QUARTERLY REPORT ON INFLATION
November 2010

MAGYAR NEMZETI BANK

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Published by the Magyar Nemzeti Bank

Publisher in charge: dr. András Simon, Head of Communications

8-9 Szabadság tér, H-1850 Budapest

www.mnb.hu

ISSN 1418-8716 (online)

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 Report is published biannually, with partial updates to the forecasts also prepared twice a year. The forecasts of the Monetary Strategy and Economic Analysis and Financial Analysis Departments are based on certain assumptions. Hence, in producing its forecasts, the Directorate 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 Viktor Várpalotai. The *Report* was approved for publication by Ferenc Karvalits, Deputy Governor.

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The *Report* incorporates valuable input from the Monetary Council's comments and suggestions following its meetings on 15 November and 29 November 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.

The projections is based on information in the period to 22 November 2010.

Contents

Summary

Rising domestic demand may lead to higher-than-targeted inflation over the entire forecast period

Under the assumptions that the central bank base rate and the average exchange rate remain constant at their October levels (5.25% and EUR/HUF 274, respectively), Hungarian economic growth continues to accelerate on the forecast horizon. Rising domestic consumption and a couple of large-scale investment projects which have already been announced in the manufacturing sector are the main sources of growth, in addition to robust export growth. Improvements in employment and the Government's measures to stimulate income growth will result in higher consumption, while the increasing unpredictability of the tax regime and the sustained weakness of bank lending will materially weaken firms' investment activity.

Earnings growth is unlikely to pick up sharply, due to continued loose labour market conditions and consequently, little inflationary pressure is expected from the labour market. By contrast, sharp rises in unprocessed food prices will put upward pressure on an increasingly wide range of items in the consumer basket through increases in costs. With the upward effects on inflation of the Government's measures emerging gradually from early 2011, the average inflation rate may be above 4% next year.

Inflation is expected to moderate as the first-round effects of cost-push shocks wear off. With domestic consumption likely to pick up, however, the downward effects on prices of the negative output gap are expected to fade gradually. Consequently, the pass-through effects of the supply shocks may result in inflation being above the 3% target on the monetary policy horizon.

Global investor sentiment has been volatile; assessments of the risks associated with forint assets have been shaped mainly by country-specific factors

Over the past few months, developments in global market sentiment were shaped primarily by market expectations about the second phase of quantitative easing measures by the US Federal Reserve, which led to dollar depreciation and rises in equity markets. Concerns about the fiscal outlook for some peripheral euro-area Member States intensified again towards the end of the period, which was reflected in rises in those countries' yield spreads.

In addition to global investor sentiment, country-specific factors also affected developments in domestic financial asset prices. At the beginning of the period, the aborted negotiations with the IMF had an adverse impact on sentiment towards Hungary. But thereafter, as the Government expressed its commitment to meeting the deficit targets, Hungarian asset prices outperformed those of countries of Central and Eastern Europe. Announcement of the Government's second action plan resulted in a relative deterioration of risk perception related to Hungary.

On aggregate, the forint strengthened somewhat over the period, similar to the Czech koruna and the Polish zloty.

Tight credit conditions are impeding the economic recovery

The decline in lending to the private sector continued in 2010 Q3, although at a slower pace. Conditions on lending to the corporate sector remained tight, with little sign of a pick-up in the supply of credit. Credit demand is likely to increase mainly in industries selling their output to external markets, which, in turn, may result in a gradual pick-up in corporate lending from 2011.

Bank lending to the household sector fell further at about the same rate as in the previous quarters. The substantial reductions in personal income tax rates and improvements in the employment situation are expected to stimulate credit demand in the short term. However, banks are likely to respond to rising demand with some delay, due to a deterioration in credit quality and the effects of the sector-specific extra tax imposed on the sector. Consequently, outstanding lending to households is only expected to increase again from the middle of 2011.

In addition to strong export growth, rising employment may facilitate the economic recovery

The Hungarian economy continued to slowly recover from recession in Q3. Growth continued to be led by industrial sales on the back of rising German export activity, but some sectors supplying the domestic market also showed signs of a turnaround in the past quarter. According to retail sales data, household consumption spending is expected to increase slightly in 2010 H2, driven mainly by rising employment and improvements in the sector's income prospects. Investment spending by firms operating with low capacity utilisation is likely to remain very subdued, due to the tight credit conditions. Firms are expected to undertake new investment projects only in manufacturing.

Employment began to rise at an increasing pace following the pick-up in economic activity. However, the increase in demand for labour was accounted for wholly by export industries. The participation rate continued to rise, in addition to the increase in employment growth. Consequently, there continue to be no signs of a turnaround in unemployment. The downward effect on earnings of the loose labour market is being increasingly felt and, therefore, pay increases in the private sector continue to be historically low.

Growth is likely to accelerate and become more balanced, despite the risks to investment

Exports continue to grow at double-digit rates on the forecast horizon, led mainly by German export activity, which in turn is propelled by demand from Asia. That link may be gradually strengthened by the implementation and activation of large investment projects by the auto industry, which have already been announced. Domestic demand growth may pick up from 2011, with the expected growth path likely to become more balanced.

Faster growth in household consumption spending and the large investment projects discussed above may be the main factors contributing to the expansion of domestic demand. Household consumption spending is likely to increase, due to the substantial easing of the tax burden on individuals and the recovery in employment. For the present, the effect of changes to the private pension fund scheme on households are unpredictable, and thus a change in the sector's consumption-saving behaviour is not expected in the baseline projection. At the same time, borrowing, mainly in foreign currency, by heavily indebted households prior to the financial crisis may continue to imply strong pressure to adjust balance sheets, and any extra income

resulting from the reduction in taxes may raise net savings rather than consumption.

The steady expansion of production capacities in the auto industry contributes to whole-economy investment growth over the entire forecast period, but the sector-specific extra taxes, which increase investor uncertainty, may prompt a number of firms to revise their investment plans. This latter effect, coupled with tight conditions on corporate lending, may offset most of the positive impact on growth of the large individual investment projects.

In the projection, growth accelerates to above 4% in 2012. One source of this is the easing of the tax burden on household income, the other being the recovery in the goods balance, driven by new production capacities that will have been installed in the auto industry by that time.

Inflation stuck at around 4%, despite low domestic inflationary pressure

In the weak demand environment, inflation fell steadily until September. Although there has been no inflationary pressure from the labour market and domestic demand in recent months, annual consumer price inflation has remained constantly above the levels seen prior to last year's indirect tax increases.

Although there has been little evidence of significant effects from the depreciation of the exchange rate during the summer months, rises in an increasingly wide range of unprocessed food prices have put significant upward pressure on inflation. The latter effect may push core inflation upwards again in the coming months. Households' inflation expectations have stagnated at a level above the medium term 3% inflation target, consistent with the actual outturns for inflation in recent months.

With demand picking up, inflation may remain constantly above target, even if earnings growth remains subdued

The factors accounting for the revision to the inflation projection are mainly: i) rising domestic demand, ii) the sector-specific extra taxes, iii) expected slow earnings growth, and iv) an exchange rate assumption fixed at a stronger level. In the projection, the pass-through of rises in unprocessed food prices, the passing on to customers of the cost of sector-specific extra taxes and the simultaneous increase in household consumption lead to a pick-up in inflation in the short term, which is partially offset by the subdued rate of earnings growth. Inflation is expected to be above 4% in 2011.

At the end of next year, the effects of cost-push shocks of the past quarters gradually fade, and thus inflation is expected to moderate again. While domestic demand will pick up further, the downward pressure on prices of the narrowing output gap is likely to diminish, and will therefore not be able to offset the pass-though effects of the cost-push shocks. Consequently, annual inflation may remain slightly above the target even towards the end of the forecast period.

Hungary's external financing capacity may remain positive over a sustained period

Rising external demand and the export growth led by activation of the auto industry investment projects counteract the gradual increase in domestic demand, and thus the substantial surplus on the real economic balance is expected to be sustained over the coming years. However, firms' improving profitability point to an increase in the deficit of income balance. But that, in aggregate, is only likely to be reflected in a gradual decline in Hungary's

external financing capacity – the country may maintain its net saving position over the entire forecast period, due to the continuous inflow of large EU transfers in the future.

Changes in the external environment and country risk perceptions pose the greatest risks to growth

In contrast to earlier practice, starting from this the issue of the Report the aggregate effects of alternative scenarios are not reflected in the skewness of the probability distribution in the fan chart, but rather the alternative scenarios are quantified separately, and the fan chart only gives a sense of the degree of forecast uncertainty around the baseline projection.

Expectations becoming stuck at levels above the medium-term target poses the biggest risk to the inflation outlook. There are signs of this beginning to happen in the results of surveys measuring the most recent inflation expectations. Inflation expectations being stuck at a high level increase the likelihood that the cost-push shocks reflected in the inflation path in the short term will lead to a sustained rise in the price index over the longer term. If the scenario materialises, it could raise the expected path of inflation by 1 percentage point.

The likely response of economic agents to the fiscal measures is the most important source of uncertainty regarding future economic growth. The stimulus to growth may be stronger in a favourable external and financial environment, and employment growth may be faster. However, if the external environment is less favourable and domestic growth slows in parallel with exports, the risk that uncertainty and the dampening effects on investment of rising financing costs will dominate. In such a scenario, growth may be slower in the short term by 1 percentage point than in the baseline projection.

Expenditure-side structural measures will be needed to maintain the deficit below target over the longer term

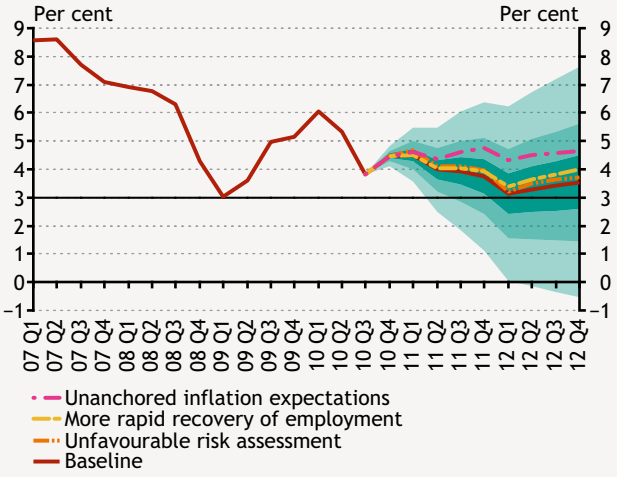
There are considerable differences in terms of the sources of revenue between the plans submitted by the Government to Parliament and actual budget policies implemented over the past decade. The laws as enacted contain a substantial reduction in taxes on labour, making up the resulting shortfall in revenue by imposing a temporary extra tax on certain sectors and by re-channelling a certain amount private pension fund contributions and some of the wealth accumulated in the funds to the budget.

The Government's fiscal measures are likely to ensure that the deficit path will be lower than previously expected on the forecast horizon. The measures will help achieve the Government's deficit targets over the coming years. Despite meeting the deficit targets on an ESA basis, however, the structural position of the government budget is likely to deteriorate and, consequently, the improvement in balance is unlikely to be sustained over the longer term in the absence of further measures.

The effects of general government measures on the labour market may spur potential growth; however, risks stemming from the rise in the expected return on investments may threaten excess growth

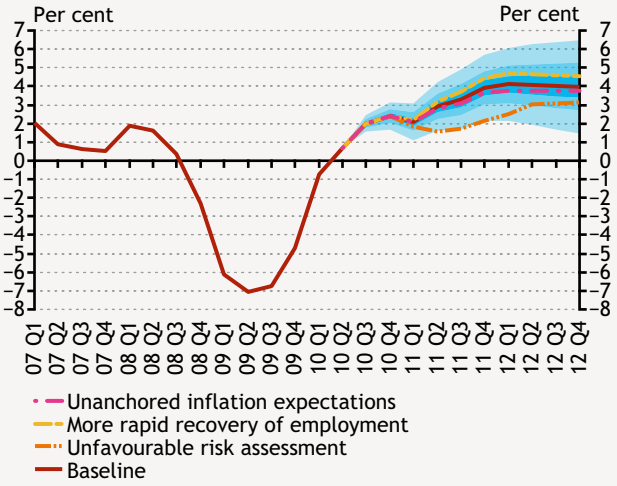
In the long term, the labour market impacts of the personal income tax system reform may exert a positive effect on the potential growth of the Hungarian economy. Faster growth may primarily stem from the stimulating effect of tax cuts on labour intensity, while employment may only rise slightly under current circumstances. At the same time, measures implemented to ensure funding for the personal income tax reform may damage investor confidence in the long term, an effect likely to dissipate most of the excess growth on the labour market. Consequently, we do not anticipate any significant improvement in potential growth in our forecast.

Inflation projection fan chart, uncertainty and the impact of alternative scenarios



GDP projection fan chart, uncertainty and the impact of alternative scenarios

(annual changes, seasonally adjusted and 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.)

	2009	2010	2011	2012
	Fact	Projection		
Inlation (annual average)				
Core inflation[1]	4.1	3.1	3.5	2.9
Consumer price index	4.2	4.9	4.0	3.3
Economic growth				
External demand (GDP based)	−4.2	2.1	1.9	2.0
Household consumption expenditure	−7.6	−3.0	2.8	4.0
Gross fixed capital formation	−6.5	−0.9	3.2	6.4
Domestic absorption	−11.5	−1.5	2.5	3.5
Export	−9.1	14.5	10.5	9.8
Import	−15.4	12.5	10.7	9.7
GDP*	−6.7	1.1	3.1	4.0
External balance[2]				
Current account balance	−0.5	1.3	0.3	0.1
External financing capacity	0.8	3.4	2.6	2.3
Government balance[2]				
ESA balance	−4.4	−3.8	−2.7	−3.1
Labour market				
Whole-economy gross average earnings[3]	0.6	2.0	2.2	5.7
Whole-economy employment[4]	−2.5	0.1	0.5	0.4
Private sector gross average earnings[5]	4.4	3.9	4.4	5.6
Private sector employment[4]	−3.8	−0.7	0.9	1.2
Unit labour costs in the private sector[4,6]	8.3	0.8	0.7	1.9
Household real income[7]	−5.8	−1.1	1.3	3.1

1 From May 2009 on, calculated according to the joint methodology of the CSO and MNB.
2 As a percentage of GDP. In our forecast we have not taken into consideration any risk from debt assumptions.
3 Calculated on a cash-flow basis.
4 According to the CSO LFS data.
5 According to the original CSO data for full-time employees.
6 Private sector unit labour cost calculated with a wage index excluding the effect of whitening and the changed seasonality of bonuses.
7 MNB estimate. In our current forecast we have corrected the data of household income with the effect of changes in net equity because of payments into mandatory private pension funds.
** Data are not adjusted for calendar effects.*

1 Evaluation of macro-economic data

Turnaround in the labour market, inflation stuck at 4%

A strong increase in global trade continues to boost domestic exports and, through them, the continued sluggish growth of Hungary's GDP. Although the output of sectors supplying domestic markets continues to decline, some sectors – typically those linked to household consumption – are showing signs of a turnaround that seems to be emerging earlier than expected. In line with this, in addition to dynamic growth in exports, domestic demand is hindering economic recovery to a lesser and lesser degree, and thus the structure of growth may become more balanced from the second half of 2010.

