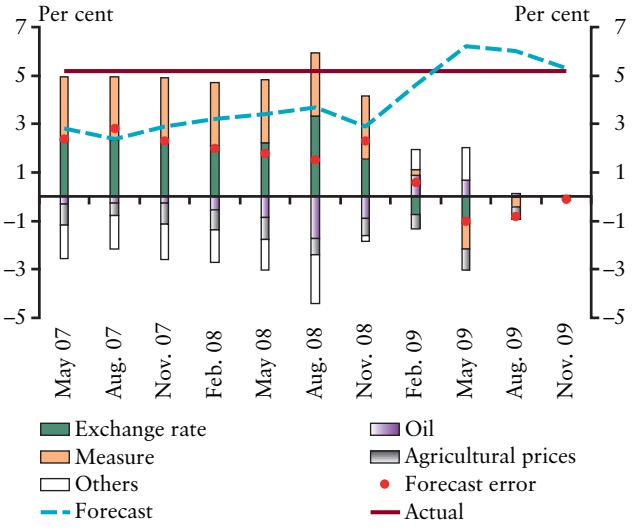


Chart 4-4

Inflation forecast error for 2009 Q4 and its decomposition



wages), which are considered endogenous for our forecast model.

As agricultural producer prices are also exogenous for our models, our treatment of them is similar to that of the basic assumptions. Inflation for 2009 was largely influenced by the VAT and excise duty increase in July 2009, and to a lesser degree by other government measures. The resulting forecast error should also be considered exogenous. The results are shown in Chart 3 and Chart 4. The forecast error is calculated as the difference between the actual and the forecast figures, from which we compute the remaining error by excluding the effects of the factors listed above. To some extent this error contains changes in the inflation effect of macroeconomic developments (labour market, economic activity) which were not anticipated in the forecast, and also includes the error of the model used for the inflation forecast. Thus the remaining forecast error adequately reveals the modelling error that we actually made. Consequently, in August 2008 for example, the forecasted inflation would have been around 2 percentage points higher than the actual figure proved to be if information regarding the paths of exchange rates, oil prices, measures and agricultural producer prices had been available to us.

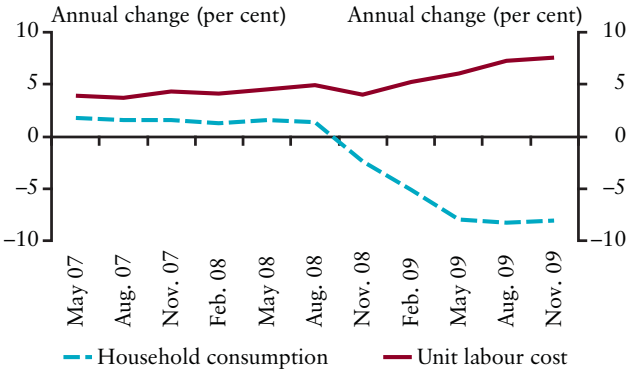
It is evident that this error was significantly negative until August 2008; however, this changed and the error occasionally even turned into positive from November 2008, once the effect of the crisis was incorporated into the forecast. Thus it appears that from November 2008 we were able to forecast the disinflation effect of the crisis basically accurately. At the same time, the significantly positive

modelling error observed in May 2009 is noteworthy, and is even more striking in the context of the decomposition of the forecast error for 2009 Q4 (Chart 4). Does this mean that the forecast we issued in May 2009 – excluding the effect of exogenous items – was too low? We do not think so; in fact it is apparent that, reflecting the smaller-than-expected carry-over effect of VAT, the error resulting from the effect of government measures was negative. Therefore, if – based on previous experiences – we considered the difference between the expected VAT effect and the materialised VAT effect a modelling error, the positive error would be significantly lower. In other words, our overall assessment of the magnitude of disinflation was correct; however, we were unable to break it down properly into a decline in net inflation and a VAT effect.

Changes in our forecasts are also worth examining with respect to a number of endogenous variables relevant to inflation, such as household consumption and unit labour costs (Chart 5). Evidently, significant changes took place in November 2008, which prompted us to reduce our consumption forecast considerably. It is somewhat surprising that the inflation forecast we issued in November 2008 proved to be reliable (excluding exogenous factors), considering that our consumption forecast continued to decline significantly during subsequent quarters. However, this may be explained by the fact that our unit labour cost projections progressively increased from February 2009 parallel to the declining consumption forecast, which, ceteris paribus, put an upward pressure on inflation.

Chart 4-5

Household consumption and unit labour cost forecasts for 2009



** For unit labour costs the chart indicates the weighted average of unit labour costs in the sectors of manufacturing and market services, where we applied the weights from our cost pass-through inflation forecast model.*

On the whole, we can conclude that, in addition to exogenous factors, our inflation forecast error for 2009 was predominantly caused by the fact that before November 2008 we were unable to envisage the price reducing effects of the crisis. Nevertheless, from November 2008 our assessment of the disinflation effect of falling demand was basically correct.

Boxes and Special topics in the Report, 1998–2010

* Recurring analyses are not listed here.

August 2005

November 2005

May 2006

November 2006

February 2007

Appendix

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