Lagging behind the turnaround in the business cycle, employment figures have been rising over the past quarters. For the time being, however, only export-related sectors are experiencing a recovery in the labour market. Along with higher employment, activity is also picking up. Consequently, the higher labour demand has not yet caused the high unemployment rate to drop. It is becoming increasingly obvious that the persistently loose labour market conditions are resulting in consistently negative impact on wages; as a result, private sector wage growth hit all-time low in the Hungarian economy in the past few months.

The gradual decline in inflation, which started at the beginning of the year, came to an end in the autumn. Although core inflation is at a historically low level, a significant rise in unprocessed food prices during the summer has been feeding through into the overall CPI.

1.1 Buoyant demand in Asia also affects Hungarian external demand through indirect channels

There has been no significant change in the domestic demand of developed economies. Post-crisis unemployment is stuck at a high level, with Germany being the only exception, while the instruments of economic policies adopted during the crisis in order to jump-start the economy and the impacts of these instruments are running into increasingly significant obstacles (e.g. substantial budget deficits, rising sovereign debt, base rates close to zero). Correspondingly, despite the promising H1 data, which were also supported by a turnaround in the inventory cycle, global economic indicators for the third quarter already suggest slower global growth.

Despite the slowdown in developed economies, global trade and hence Hungary's external demand have expanded dynamically. This trend is largely driven by exports to Asian economies which are experiencing strong growth in domestic demand. Although the weight of Asian economies in Hungary's exports is relatively small, these favourable growth impulses are being seen in Hungary's external demand as well, indirectly via German exports.

Over the short run, we expect this trend to continue. Global business activity is only likely to recover slowly in the quarters to come, whilst the share of Germany's exports in vigorous Asian demand is expected to grow further. This is supported by the fact that, despite the waning European recovery, the business activity indicators capturing the German industrial outlook recently remained at higher levels than before the crisis.

Chart 1-1
Developments in German exports after the onset of the crisis
(by target countries)

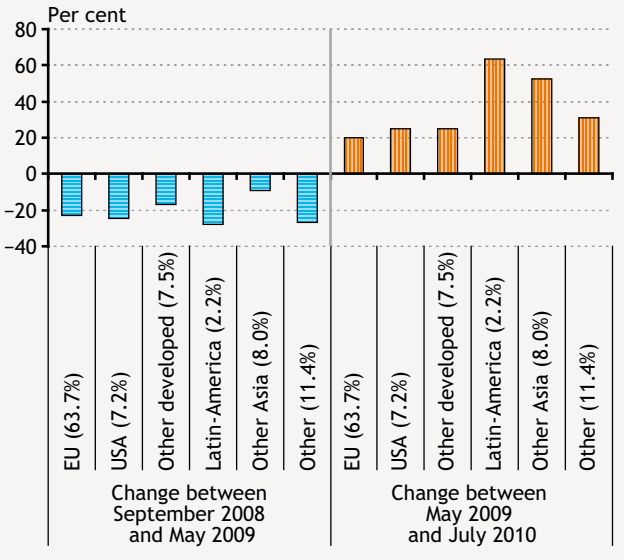
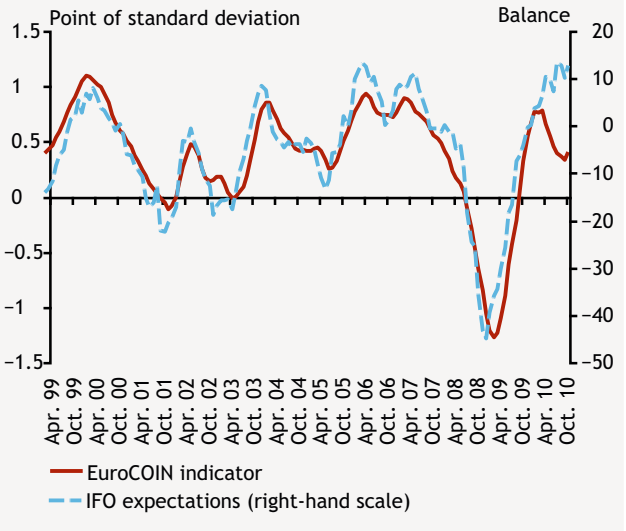


Chart 1-2
IFO expectations and the EuroCOIN indicator*

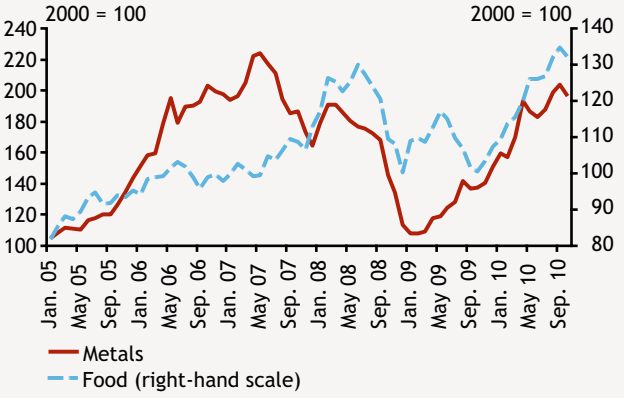


** The (New) EuroCOIN is a monthly indicator moving together with the trend (cleaned of short-run noise) of euro-area GDP growth. The indicator is computed by CEPR from monthly data with a dynamic factor model (http://eurocoin.cepr.org/).*[1]

[1] For more details on methodology, see: Altissimo, F., R. Cristadoro, M. Forni, M. Lippi and G. Veronese (2010): "New Eurocoin: Tracking Economic Growth in Real Time". *Review of Economics and Statistics*, 92 (4) (November), 1024–1034.

After the freefall seen in 2008, commodity prices increased significantly last year and have been on the rise ever since, due in part to enormous demand for commodities in emerging economies and in part to current worries about inflation, which have emerged in response to planned and actual monetary easing in advanced economies. Rising prices have been typical for a wide range of commodities. This year, unprocessed food experienced the most significant price increases, the extent of which is on par with the pre-crisis price explosion in 2007. Even though there have been no major shifts in commodity prices in recent months, they may remain anchored at a high level in the quarters to come, due to Asian demand that is expected to remain strong over the short run and consistently loose monetary conditions in advanced economies. This may exert increasingly strong cost-side price pressure on an ever larger number of items in the CPI basket.

Chart 1-3
World food and metal price developments
(2000 = 100, in EUR)



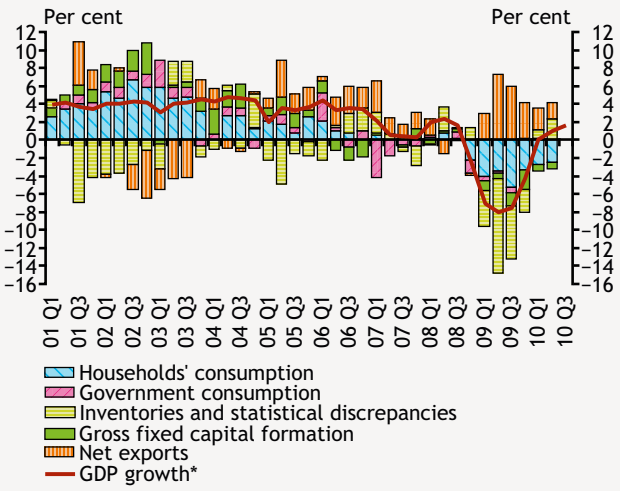
1.2 Signs suggesting a turnaround in domestic demand as well

Domestic growth continued to exhibit strong heterogeneity in the first half of 2010. In keeping with the upturn in German exports activity, Hungary's export sales – supported mainly by strong supplier connections – grew dynamically, while at the same time there was a general slump in the performance of sectors supplying the domestic market. Consequently, Hungarian GDP growth still falls behind the rates recorded by its regional competitors.

Available data from the third quarter suggests that Hungary's export sector continues to benefit from the brisk growth in global trade. Concurrently, after a long time, signs suggesting a turnaround in output were also discernible in the case of a few sectors supplying the domestic market.

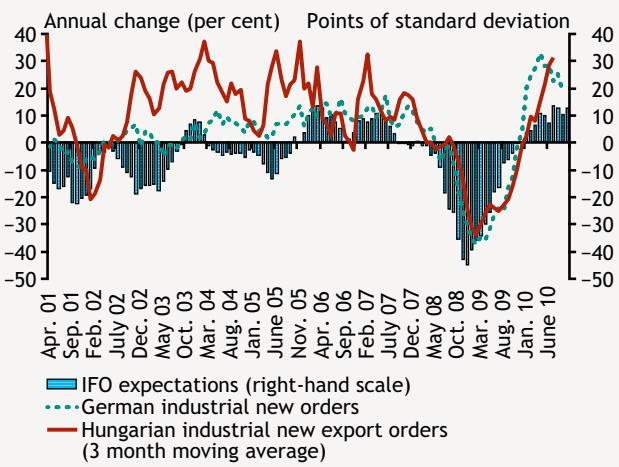
Industrial output also continued to grow dynamically in the third quarter. This production growth still can be attributed to developments in exports. Even though Hungary's direct export sales to Asia have been above average in recent quarters, it is still mainly through German exports that Hungary is benefiting the most from strong Asian demand.

Chart 1-4
Decomposition of GDP growth*
(annual rate of growth)



** We used the GDP data revised by Central Statistical Office during publication of preliminary Q3 data to illustrate the GDP growth, but we had only the unrevised data for the detailed breakdown.*

Chart 1-5
German and Hungarian new industrial orders and the IFO expectations index



Based on indicators of business activity in Germany and the volume of new orders in Hungary, industrial export sales are likely to grow vigorously in the months to come, albeit at a rate somewhat below what was seen in the first half of the year. In the years ahead, the relationship between German and Hungarian exports is likely to strengthen further, as a result of upcoming major capital investments, mainly involving the automotive industry.

The output of the services sectors shows a large degree of heterogeneity. The output of service providers closely linked to export activity (e.g. transport and telecommunication) has been rising gradually since mid-2009. By contrast, deteriorating portfolio quality, subdued lending, extra taxes and a lacklustre residential property market have been decreasing the value added of companies operating in the financial, real estate and other services sectors, all of which still posted growth last year.

In respect of sectors supplying the domestic market, the retail sector caused the biggest surprise. Following nearly four years of steady decline, sales increased mildly in recent months. It was primarily durable goods and fuel where the growth was significant. The former may be

Chart 1-6
Annual change of value added in market services
(seasonally adjusted CSO data)

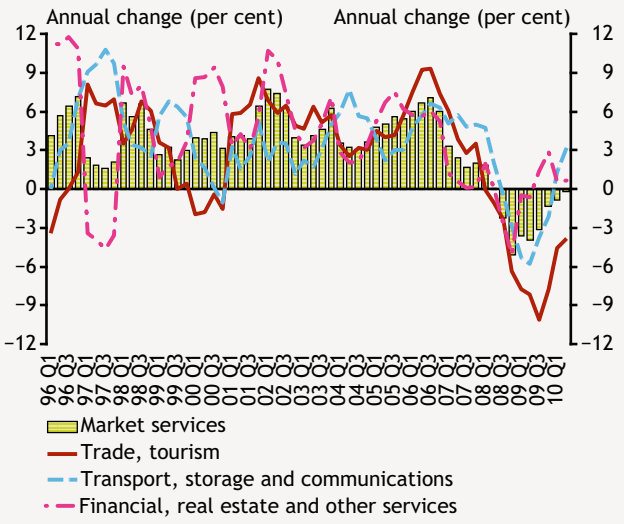
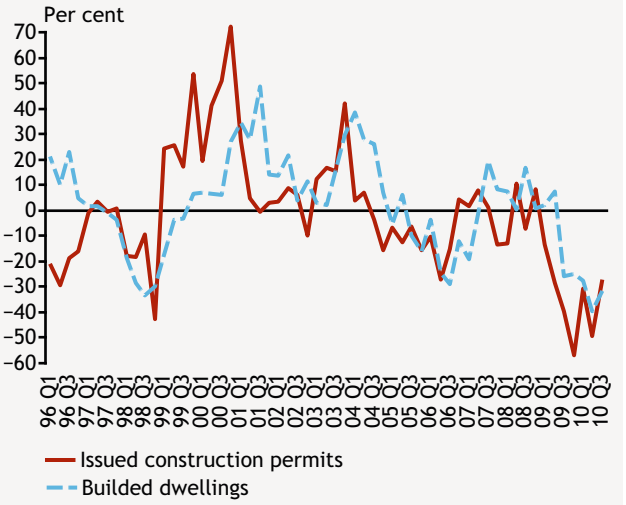


Chart 1-7
Changes in the number of newly issued construction permits and occupancy permits
(annual change, seasonally adjusted data)



attributable to the improved income outlook, which is also reflected in higher confidence indicators, while the latter is primarily due to an agreement[2] between the government and road transporters. Although this upturn in retail sales occurred somewhat earlier than expected, sales figures are expected to take off only if current household income rises at a notable rate, which is forecasted for early 2011.

The value added of sectors with a lower weight declined further. As a result of adverse weather conditions, poor crops affected an increasingly wide variety of products and consequently the value added of agriculture in 2010 will probably fall significantly behind the above-average output of the preceding two years.

Construction output fell further from an already low level in this year. The underlying reason for this is the ongoing downturn in the residential property market. The only new orders were projects financed from EU funds. Besides the bleak outlook on demand, increasingly difficult financing conditions also hit the output of the sector hard. The number of construction permits and occupancy permits also decreased further in the third quarter, and thus a turnaround is only expected to materialise in the second half of 2011. Despite the discouraging data on the residential property market, the construction industry experienced some slight growth in the summer. The underlying reason was construction and renovation by municipalities. Nonetheless, given the low number of new orders, production in this sector is still far off from achieving a lasting turnaround.

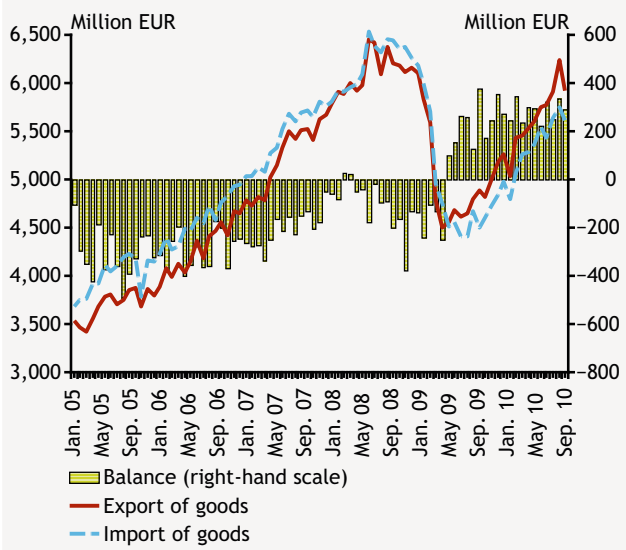
Shifts in the production of certain sectors are also clearly visible in changes in demand in the economy as a whole. Slow GDP growth continues to be driven by an increase in both net exports and inventory changes. At the same time, a turnaround in the third quarter is likely to be experienced earlier than expected for some components of domestic demand. Thus, from the second half of the year, domestic business activity will hinder domestic recovery less severely.

Exports sales have been rising in recent months, approaching the pre-crisis level. Import demand linked to exports also boosted imports, while, due to weak internal demand, the foreign trade balance stabilised at a high level. A slow turnaround in household consumption and corporate capital investment – primarily related to parts supplies for the Mercedes plant in Kecskemét – may lead to the gradual diminishing of the export–import gap; however, the growth contribution of net exports may still remain positive in the second half of this year.

According to national accounts data, household consumption spending declined further until mid-2010, whilst Q3 data on retail turnover suggest minor, earlier-than-expected improvements in household demand. Macro-economic indicators of household consumption

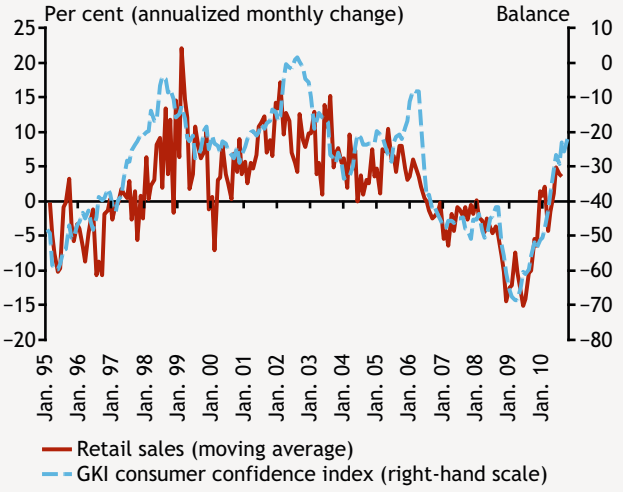
[2] Under the agreement effective 1 July 2010, road transporters are to refuel at national petrol stations, where fuel prices are typically higher than the regional average. In return, as of January 2011, they will be eligible for lower excise duties.

Chart 1-8
Value of external trade value and the trade balance
(seasonally adjusted levels, million EUR)



Note: Exports of goods have been adjusted for shifts between certain months, unavailable items and the activity of VAT residents. Imports of goods have been adjusted for purchases brought forward around Hungary's accession to the EU, the impacts of public warehousing in 2004, the effects of the purchases of Gripen fighter jets and Combino trams, as well as the activity of VAT residents.

Chart 1-9
Changes in retail sales and the consumer confidence index
(seasonally adjusted, annualised monthly index, MNB's seasonal adjustment)



show a rather mixed, sometimes conflicting picture regarding the consumption options of households. In the second quarter, savings in the sector rose markedly; while at the same time household lending has been decreasing for the entire year. Depreciation of the forint early in the summer increased the repayment burden on households with FX debts, which – along with a slower rate of growth of wages – reduced their disposable income. From a demand standpoint, household confidence and employment indicators were the only indices showing a clearly positive shift over the past quarters. Thus, in our opinion, the favourable changes in retail data since the summer are attributable mainly to improvements in the labour market and its outlook.[3]

Investment activity in the national economy declined further in the first half of 2010. Except for a few sectors implementing some major investment projects, the slowdown was widespread. Capital investment in the manufacturing industry picked up after falling for nine consecutive quarters, which was largely due to the ongoing construction of the Mercedes plant in Kecskemét. The decline in construction was stronger than earlier, the underlying reasons for which are the shrinking real estate market and the postponement or cancellation of investment projects related to governmental investment, which is unusual in election years.

Although capacity utilisation levels for the manufacturing industry are in line with the historical average, due to banks' continuing subdued loan activity, only the continuation of capital projects already in progress (Mercedes, Hankook) and those recently announced (Audi, Opel) will contribute to growth to a notable degree in the short run. In the quarters to come, investment activity in the service industry is likely to be restrained by prospects weaker than those of the manufacturing industry, as well as by tight credit conditions and significant extra taxes that have been imposed on certain sectors.

With external business activity picking up, the growth contribution of inventory changes was also positive during the second quarter. Statistics on inventories at current prices suggest that export-oriented sectors (i.e. the manufacturing industry) are in the process of replenishing their inventories, whereas inventories are being downsized in response to the subdued demand in the retail sector and poor crops in agriculture. Inventories are unlikely to rebound to their pre-crisis level in the near term, as uncertainty surrounding a pick-up in business activity and tighter credit conditions may prompt companies to manage

[3] However, it is important to note that retail statistics may have been distorted by individual items unrelated to household consumption in a statistical sense. Such items are e.g. a rise in the fuel consumption of road transporters and purchases of new vehicles by the police. If these impacts are excluded, the change in household consumption is probably less pronounced that what is reflected in retail data.

Chart 1-10
Capacity utilisation in manufacturing

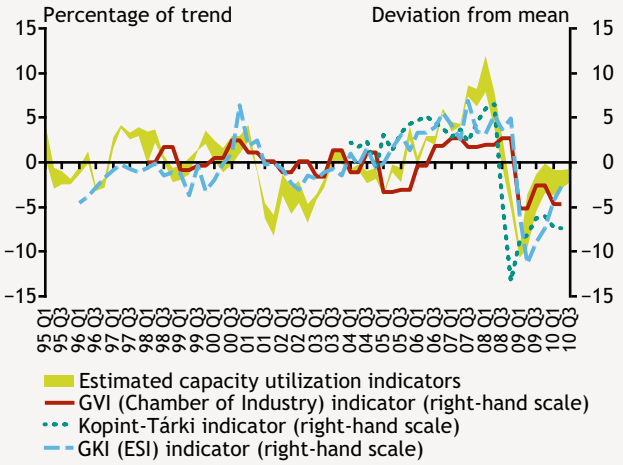
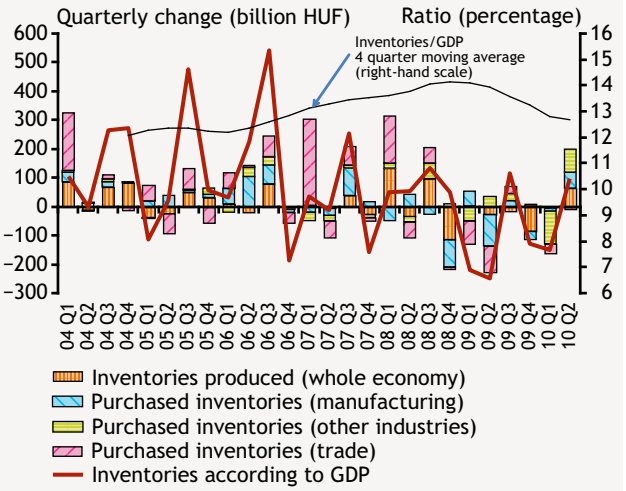


Chart 1-11
Changes in inventory based on current prices and GDP; inventory to nominal GDP ratio



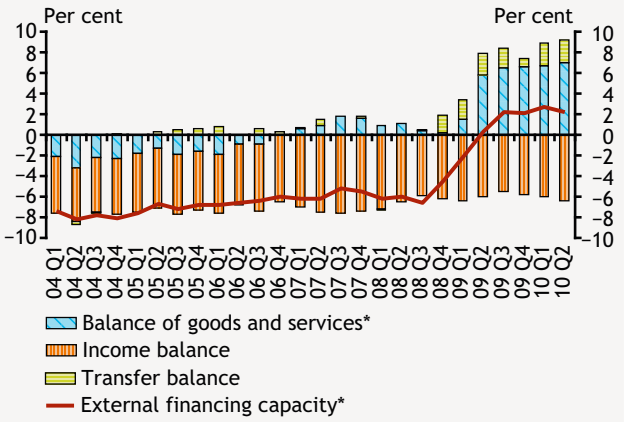
their inventories more efficiently. Accordingly, the growth contribution of inventory changes during the recovery may fall short of the growth loss resulting from inventory changes during the crisis.

In accordance with the sector's production-side output, the growth contribution of government consumption was mildly positive; the underlying reason for this was a rise in the numbers of employed in the 'Pathway to Work Programme'.

1.3 Hungarian economy continues to have a net saving position

Although Hungary's external financing capacity weakened somewhat in the second quarter of 2010, it remains significant, amounting to 2% of GDP (Chart 1-12). A slightly lower net saving position is mainly attributable to a consistent rise in the deficit of the income account. The real economic surplus and an inflow of EU transfers continued to make a substantial contribution to Hungary's capacity for external financing.

Chart 1-12
Components of external financing capacity
(seasonally adjusted, as a proportion of GDP)



** Adjusted by the difference caused by imports brought forward on account of 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 capacity does not necessarily equal the adjusted values of the external financing capacity.

The surplus of the seasonally adjusted real economic balance slightly exceeded that of the previous quarter, amounting to 7% of GDP. The surplus of the transfer balance was still high in the second quarter, the underlying reason for which was a stronger inflow of EU funds.

The income balance deficit has been rising since end-2009, which is linked to a rise in the estimated profits of foreign-owned companies.[4] In 2009, dividends which are generally approved in the first half of the year dropped markedly, by close to 15% on a year earlier. Data for 2010, however, suggest that the dividends approved will not decline any more. Debt-related net interest expenses did not change materially in the second quarter of 2010.

A consistently high external financing capacity was the outcome of the fact that the increase in the general government's financing needs was counterbalanced by a corresponding rise in the private sector's net savings. Contributors to a higher budget deficit were rising expenses (e.g. hospitals, one-off support for the Hungarian State Railways and the supplementation of the income of public sector employees) and lower income (reduction in social taxes and contributions, the widening of personal income tax brackets, lower VAT income due to lower consumption). At the same time, however, the majority of these factors – along with stronger use of EU transfers – increased private sector income and thus indirectly the financial savings of corporations and households.

The rise in the financing capacity of the household sector in particular was sizeable in Q2, which is difficult to explain on the basis of the information available to us on developments in household income and consumption. As we only have few data on some forms of savings (FX-denominated cash, savings deposited abroad), it is probable that another contributor to the significant increase in financial assets was the fact that part of the savings held abroad was brought home due to the uncertainty caused by the crisis. In 2010 Q2, further major contributors to the increase in net savings were a marked drop in loans from financial institutions, due to a change in the regulatory environment and the strong depreciation of the forint.

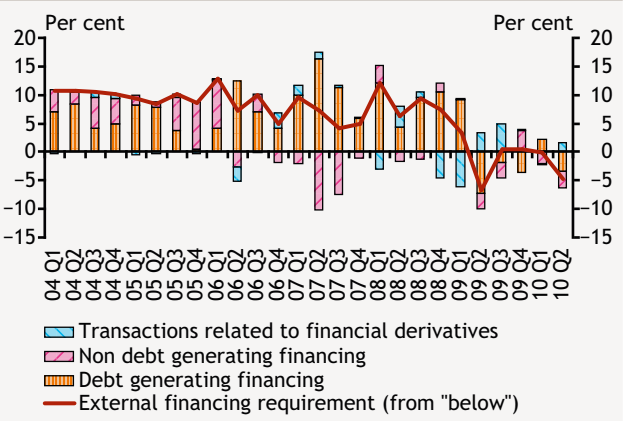
[4] Data on income flows related to direct capital investments in the Balance of Payments Statistics are based on estimates. The estimate will be replaced by data based on corporate reports next September.

Developments in financing

In 2010 Q2, net direct capital outflows continued, which was also mainly due to seasonal impacts, in connection with dividends disbursed in the second quarter. The outflow of non-debt-type funds was further driven by the fact that non-residents reduced their investments in equity portfolios in Hungary. By contrast, there were further inflows of new FDI and intercompany loans.[5]

In addition to significant net lending and the withdrawal of direct capital, the outflow of debt-type funds was sizeable in the second quarter. Related predominantly to the general government, the reduction in net debt was the outcome of an increase in foreign currency reserves due to EU transfers. In addition, the external debt of the banking sector also declined slightly in the second quarter.

Chart 1-13
Forms of financing as a percentage of GDP



Note: Financing requirement is calculated by the "bottom-up" approach and is equal to the sum of the external financing requirement and the error and omission item of the balance of payments statistics.

Despite the outflow of debt-type funds, the net external debt rate rose further in response to a weaker HUF exchange rate, amounting to nearly 58% of GDP. Although there was some moderation in euro-denominated debt, due to exchange rate changes, practically all debt indicators increased further, with gross external debt and net external liabilities approximating 120% of GDP and 115% of GDP, respectively.

Box 1-1
Impact of the revisions in the balance of payments

In keeping with earlier practice, on the basis of the corporate reports received and as a result of some methodological developments there were major revisions in the balance of payments statistics published at the end of September. The most significant change in the current account balance was brought about by the new method of the estimation of transportation costs (adjustments for the CIF-FOB parity). As a result, the value of goods imports recognised in the balance of payments and in the GDP rose by EUR 300-500 million, with a resultant corresponding decrease in the real economic balance. Overall, as a result of the revisions, since 2004 the external financing requirement and the deficit of the current account rose by an annual 0.3% to 0.7% of GDP. However, the changes did not affect the main trends in the external financing requirement. There was no similarly consistent change in the external financing requirement calculated with the bottom-up method. The fact that, as a result of the revisions, the size of 'Net errors and omissions' has become lower in respect of recent years suggests more consistent data.

The revisions affected the structure of financing and portfolio statistics to a greater extent. The main reason for this change is that based on corporate reports (available since 2008) inferences can be made to commercial loans. Accordingly, MNB provided new estimates for commercial loan receivables and debts regarding the 2004-2007 period. Overall, gross debt excluding intercompany loans grew by 5% to 7% of GDP between 2004 and 2007; by contrast, data for 2008 and 2009 suggest a mild, 0.5 percentage point rise on average relative to earlier data. Net external debt rose by approximately 3% of GDP between 2004 and 2007; however, in 2008 and 2009 it decreased by close to 0.6 percentage points relative to preliminary data.

The announcement of a multinational company operating in Hungary in its annual report that it had transformed its financing structure led to significant revision. In connection with the structural changes, the foreign owner appreciated the value of the company, as a result of which FDI stock increased. Subsequently, a significant part of equity-type liability was replaced by intercompany loans. As a consequence, the structure of the inflow of FDI changed significantly: in 2009 Q4 equity-type liabilities fell markedly by EUR 4.4 billion, while intercompany loans rose by HUF 4.7 billion compared to data disclosed earlier.

[5] The main underlying reason for this development is the management of losses, i.e. the replenishing of retained earnings, rather than new investments.

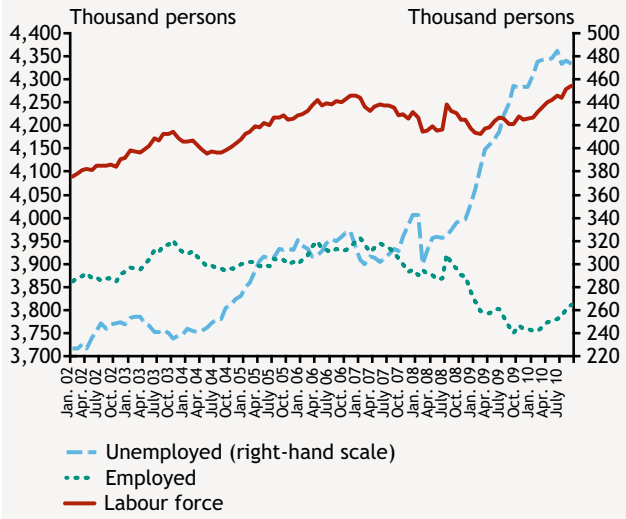
Recognition of the above transaction altered the overall picture regarding financing trends since the onset of the crisis: while there were heavy withdrawals of funds within the company group since the outbreak of the crisis, on the whole, intercompany loans are increasing markedly and outflows of non-debt generating liabilities affect 'traditional' FDI.

1.4 Rising activity, strengthening employment

Lagging somewhat behind the turnaround in the business cycle, there was also a reversal in private sector employment. In conjunction with rising labour demand, and due, predominantly, to government measures tightening the rules of retirement, activity has also been picking up since the end of last year, and thus, for the time being, higher employment has only resulted in unemployment stabilising at a high level.

Chart 1-14
Employment and unemployment in the national economy

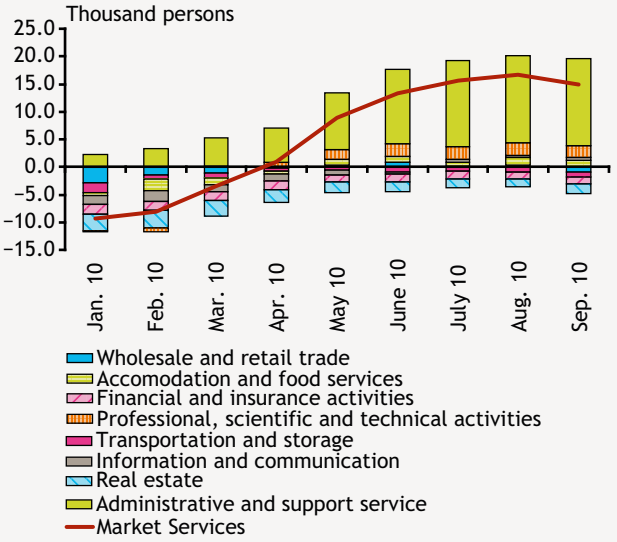
(seasonally adjusted monthly data)



In the private sector, the number of employed rose in both the manufacturing industry and the market services sector. For the time being, however, the pick-up in labour demand is due, almost entirely, to the improved output of exporting companies, while the sectors supplying the domestic market continue labour-hoarding. An indication of this is that, in the case of service providing industries, net rise in the numbers employed in the first half of the year was due, nearly entirely, to the activity of temporary staffing

Chart 1-15
Developments in employment in the market services sector

(seasonally adjusted monthly data December 2009 = 0)



companies;[6] excluding their activity, the numbers employed in the market services have not changed substantially, which coincides with information provided by labour surveys. This means that rise in the numbers employed in the services sectors is clearly attributable to manufacturing industries. Public sector headcount has been broadly flat in recent months, consistent with our understanding that public sector employment is likely to have reached a peak level early in the summer.

The reversal in the business cycle and in the labour market has been corroborated by other employment indicators from the manufacturing industry. In conjunction with higher output, the proportion of part-time employees and the hours worked have reached or even exceeded the pre-crisis level over the past months. Accordingly, only the employment of new labour will be able to satisfy a further rise in labour

[6] Temporary staffing companies, which – statistically – form part of the services sector and which pay the labour they hire, have outsourced a large number of mainly low-wage blue collars in recent months.

Chart 1-16
Number of working hours and part-time workers in the manufacturing sector

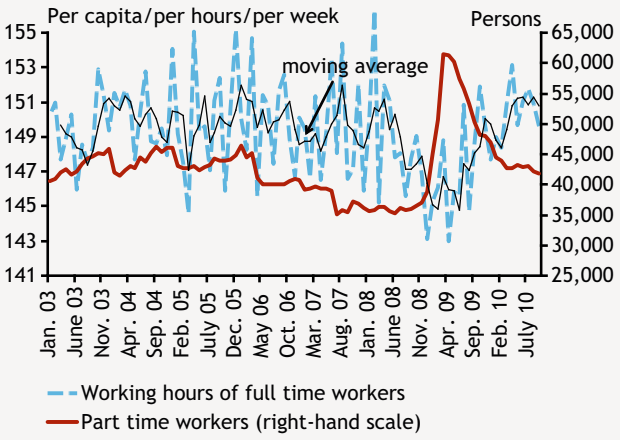
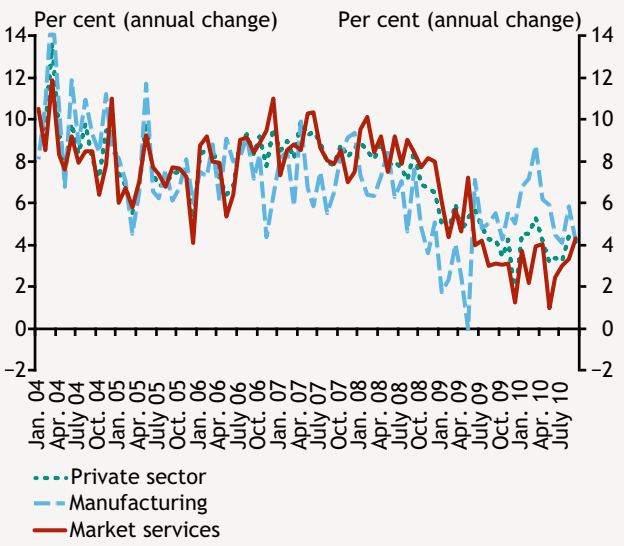


Chart 1-17
Average gross earnings in the private sector
(annual index, seasonally adjusted data)



demand. In the short run, export-oriented sectors are likely to continue to drive employment in the private sector, while, in the case of market services, due to the sizeable labour-hoarding, a pick-up in demand may, initially, materialise without any change in the numbers employed.

Loose labour market conditions are curbing wage growth. Consistent with this, the wage index of the private sector slowed further in the third quarter and, falling well behind our expectations, flattened out at a historically low level of 3.5%. The impact of a different business cycle is still reflected in wages. Wages in the manufacturing industry, where profitability has grown faster, exceeded those in the market services sectors.

Box 1-2: Alternative indicators for measuring wage inflation

Data pertaining to the gross average private sector income is one of the macroeconomic indicators with the highest variability both over time and cross-sectionally. One of the reasons behind this is that the private sector is composed of heterogeneous sectors, which each establish regular wages, pay out premiums and change the size and composition of their labour force at different times. Seasonal adjustment would in theory smooth out some of this volatility, but seasonality is not entirely stable due to the abovementioned behaviour. Besides, seasonally adjusted data may be substantially revised in light of new information received. The volatile wage index, the outliers observed in certain months and the revisions thereof render the estimation of not only short-term wage developments difficult, but also that of the underlying developments of the month under review and of the extent of inflationary pressure exerted by wages. To tackle this problem, we wish to glean valuable information from the cross-sectional data of sectoral wages and use it to manage outliers. The alternative wage inflation indicators thus can better reflect underlying developments.[7]

The cross-sectional volatility is illustrated by the following histogram showing the wage indicators of 79 sectors for September 2010 (wage index adjusted for changes in labour force composition). While the seasonally adjusted annual wage index was 4.1% and traditional wage inflation was 4%, it is apparent that the change in wages in half of the sectors represented was between −1.0% and 2.0%. As a result, both the unweighted median and the median weighted by employment were lower than wage inflation. Wage inflation exceeding 10% in 12 sectors pulled the average upwards.

We calculated alternative indicators using seasonally adjusted gross average wages from 79 sectors. As seasonally adjusted month-on-month indices remain highly volatile, we used year-on-year indices.

[7] We use the method presented to measure short term inflationary pressure on prices, presented in greater detail in Box 1-2 of the November 2009 *Report on Inflation* and the study soon to be published.

Chart 1-18
Histogram of wage inflation in various sectors in September 2010

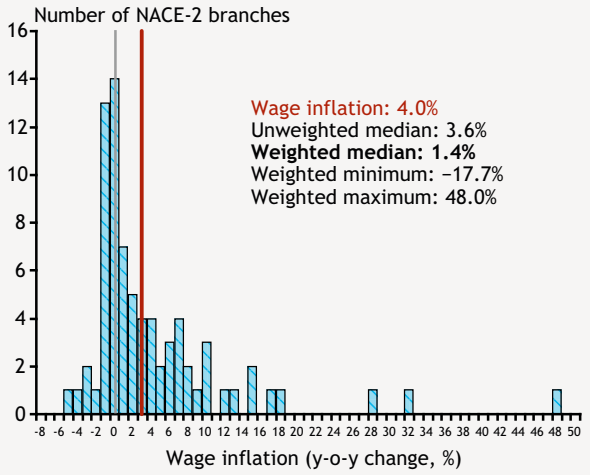
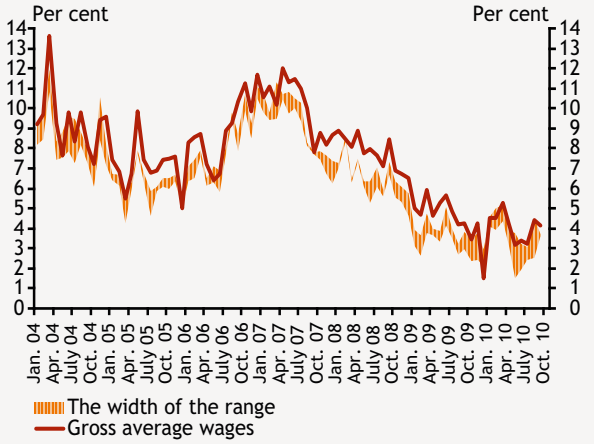


Chart 1-19
Developments in alternative wage inflation indicators

(based on seasonally adjusted monthly data)



The indicators generated by us performed well in filtering out outliers, thereby also smoothing out base effects in the annual index. We further mitigated the volatility and revision of the adjusted data by not using the current monthly workforce figure to produce the data series for the entire private sector, but rather the previous year's annual average workforce figure instead, similarly to the consumer price index. As this method filters out the change in the size of the workforce and in its composition, we can consider these indicators as wage inflation indicators.

We examined three indicators in total, forming a band – similar to inflation – from them, which not only illustrates the uncertainty of developments, but also highlights the outlying nature of the traditional wage index, falling far outside the band. The simplest indicator is the median of the seasonally adjusted wage indices of the 79 sectors. The advantage of the indicator is its simple interpretability and resistance to outlying data. But the volatility and revision of this indicator proved substantial in the course of examinations.

For calculating the so-called trimmed mean, we align the annual indices of sectoral wages and trim some of the lowest and highest values before weighting the remainder to an aggregate index. The extent of trimming, in other words the amount we omit from the bottom and top of the wage index distribution is predetermined and determined in proportion to weightings (i.e. employment). The extent of this can be ad-hoc or tied to specific criteria.

The third indicator is the so-called Edgeworth weighted index, where the weighted average is determined in a way that sectors with more volatile wage dynamics receive a smaller weighting, and those with less volatile wage dynamics receive a larger weighting. Accordingly, the employment weightings of sectors are multiplied by the reciprocal of the standard deviation of the wage dynamics measured over the past 24 months. We then aggregate the individual sectors with the modified employment weightings into the whole of the private sector.

With the methods presented above, we obtain a band with a width of 0.5-1.0 percentage point on average (Chart 1-19). The band is determined by the lowest and highest values for the month under review. We also use the histogram formed by the sectoral wage indices of the month under review (Chart 1-18) for interpreting the band.

The advantage of the three indicators presented above is that as a result of the seasonal adjustment of fresh data, the time series' past is revised to a smaller extent than the time series of aggregate gross income or that of a HP-filtered data, which has a high level of endpoint uncertainty. The Edgeworth index and the trimmed mean have the lowest level of revision among the examined indicators, and the median's revision is lower than that of the traditional gross average wage time series. As these data are only revised slightly, the assessment of fresh data does not change significantly even several months later. The revisionary characteristic is correlated with the fact that if newly registered data deviates significantly from previous months' figures, the traditional wage index can only allow us to conclude on whether the data was outlying or whether the dynamics have really changed only months after the fact. The band formed from the

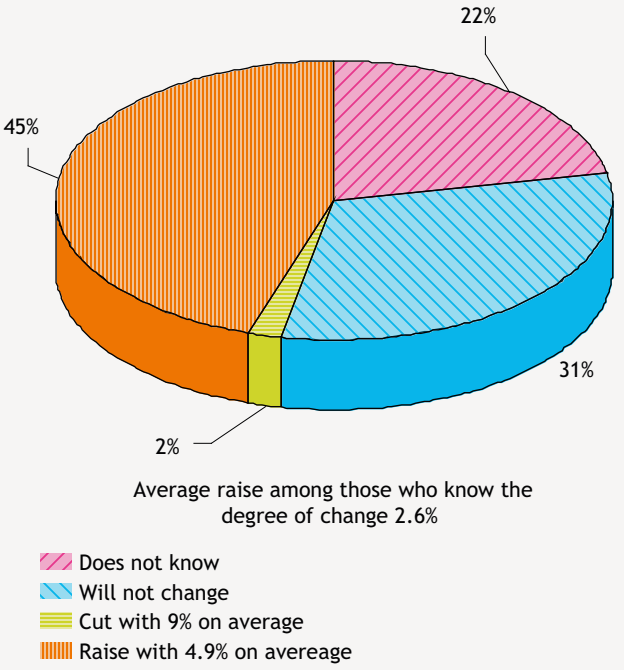
alternative indicators, however, can help clarify the abovementioned dilemma in real time.

Take, for instance, March 2010, when the seasonally adjusted data registered showed an annual wage dynamic of almost 7%. Although the top of the band formed from alternative indicators approached 6%, the band widened compared to previous months, and the bottom value was around 4%. This allowed us to conclude that the high wage index in March was presumably an outlier, affecting only a portion of sectors. The following months validated this assumption: the wage index for March was revised to around 5% and was followed by a progressive slackening.

Regarding the short-term prospects, the government's measures affecting the personal income tax regime have created the greatest uncertainty. As a result of the government's measures affecting the personal income tax regime, taxes on wages will decrease on average, especially in the above-average income brackets. Given the current loose labour market conditions, this impact – particularly in the higher income brackets – may allow for the possibility of reaching a modest wage agreement. This is supported by surveys on planned wage increases in the next year. According to these, more than 40% of the employers plan to raise wages in 2011, while one third plan to keep wages unchanged in order for them to be able to continue operations. At the same time, a large proportion of respondents – more than one fifth – is still uncertain about the wage development; which is probably highly conditional on the next year's tax changes.

In case of wages lower than average, the upward effect of the minimum wage increase might be decisive, thus we count on a narrowing wage scale in the next year.

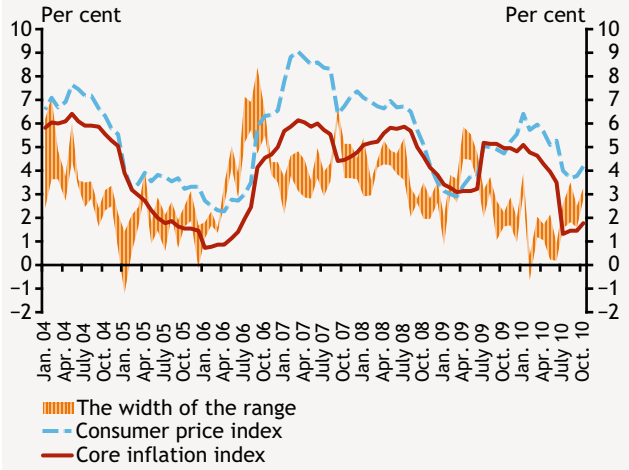
Chart 1-20
Expected wage changes in 2011, DGS GLOBAL survey October



1.5 Food price shock has reversed the trend of declining inflation

In recent months, despite historically low core inflation, downward sloping trend of inflation, which started at the beginning of this year, has ceased. The annual CPI, which is still higher than the medium-term inflation target, has become stuck at around 4%. The break in the disinflation trend is clearly due to a massive rise in the prices of an increasingly wide range of unprocessed food, while the impact of the depreciation of the forint exchange rate on consumer prices has so far been weaker than expected.

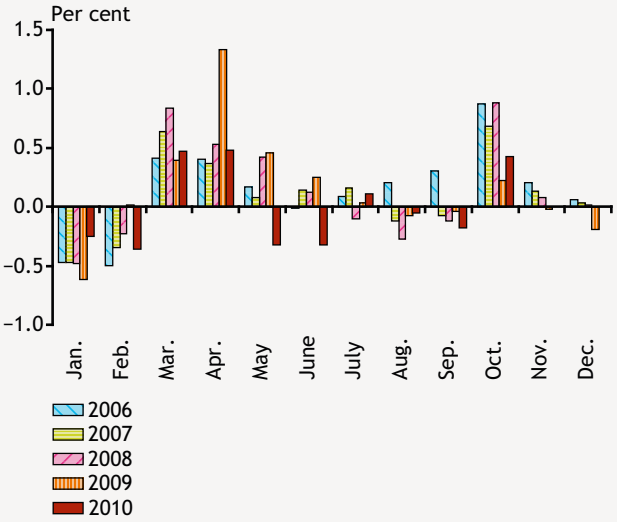
Chart 1-21
Consumer price index, core inflation and developments in underlying inflation indicators



With the base effect of the indirect tax hike last year dropping out, decline in the annual inflation was noteworthy in the summer. Lower prices in response to weak domestic demand affected a wide range of goods, which led to historically low levels in both core inflation and the indicators measuring inflationary pressure. Despite weak demand-side inflation effects, the decline in inflation has come to a halt in recent months, with the annual rate remaining above the level from before the indirect tax hike.

Insufficient market demand has probably played a key role in the inflationary impacts of the depreciation in the

Chart 1-22
Seasonality of traded goods' price changes
(seasonally non-adjusted, excluding VAT, month-on-month change)



summer falling short of our expectations. Price increases in response to depreciation were extremely moderate in nearly all groups of products (durable goods, processed food), so it can be assumed that the negative output gap reduced both the magnitude and the speed of the pass-through of a weak exchange rate into prices. This is also underpinned by international evidence. The most affected traded goods' prices mostly declined until September – except for in July – while the price dynamics in October were also far below the historically typical levels.

The price of processed food was stable until the end of summer, similarly to the period since onset of the crisis. By contrast, there were sharp increases in the prices of unprocessed food, which affect those of processed food. Historical evidence reveals that manufacturers will soon accommodate increasing costs arising from higher commodity prices. For the time being, the impact of such pricing-in is – relative to 2007 – moderate. Based on this, our assumption is that most of the pass-through of the price shock into the prices of unprocessed food has yet to materialise, which is also corroborated by data for

Chart 1-23
Pass-through of agricultural prices to consumer prices

(change between June and October in 2007 and in 2010)

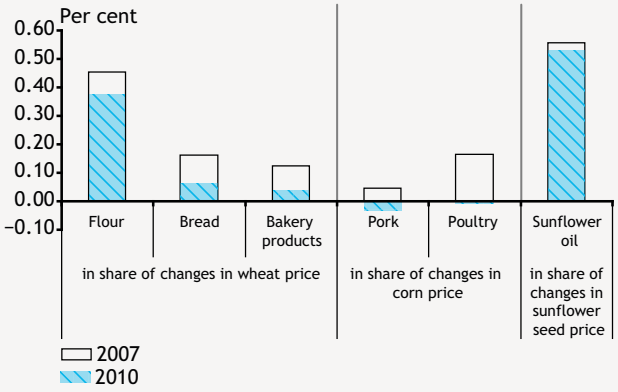
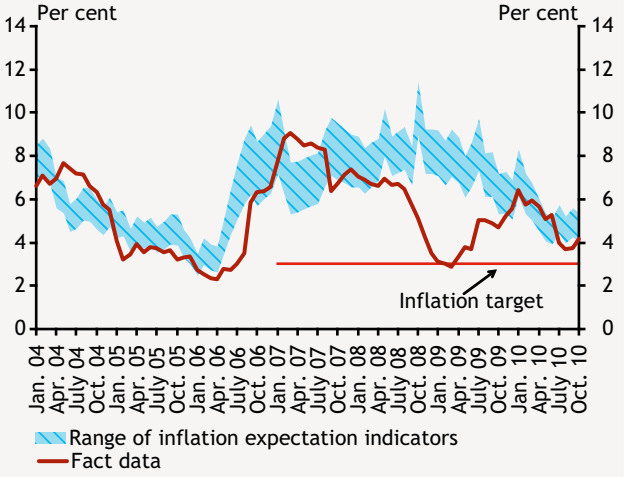


Chart 1-24
Developments in inflation expectations*



** MNB estimate.*

September and October. Core inflation is likely to be shaped predominantly by changes in the prices of processed food.

As for the pricing of products where there was no cost-side pressure, inadequate domestic demand exerted strong downward pressure. As a result, inflation in market services has remained at a historically low level over the past months. Given the low level of household consumption and the seasonality of price adjustment, no reversal is likely to occur in inflation for this group of products until the end of this year.

Despite a rise in global energy prices in the first half of the year, no inflationary impact has been exerted on domestic – regulated – prices over the past months. The main underlying reason for this is that the government declared a moratorium on prices with effect from 1 July, which may – in the short run – prevent the rise in commodity prices from passing-though into consumer prices. The prolongation of the gas price subsidy scheme until the end of this year has a similar effect.

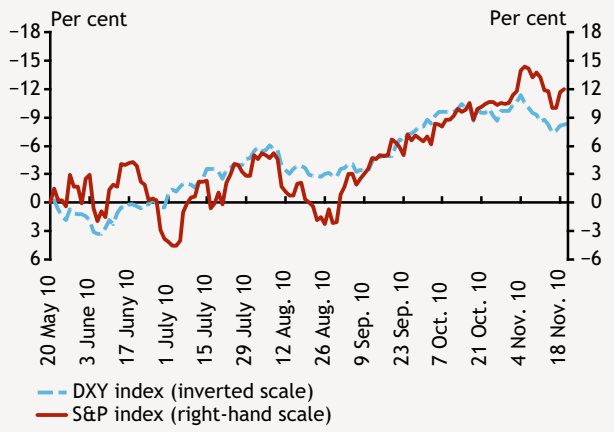
The favourable trend in the inflation expectations of the households that had been going on for nearly one and a half years came to a halt in the past months. Our surveys show that inflation expectations have been 4 to 5%, above the medium-term inflation target since early summer. The end of downward trend in inflation expectations also represents a risk to medium-term inflation.

2 Financial markets and lending

2.1 Concerns over indebted countries have strengthened

During the 3 months since publication of the last Report, global market sentiment and hence major market indicators were first shaped by expectations regarding the Fed's new quantitative easing, while during the last couple of weeks they were rather influenced by mounting concerns about the euro area. The new US monetary stimulus resulted in considerable weakening of the dollar. As regards the prices of risky assets, trends are not completely consistent. The new monetary stimulus, which the markets had taken for granted more and more, together with companies' better-than-expected profits in the ongoing reporting season affected the equity markets favourably. Another favourable development was that the sovereign risk premium of most countries declined and that, although to a lesser extent, emerging market currencies also appreciated somewhat. Worries about the debt path of the Mediterranean countries, however, came to the fore again in the past weeks, which not only led to a significant rise in their yield premia, but also pared somewhat the favourable price effects of the Fed's stimulus.

Chart 2-1
Changes of the DXY dollar index and the S&P stock index in the past 6 months



Note: Falling dollar index denotes the depreciation of the dollar.

Hungary's risk assessment was mostly affected by developments related to the budget for 2011, along with global market sentiment. The Government's commitment to the budget deficit had a positive impact on the country's risk assessment in the first half of the past quarter, which was reflected in both the decreasing risk premium and the appreciating forint. Since the announcement of the Government's second action plan and some details of next year's budget, however, Hungary's assessment has deteriorated. News on the planned changes of the pension system resulted in a rise in long-term government bond yields.

The Fed decided on quantitative easing, while emerging countries apply various tools to control capital inflows

Expectations of the Fed's second round of major quantitative easing built up gradually during the period under review. According to the statement the US central bank will buy government securities worth USD 600 billion by June 2011, besides the reinvesting its maturing securities holdings of USD 250 to 300 billion. The announcement of the slightly larger-than-expected package led – temporarily – to an even weaker dollar and a rise in share prices. Opinions are divided over the efficacy of this quantitative easing strategy, as reflected – besides the criticism of some European and Asian politicians – in the recent comments of several central bankers and renowned economists.

Japan also decided to adopt further measures aimed at invigorating the economy. The government announced the implementation of a package equal to USD 55 billion. In September, the Bank of Japan announced the introduction of a new loan facility with a maturity of 6 months, then in October, in addition to a symbolic rate cut (from 0.1 to a band of 0 to 0.1%), unveiled the details of an asset purchase programme worth approximately USD 60 billion.

Concurrent with an increasing likelihood of quantitative easing in the US and the weakening of the dollar, attention has recently been focused on the 'currency war', as dubbed by the media, i.e. a phenomenon of competitive devaluation. Capital is flowing from countries with their base rate persistently at close to zero which are implementing quantitative easing to countries with higher interest rates. Some of the latter countries are adopting various administrative measures to prevent capital flows (e.g.: Brazil, South Korea and Thailand have, for instance, recently introduced taxes to be imposed on inflows of portfolio capital). Countries with a pegged exchange rate regime, mostly China, are under mounting foreign policy pressure (mainly from the US and Europe).

In light of this, it is hardly surprising that one of the hottest topics at the IMF's general meeting and the G7 and G20 summits was the issue of exchange rates. Although official communication expressed co-operation, so far no actual measures have been taken. One favourable development is, however, that the central banks of a number of emerging countries have taken steps to create circumstances facilitating the appreciation of their currencies.

Some European central banks seem more inclined to tighten monetary policy

Unlike the aforementioned two developed market central banks (USA, Japan), the European Central Bank has offered no indication of its intention of easing; on the contrary, steps to discontinue the use of extraordinary instruments are likely to be taken in a few months. In line with expectations, the central bank left its base rate unchanged during the period reviewed. Central bankers agree that, consistent with earlier expectations, recently published macro-economic data confirm that the rate of recovery will remain positive and inflation will remain moderate. Rising commodity prices, potential protectionist measures and unfavourable developments in global imbalances pose downward risks. Regarding monetary policy instruments, the central bank reassured market actors that its tenders offering unlimited liquidity will remain in place at least until mid-January. A promising development is that only EUR 135 billion was rolled over from the EUR 225 billion repaid on maturing long-term refinancing operations before the end of September by commercial banks in the euro area, compared to market expectations of around EUR 175 to 200 billion. As a result, excess liquidity in the system dropped significantly, which led to rising euro money market yields. The Governing Council is likely to issue guidelines on the termination of the extraordinary instruments at its December meeting.

Renewed worries about peripheral countries prompted central banks to purchase government bonds again.[8] Although the tightening cycle may start before the phase-out of the extraordinary instruments, based on the most recent communication, most analysts expect no change before the end of next year.

In line with expectations, the Bank of England left its base rate unchanged and disclosed no new information on its non-conventional measures. Although the policy rate was raised by 25 basis points (to 1%) in Sweden, both the Swedish and the Norwegian central bank revised down their interest rate projections, suggesting that tightening will be slower than expected earlier.

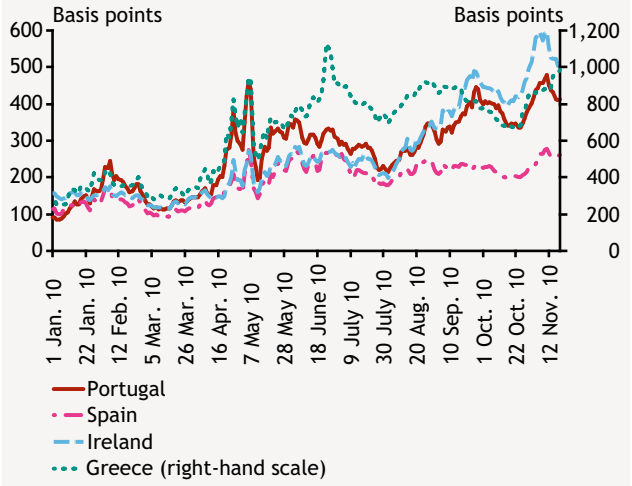
The monetary policy stance of the central banks in the CEE region suggests tightening, despite the fact that there has been no increase in the base rate since the last Report. The best example of this stance is the Polish central bank, which raised the reserve requirement ratio from 3% to 3.5% in October, although the rate hike – as opposed to earlier expectations – did not take place in November due to capital inflows and the appreciation of the zloty. Several decision-makers at the Czech central bank emphasised the increasingly imminent necessity of tightening.

Renewed worries about peripheral countries in the euro area

Investors' worries about the fiscal stability of some peripheral countries in the euro area flared up again in recent months, which was reflected in the widening of yield spreads for these countries. This was not a continuous trend, but rather came in successive waves, and intensified only in the past couple of weeks. In September, only Irish and Portuguese sovereign risk premiums rose significantly (by approximately 160 to 180 basis points); in the case of the former, the burden of the bank consolidation on the central budget not only resulted in a rise in the risk premium, but S&P also downgraded the country's sovereign debt. In the first half of October risk premia of the peripheral countries declined, whilst in the past weeks a significant rise in yield spreads took place. The intensification of fears was mostly related to Ireland, as a result of which

[8] Along with the establishment of the European Financial Stability Facility and approval of the EU/IMF loan package to Greece, the ECB announced in May that central banks would purchase government securities if necessary; the volume of purchases was significant only at the end of spring.

Chart 2-2
Five-year CDS spreads of selected euro-area member states



the country had to apply for credit via the European Financial Stability Facility, although its financing is secured until the middle of next year. The widening of peripheral yield spreads has further been fuelled by concerns that Spain and Portugal may have to follow suit. The former, although it is in a better financing situation, can be considered more important in terms of systemic risk.

Another likely cause of rising premia is that trust in the viability of the current community support scheme has been weakened by disagreements which emerged between the member states in the course of the working out of a new scheme based on a more solid legislative mandate. Finally, leaders of the euro area decided to incorporate the new European financial support mechanism, which also specifies penalties to be imposed on the member states that fail to comply with the criteria, into the Treaty of the EU. Details are likely to be worked out by December. The earliest effective date is 2013, when the mechanism announced in May will expire.

Country-specific events also affected asset prices in Hungary

In addition to global sentiment, country-specific factors also significantly affected domestic asset prices. In the first half of September, the government's communication ruling out the continuation of co-operation with IMF had an adverse impact on Hungary's risk perception. Subsequently, a change in rhetoric regarding the budget deficit and oral commitments, made on several occasions, to a tight fiscal policy resulted in a substantial improvement. This may also be due to the fact that, in light of recent communication, market participants expected the announcement of expenditure-side measures following the municipal elections.

The next important national event was the announcement of the Government's second action plan in mid-October. Although there was no adverse market response on the day of the announcement, domestic instruments started to underperform the next day and several analysts' opinions voicing criticism were disclosed in succession.

Another event with national relevance was the announcement of the baseline figures of the 2011 budget. Analysts pointed out again that although, in the short run, the measures would facilitate the meeting of the deficit target, in the medium term, they posed a threat to fiscal sustainability; the transformation of the pension system simply postpones the government's liabilities. Subsequent to its most recent review, the IMF established that there were no structural measures engineered to reduce expenditures, and pointed out that the measures might erode investor confidence. The credit rating agency S&P seems to share this opinion. Although it has not changed the rating of Hungary's sovereign debt (i.e. it confirmed Hungary's BBB- rating with a negative outlook), it pointed out in a public announcement that unless the government put forward a credible medium-term fiscal strategy, downgrading may follow. In the last days of the period the governing party's plan to cut the budget of the Fiscal Council also received an unfavourable reaction from analysts.

After a temporary improvement Hungary's risk assessment deteriorated again after mid-October

Hungarian CDS (credit default swap, insurance against sovereign default) prices declined by 20 basis points during the period reviewed. Although this is slightly less than the average reduction in the CDS of other emerging European countries with similar CDS levels to that of Hungary (Romania, Bulgaria, Croatia, Latvia and Lithuania), Hungary's relative perception did not change materially considering the whole review period. The CDS price of the regional competitors in a narrower sense (Bulgaria, Romania), however, fell more markedly than Hungary's by around 20 basis points, and thus Hungary's position has deteriorated relative to these countries.

Looking at the changes of Hungary's position within the period reveals the impact of country-specific factors. Before early September Hungarian CDS prices increased at a rate higher than average, while between mid-September and early-October the country's relative position improved significantly. Since the announcement of the second action plan in mid-October, however, Hungarian CDS prices have risen again relative to other countries' average.

Chart 2-3
Five-year CDS spreads of selected Central European countries and the iTraxx Central European composite index in the past 6 months

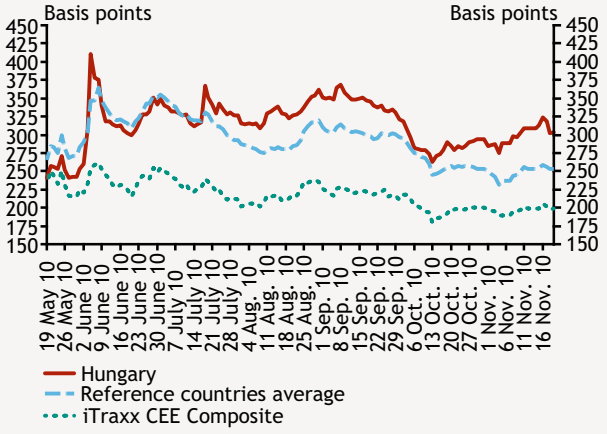
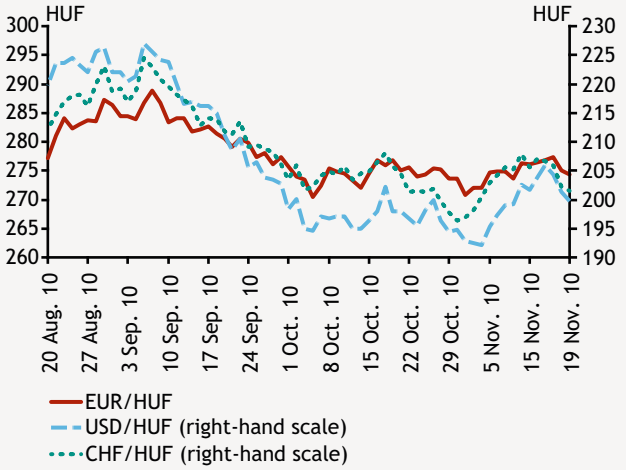


Chart 2-4
Developments in the exchange rate of the forint vis-à-vis the euro, the dollar and the Swiss franc



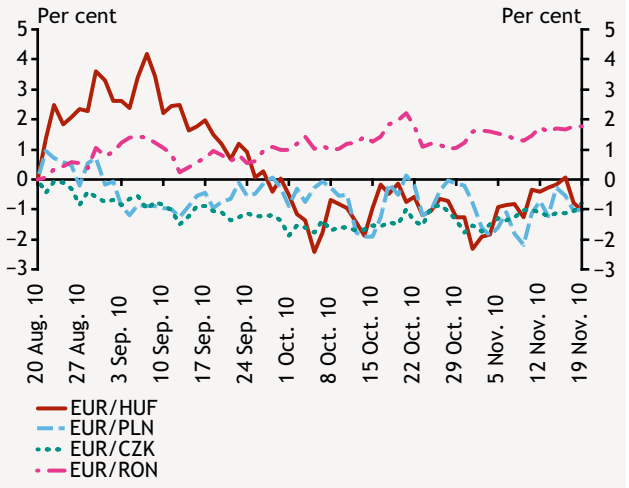
If we take into account euro-area countries with CDS prices similar to that of Hungary (Ireland, Portugal and Spain), the picture is somewhat brighter: the premium of Ireland and Portugal rose significantly, while that of Hungary decreased.

Appreciation of the forint was similar to the performance of other regional currencies

Similar to CDS, developments in the forint exchange rate also clearly reflect the above country-specific factors. The weakening of the forint prior to early September occurred in an environment of favourable global market sentiment, at which point it substantially underperformed the regional currencies, depreciating by approximately 4% (to EUR/HUF 290) relative to the start of the period. From mid-September to early October, however, the domestic currency outperformed its regional peers, appreciating by nearly 6% to EUR/HUF 270. Even though the impacts of domestic events were still visible after early October, exchange rate fluctuations were more moderate in both absolute and relative terms. The euro/forint exchange rate has fluctuated in a EUR/HUF 270-278 band.

The Swiss franc/forint exchange rate rose from CHF/HUF 212 to 224 by early-September, the franc also reached its historically strongest level against the euro these days. Afterwards the franc/forint exchange rate declined markedly (by 13%) until early-November, reaching its lowest point in the review period (CHF/HUF 196). This decline was due to both the strengthening forint against the euro (until early-October, in line with the improvement of Hungary's risk assessment), and the weakening franc against the euro. Along with the improving global market sentiment, the depreciation of the franc was also due to fact that the Swiss National Bank revised down its growth forecast, from which market participants concluded that it would not tolerate significant franc strengthening. Comments on the strong intention to avoid deflation appeared several times in the SNB's communication in October, further weakening the frank. Since early-November, however, both the weakening forint, due to deteriorating market sentiment, and the weakening euro, due to intensifying concerns on the Eurozone, led to a rising franc/forint exchange rate, which was exacerbated by hawkish comments from central bankers.

Chart 2-5
Relative developments in the exchange rate of the forint and other regional currencies



Note: A negative value denotes the appreciation of the given regional currency against the euro

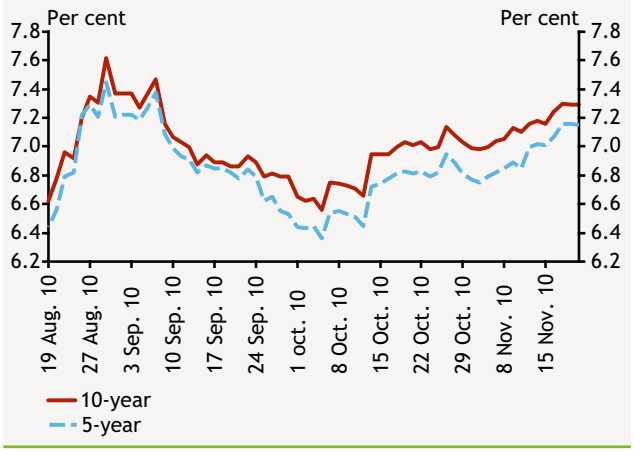
The performance of the forint was similar to that of the Polish zloty and the Czech koruna in the entire period: overall, all three currencies appreciated by approximately 1% against the euro. The Hungarian currency was supported by expectations that the sale of foreign holdings of private pension funds once having returned to the state would create demand for the forint.

Measures related to the pension funds are likely to have contributed to the rise in long-term yields

Long-term government bond yields followed a path similar to the above. In the early days of the period the deterioration of Hungary's perception led to a dramatic increase in yields, while in early October, they returned to the levels experienced at the beginning of the period. Since the announcement of the government's action plan, however, yields have risen by 60-70 basis points. It has partly been due to investors' concerns about the private pension funds' declining demand for government securities, first only fuelled by the channelling of employee pension contributions into the state pillar and later by government plans to overhaul the entire pension system.

Regarding the impact of the former, based on the current portfolio structure the suspension of private pension fund contribution payments representing HUF 360 billion on an annual level would diminish demand in 2011 by HUF 190 billion. The handover of the portfolio of those returning to the state pension system will have an impact of much greater volume, but its exact size is not yet known. Although, theoretically, these items do reduce the state's funding needs and thus the supply of government securities as well, the key budget figures presented so far suggest that the state will use the pension fund contribution payments

Chart 2-6
Long-term forint government bond yields in the last 3 months



and a part of the revenue arising from returns to the state pension system to cover its immediate expenditures, which will dampen this offsetting effect. The diminishing demand of private pension funds, regardless of the developments on the supply side, will render longer-maturity securities harder to sell. This increases the expected liquidity premium, which drives government bond yields even higher.

A sector breakdown of government security holders reveals that this lost demand will primarily be taken over by non-residents and credit institutions. As experience from past periods of market turmoil shows, the behaviour of non-residents in times of crisis exacerbates shock effects, while that of domestic actors mitigates them, therefore a higher proportion of non-residents may increase the sensitivity of the government bond market, rendering the country more vulnerable. Another factor, which may give reason for concern is that rating agency S&P rates Hungary just one notch above the so called speculative category, and in its latest assessment it warned of a possible downgrade unless the government comes up with a credible fiscal plan for the medium term. This could entail substantial sales of government bonds by non-residents, as numerous investors are bound by regulations stating that they only hold securities rated as investment grade by all three major rating agencies. In this case, financing government debt could become more difficult, as demand for the sudden flood of supply would be restricted only to credit institutions and insurance companies of sectors currently possessing a large portion of securities, and to investment funds from among those holding a smaller portion.

At the same time, the wealth managed by investment funds could increase as a result of the tax cuts, which would be favourable on the demand side, although this effect could be somewhat dampened by wage cuts in the public sector. Higher household savings could also push demand from financial enterprises upward as an indirect effect. It should be noted, however, that although the volume of government securities held by credit institutions has so far been closely related to the size of their balance sheet, the extraordinary tax on financial institutions may dampen their demand for government securities.

Since the last Report, non-residents have increased their government securities holdings by approximately HUF 300 billion. This increase was relatively gradual, and non-residents did not sell large quantities of government securities even in periods when Hungary's perception was deteriorating and yields were rising. To a certain degree, this could be attributed to the large amount of capital flowing into emerging markets as a result of the quantitative easing in the US; therefore, increasing demand is not

necessarily the outcome of positive country-specific factors, which is also reflected in rising yields.

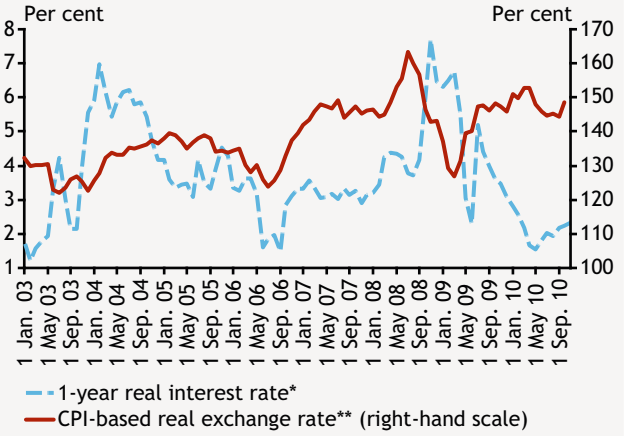
In respect of monetary conditions, the real interest rate increased somewhat

Real yield expected for the next 1 year has increased somewhat since the last Report. The underlying reason for this is that 1-year government bond yields rose to 5.9%, from 5.5% typical in August, in an environment where inflation expectations did not rise markedly. Based on the poll conducted by Reuters in October, analysts continue to anticipate a 3.5% price increase on average in 2011.

The increase in nominal yields reflects both increasing rate hike expectations since the end of summer and the impact of the above mentioned drop in pension funds' demand, also visible in longer maturities. As regards expectations for the central bank base rate, in early September, concurrent with the depreciation and relative underperformance of domestic assets there was a sharp increase in forward money market rates, the best indicators for policy rate expectations. As a result, a 100-basis point higher base rate had been priced already on a 6-month horizon. Following the subsequent moderation, these rates are currently 30 basis points higher than the levels prior to the publication of the August Report. They are consistent with an approximately 50-basis point increase in the base rate over the next 6 months, although most analysts expect the base rate to remain unchanged in the first half of 2011, and their forecasts are rather mixed regarding its subsequent path.

The declining trend in the backward-looking real exchange rate that started after spring seems to have reversed in October, which was rather due to the nominal forint strengthening.

Chart 2-7
Evolution of the forward-looking real interest rate and the euro/forint real exchange rate



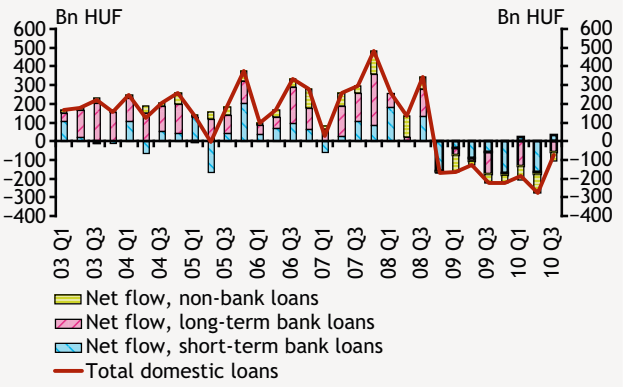
** Based on the one-year forward-looking inflation expectations of analysts calculated by the MNB using the 1-year zero coupon yield and the Reuters poll.*
*** Monthly depreciation of the exchange rate against the euro (monthly rate of devaluation until April 2001), adjusted for the given domestic inflation indicator and the harmonised inflation of the EU (1 January 1997 = 100%; an increase means appreciation).*

2.2 The financial system can make only a limited contribution to the economic recovery through private-sector lending

The fall in private sector lending continued in 2010 Q3, although at a slower pace. The fall in corporate lending has slowed down substantially, while credit conditions have remained unchanged. Following an upswing in the real economy, credit demand may increase over the coming quarters in sectors driven by external demand, and consequently lending may start to climb in 2011 H1.

Bank lending within retail lending has fallen in equal measure to the past quarters. The decline has, however, undergone some restructuring: consumer loans contributed to a greater extent to the fall than loans for house purchase. With the disappearance of FX mortgage lending, HUF-denominated loans for house purchase along with consumer loans have gained ground. As retail loan demand is expected to recover slowly, and credit supply constraints are not expected to be eased in the near future, we do not foresee retail lending picking up in 2011 H1.

Chart 2-8
Quarterly net increase of loans to non-financial enterprises from the domestic banking sector and other financial intermediaries



Note: Credit institutions and branches of foreign credit institutions in Hungary. Seasonally not adjusted net increase of loan volumes, adjusted for the effect of exchange rate changes. Last data for non-bank loans is an estimate.
Source: MNB.

Credit supply constraints are still perceivable in corporate lending

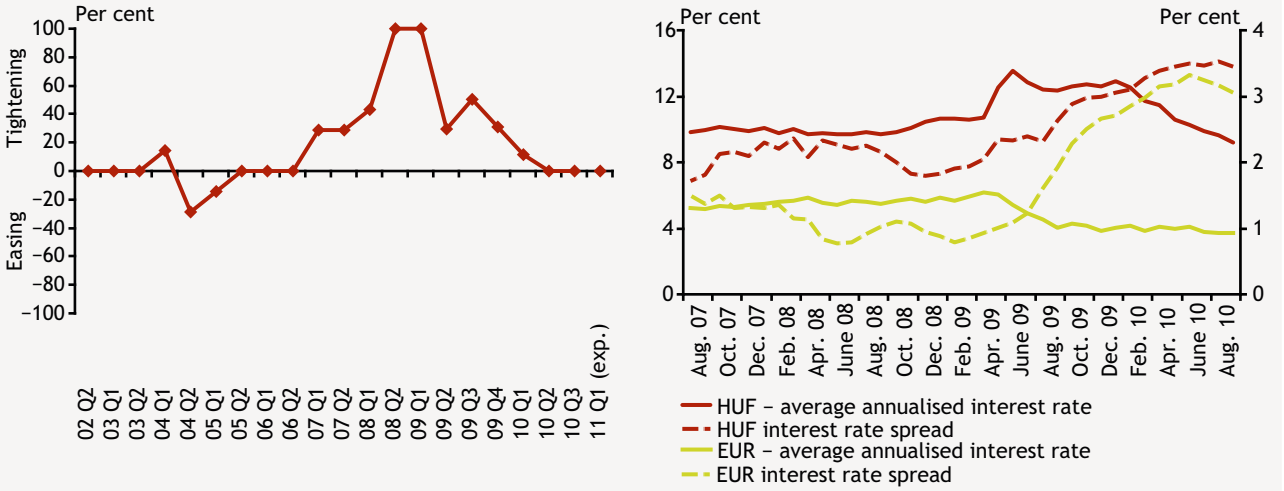
The recovery of the real economy is already somewhat perceptible in corporate lending. Although the fall in domestic corporate lending continued in Q3, the pace of decline has decelerated. The quarterly fall of HUF 73 billion is the lowest decrease since the onset of the crisis, although the pick-up in lending may be fragile, similar to the pick-up in production. In Q3 short-term bank loans, which are typically working capital loans, increased, while long-term loans, which are typically investment loans, fell. This indicates that the funding of firms' current production may have improved, even if only very slightly, however no substantial investments have been launched yet.

The supply constraints of bank lending are still in place. The MNB lending survey[9] reveals that a nearly four-year tightening cycle came to an end around the middle of the year, and that no easing of non-price credit conditions is expected this year or in the first quarter of the following year. Regarding price factors, neither the average interest spread on corporate HUF loans,[10] nor the average interest spread on FX loans changed notably. Thus, credit supply constraints did not ease in Q3. Although some banks indicated that competition and market share objectives would in part justify the easing of credit conditions, the further deterioration of risk appetite and of the capital position of certain banks offset these factors.

The manufacturing industry was hit by the most severe decrease in lending among the sectors of the national economy. The economic recovery, however, is in fact driven by the manufacturing industry. In the past, manufacturing

[9] Magyar Nemzeti Bank (2010): "Senior loan officer survey on bank lending practices" (November 2010)
URL: http://english.mnb.hu/Penzugyi_stabilitas/publications/hitelezesi_felmeres/mnben_hitelezesi_felmeres_201011.
[10] The difference between the weighted average interest rate on new corporate loan volumes and the three-month interbank interest rate.

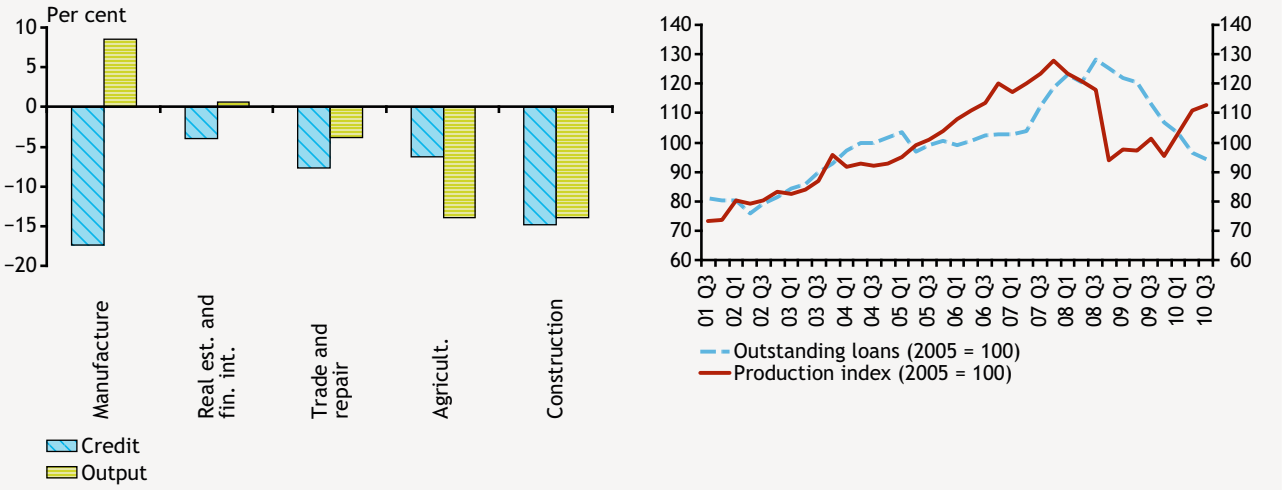
Chart 2-9
Developments in lending standards and corporate lending rates



Note: Net difference between the ratio of banks tightening and easing (weighted with market share). For 2011 Q1 expectations of interviewed banks. Interest rate spread is measured against three-month interbank interest rates.
Source: MNB.

industry production and credit volume within the sector were closely correlated. Moreover, we can observe that lending has lagged behind developments in production. The dynamics of corporate lending usually lag behind that of the real economy, which is underpinned by previous crises' data as well as current regional processes: corporate loans tend to follow the real economic turnaround with a lag across the CEE region.[11] Therefore, a continued pick-up in manufacturing industry production suggests that lending will soon follow suit. This expectation is also backed by the fact that the findings of the MNB lending survey reflect that banks also see an improvement in the manufacturing industry portfolio in Q3, so this may be the first major sector where lending is expected to pick up.

Chart 2-10
Annual change in sectoral output and credit and the connection between them in manufacturing
(2010 Q2)



Note: Year-on-year change in 'sectoral output' as of 2010 Q2 and year-on-year growth of sectoral credit stock. Production index of manufacture and credit related to manufacture, adjusted for exchange rate effects.
Source: MNB.

[11] For more details on the relationship between lending to the private sector and banking crises, see: Felcser, D., Gy. Körmendi (2010): "International experiences of banking crises: management tools and macroeconomic consequences", *MNB Bulletin*, June 2010.
URL: http://english.mnb.hu/Kiadvanyok/mnben_mnbszemle/mnben_mnb_bulletin_june_2010

We expect a pick-up in corporate lending in the first half of 2011. With the strengthening of external demand, an upswing is primarily expected in lending activity triggered by the increased demand for credit from firms producing for export. Improving sales figures and increasing production may have a positive impact on the creditworthiness and access to credit of these firms (even if credit conditions remain unchanged). Based on the probable increase in credit demand we expect an increase in the corporate loan portfolio by next year. The economic upswing of the euro area remains fragile, representing a to the pick-up in lending in 2011, as does the fact that if weak profitability and the deterioration in the portfolio require further balance sheet adjustment from the banking system, credit constraints may become more severe and private sector loans, in particular corporate loans, may be cut back.

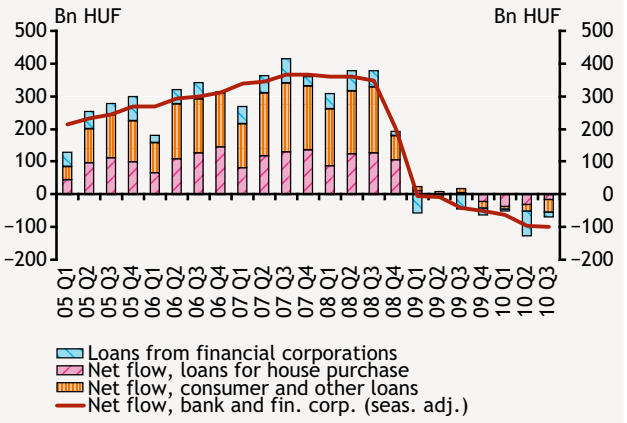
Lending to households is subdued, foreign currency lending has faded out

Bank lending to households fell in Q3, in line with the decrease of previous quarters. At a quarterly level, households repaid HUF 50 billion more in loans than they contracted. The decrease, however, is primarily due to the fall in consumer loans, and less to the fall in loans for house purchase, which represents a change compared to previous trends. The breakdown by currency reveals that not only consumer loans, but housing loans also increased in Q3 within HUF lending. The fall in both types of loans accelerated within FX-denominated loans. This is the result of the drying up of FX lending, while repayment of the outstanding volume is accelerating due to annuity-type products.

Within the new loan volume, FX mortgage loans essentially disappeared from the market following their ban, which became effective 13 August 2010. The proportion of HUF mortgage loans nevertheless falls short of 100%, due to a small volume of redemptions: if CHF-denominated loans, for example, are redeemed for EUR-denominated ones, it is reflected in gross issues, without breaching the ban on FX lending. HUF-denominated loans also remained above 90% within non-mortgage loans.

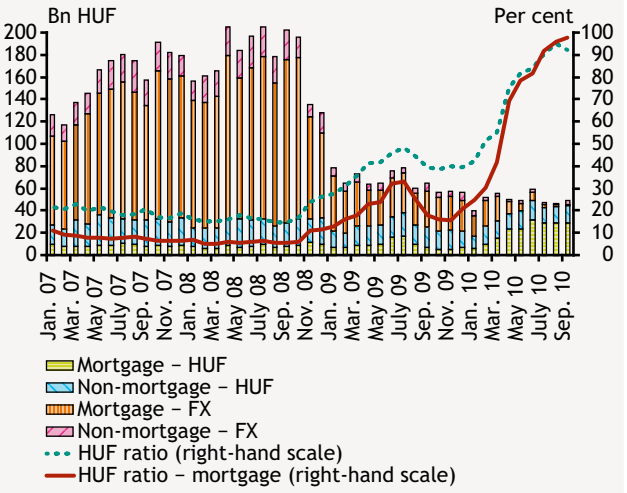
The lending survey[12] reveals that a higher proportion of banks tightened lending conditions on the housing loan market in Q3, while only a smaller proportion did so on the consumer loan market. The former was the result of the application of regulatory requirements (the ban can be regarded as an extreme form of tightening). Further

Chart 2-11
Quarterly net increase of loans to households from domestic banking sector and other financial intermediaries



Note: Credit institutions and branches of foreign credit institutions in Hungary and financial corporations. Unless stated otherwise, seasonally not adjusted net increase of loan volumes, adjusted for the effect of exchange rate changes. 2010 Q3 non-bank loans are preliminary data.
Source: MNB.

Chart 1-12
Composition of new household bank loans



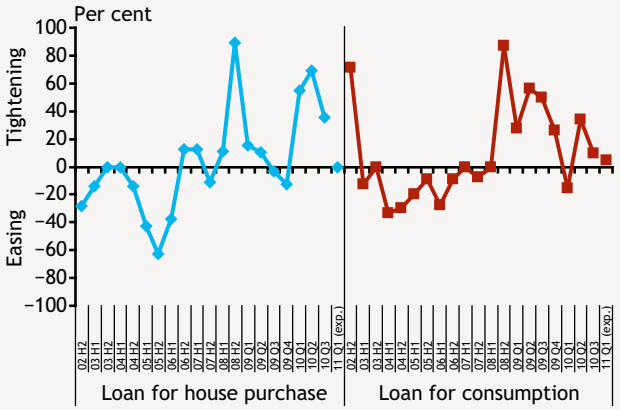
Note: Credit institutions and the Hungarian branches of non-resident credit institutions. Seasonally unadjusted data.
Source: MNB.

significant tightening is not expected by loan officers over the coming half year, but no easing of conditions is planned either.

According to our expectations, retail lending will not pick up until mid-2011. Aggregate credit demand is currently weak, and a pick-up in retail lending is strongly hampered on the demand side by substantial indebtedness and the

[12] Magyar Nemzeti Bank (2010): "Senior loan officer survey on bank lending practices" (November 2010).
URL: http://english.mnb.hu/Penzugyi_stabilitas/publications/hitelezesi_felmeres/mnben_hitelezesi_felmeres_201011

Chart 2-13
Banks' non-price lending conditions on loans to households



Note: Net percentage of respondents reporting tightening/easing (weighted by market share). For 2011 Q1 expectations of interviewed banks.
Source: MNB.

related protracted process of adjustment. Another factor hampering demand is the slow progress of labour market improvement. Changes affecting personal income tax, however, may spur credit demand by next year, particularly among families with several children and above-average income. The lending regulations implemented this year (Government Decree on Prudent Lending[13] and the Act banning foreign currency mortgage lending[14]) may hold back lending on the supply side, although in the long run they will lead to better structured lending. On the supply side, the bank levy may also have a substantial impact if banks choose to pass the cost of this tax on to existing and new customers in the form of higher interest rates. (Moreover, the drying up of FX-denominated loans has led to an increase in the average interest rate of available loans.) Based on the above, the most likely scenario is that the pick-up in retail lending will only take place from mid-2011 at the earliest, and only at a low pace.

[13] Government Decree No. 361/2009. (XII.30) on the conditions of prudent retail lending and creditworthiness examination [a körültekintő lakossági hitelezés feltételeiről és a hitelképesség vizsgálatáról]. One of the most important provisions of the Decree is that it sets upper limits on loan-to-value ratios for foreign currency-denominated loans to households. Accordingly, the limit for mortgage loans is 75%, while it is 60% for car loans and 45% for other loans. Furthermore, the Decree provides for banks to set up creditworthiness limits for individual loan applicants as a percentage of their monthly income. Accordingly, the limit for euro loans is 80% and that for other currencies is only 60%.

[14] Act XC of 2010 on the creation and modification of certain acts concerning the economy and finance [egyes gazdasági és pénzügyi tárgyú törvények megalkotásáról, illetve módosításáról]. From 13 August 2010, the Act prohibits creating a lien on a real estate with the Land Registry in cases when the claim underlying the registration arises from a foreign currency-denominated loan to a natural person.

3 Inflation and real economy outlook

The recovery of the Hungarian economy from the recession is expected to continue over our forecast horizon. According to the information received since the August issue of the *Quarterly Report on Inflation*, the upturn in external economic activity may support growth more strongly than expected in the short run. Domestic demand, in turn, may pass its trough somewhat earlier than we had anticipated. Moreover, some upcoming large-scale investment projects in the automobile industry significantly improve our outlook for economic activity over our forecast horizon.

The autumn announcement of government measures could markedly influence the behaviour of firms and households and thus have a bearing on our outlook for growth and inflation as well. Since some of these measures are unprecedented and rather large-scale, often with conflicting effects, it is difficult to quantify their impact. On the other hand, the uncertainty surrounding their impact is heightened by the fact that the phasing-out of some major measures is unclear.

Over a longer time horizon, the changes affecting personal income taxes will encourage households to increase labour supply which, in itself, points to an increase in output and a slowdown in wage and price dynamics. In the short run, however, an upturn in consumption demand should lead to a pick-up in growth and inflation. The positive growth effects of the personal income tax measures are mitigated by sector-specific extra taxes, which may prompt the firms concerned to restrain their investment projects and wages. In addition, the extra taxes may deteriorate the predictability of the general business environment, which could result in a prolonged period of restricted investment activity.

The underlying assumption of the November forecast is a stronger exchange rate than observed in August, which suggests a lower inflation path in itself. In addition, the personal income tax measures may foster a lasting deceleration in wage dynamics, which further improves the medium-term inflation outlook. On the other hand, in addition to the rebound in economic activity, new cost shocks may also put upward pressure on inflation. These factors include a continued increase in food prices, sector-specific extra taxes and, to a lesser extent, the expected minimum wage increase.

Against this background, our growth expectations for 2011-2012 have improved slightly. Our inflation expectations for 2011 have increased considerably. Inflation is still expected to exceed the 3% target over the monetary policy horizon.

Box 3-1
Changes in our basic assumptions

Our basic assumptions shifted toward a more moderate inflation path compared to the August issue of the Quarterly Report on Inflation. On the one hand, the EUR/HUF rate strengthened significantly up to October. On the other hand, the effect of rising USD-denominated global oil prices was offset by the weakening of the dollar against the euro. Accordingly, HUF/barrel oil price expectations have also declined substantially. The central bank base rate remained unchanged at 5.25%.

Table 3-1
Changes in our basic assumptions compared to August*

	August 2010			November 2010			Change compared with August (%)		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Central bank base rate (per cent)**	5.25	5.25	5.25	5.25	5.25	5.25	0.0	0.0	0.0
EUR/HUF	277.6	283.8	283.8	275.0	274.5	274.5	–1.0	–3.3	–3.3
EUR/USD (cent)	130.3	127.7	127.7	133.5	138.9	138.9	2.4	8.8	8.8
BRENT oil price (USD/barrel)	76.7	79.7	82.4	78.8	85.8	88.5	2.7	7.7	7.4
BRENT oil price (EUR/barrel)	58.9	62.4	64.5	59.1	61.8	63.7	0.2	–1.0	–1.3
BRENT oil price (HUF/barrel)	16,370	17,714	18,318	16,242	16,959	17,483	–0.8	–4.3	–4.6

** Annual averages, based on the monthly average exchange rate of October 2010 and the crude oil futures price.*
*** End-of-year values based on constant interest rate assumption, the change compared to August is presented in percentage points.*

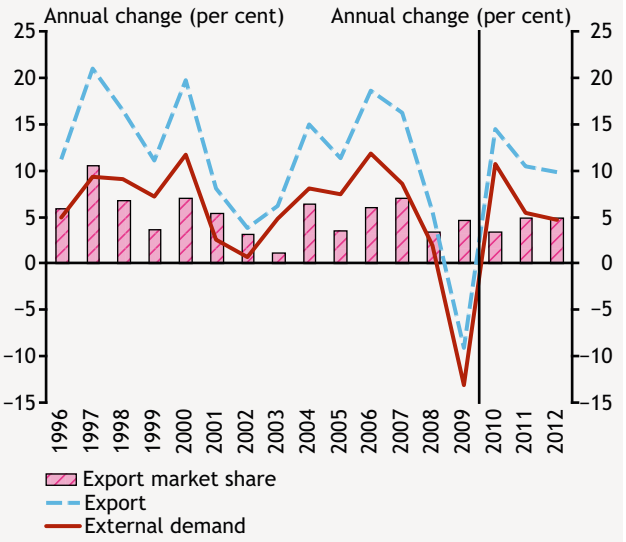
3.1 The structure of growth is expected to become more balanced

Shifts in our assessment of economic activity mostly reflect the impact of new budgetary and tax measures. Reduction of the personal income tax rate may bolster growth through consumption. At the same time, the fact that the tax cut will be financed by one-off taxes and by the depletion of the accumulated pension reserves raises concerns about the sustainability of the tax cut on the one hand, and may also deteriorate both investor confidence and the business environment on the other hand. This, in turn, could impair the investment environment. However, the impending large-scale investment projects of the automobile industry may offset these adverse effects across our forecast horizon.

Our perception of medium-term economic activity in our trading partners remained broadly unchanged. The budget deficit-reducing measures adopted in our export markets and the phasing out of inventory replenishment should restrain growth in external demand from 2011 on. At the same time, through supplier relationships, Hungary will also benefit from the robust expansion of German exports fuelled by the dynamically increasing demand of Asian countries. Toward the end of our forecast horizon, production will begin at the new Mercedes plant in Kecskemét, and a surge in production could increase our export market share substantially.

In recent months, a number of other firms have also announced ambitious plans for capacity expansion in the automobile industry, which could result in a considerable increase in corporate investment. Over our forecast horizon, however, their effect may be dampened by the announced government measures. While the decreasing corporate tax rate may improve the long-term profit outlook, the extra taxes may set back investment activity in the sectors affected. In addition, the investment environment could deteriorate in the wake of these measures. Considering the uncertainty surrounding these effects, our risk scenarios reflect more pronounced changes in the investment environment.

Chart 3-1
Changes in export market share



Box 3-2
Expected economic effect of major manufacturing industry investment projects in Hungary

Our current investment forecast is influenced by many significant effects. On the one hand, government measures can have a negative overall impact on firms' willingness and possibilities to invest. On the other hand, we expect major one-off investment projects which can compensate for the negative effects in the short term. In this Box, we estimate the expected growth effects of these investments based on available press information. On our forecast horizon these effects appear primarily through investment activity. In the long term, however, the new production capacity also increases output and exports, and consequently, potential output as well.

Numerous firms have revised their strategy during the period of recovery from the economic crisis. In many cases, production is being relocated to countries where operating costs are lower. This allows firms to improve profitability even in an environment of weak demand. This phenomenon is beneficial to Hungary, where wages are lower than in Western Europe. Moreover, since the onset of the crisis, government measures further pushed the relative cost of Hungarian labour down. Several major investment projects will be implemented over our forecast horizon, which will expand the capacity of the Hungarian automotive industry, partly by relocating production processes formerly performed in Western Europe.

Mercedes was the first to undertake a large-scale investment project, starting construction of its plant near Kecskemét in 2009. Hankook is continuously expanding its tyre manufacturing plant, and should eventually produce four times its initial production volume in Hungary. Since our August forecast Audi announced that it will substantially expand and broaden its production activity in Győr. Finally, General Motors is planning to renew the earlier product range in its Szentgotthárd plant, perform substantial research and development and introduce the production of new motors.

The total value of direct investments over four years approaches the value of HUF 670 billion, which is substantial proportion – over 20% – of annual corporate investments in the Hungarian economy. The affected firms accounted for approximately 7%-10% of Hungarian export over the past years, while only representing 0.2% of private sector employment. The productivity of manufacturing industry firms is typically very high, however the value added of their production is relatively low due to its large import requirement.

Over the long run, the new capacities will allow a substantial expansion in automobile manufacturing. Based on similar experiences in the Czech Republic and Slovakia, this can contribute significantly to value added growth. New automotive industry plants began production in 2005 and 2008 in the Czech Republic, and in 2007 in Slovakia, with an annual capacity of 0.5 million units in each country. In the years following the launch of new plants, the auto industry's value added increased dynamically, contributing substantially to GDP growth. At the same time, the global recession which occurred in 2008 hampered the sector's development, and falling car manufacturing output played a major role in the economic downturn.

Based on international experience, two effects are expected in Hungary. On the one hand, growth may accelerate, spurred by the output of the new plants. On the other hand, economic growth may become more sensitive to international business cycles – both positively and negatively.

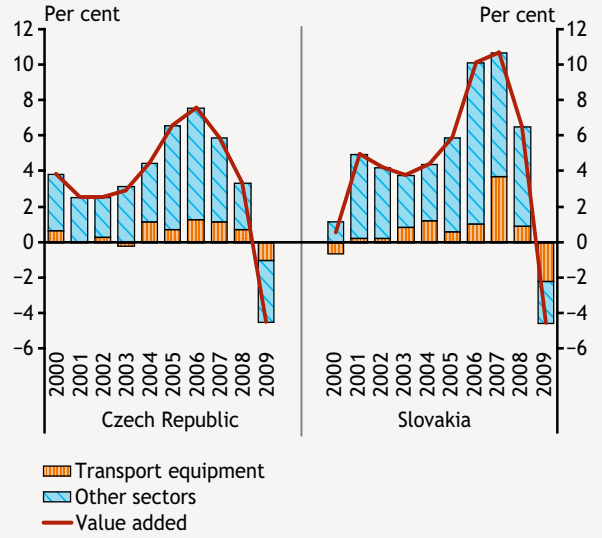
Regarding growth effects in our forecast horizon, the demand generated by the investments is predominant. When quantifying the additional growth impact of these projects, it should be taken into account that firms received substantial state subsidies for their investments. Furthermore, in case of plants already operating in Hungary, part of investments would have been implemented even

Table 3-2
Main characteristics of major investment projects in the manufacturing sector

Company	Investment value (bn HUF)	Investment period	Planned start of production	Planned new employment (persons)	2008 share in*	
					Value added	Exports
Mercedes	220	2010–2011	2012	2,500	-	-
Audi	247	2010–2013	2013	1,800	1.2%	6.8%
GM	137	2011–2012	2013	900	0.1%	0.1%
Hankook	63	2010–2011	2012	600	n. a.	n. a.
Total	**668**			**5,800**		

** Based on company data of Ecostat Top100 (2008).*

Chart 3-2
Contribution of the auto industry to value added growth in the Czech Republic and Slovakia



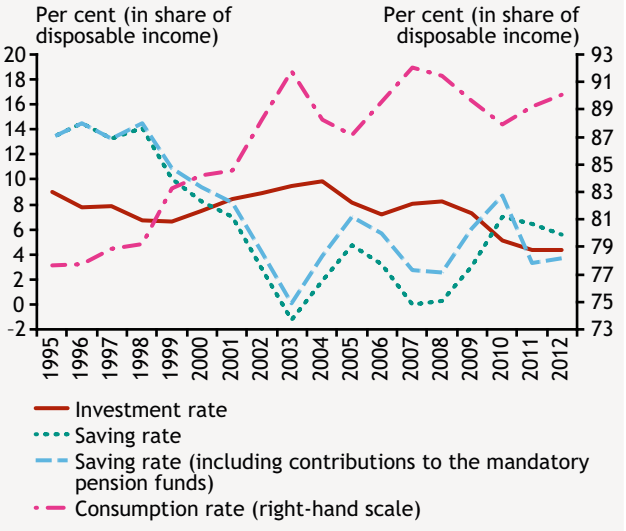
without capacity expansion. Therefore, when quantifying the effects of investment, we did not base our estimations on full additionality, but calculated with a 50% additional effect instead. Taking into account the high import content of these investments, the expected growth impact of this increased capacity may be around 0.2-0.3 percentage points over the next two years.

To quantify the production effect, we performed two estimates: first, we could use labour force expansion plans as the basis. Second, we had information about the size of expected new capacity. Based on this and past unit value data, we estimated expected sales growth. We calculated the change in value added based on the efficiency indicators of the auto industry. We took into account that the productivity of new plants may be higher than the sectoral average, as the new plants cover the entire production spectrum rather than just final assembly. Finally, we quantified backward linkages through supplier relationships using the 2005 input-output matrix. Overall, new production capacities may increase gross value added by 1%-1.5%, while supplier relationships could add further 0.5%.

The economy will not reach the 1.5%-2% higher output level immediately. Based on production data of automobile manufacturing plants opened in Slovakia in 2006, the new production lines are expected to reach full capacity in the second year after the start of operation. Therefore, a 0.4-0.5 percentage point increase in economic growth can be expected for 2012-2014 due to the new investments – assuming plants reaching full capacity over a period of three years. This boost to growth is roughly comparable to the effect of new automobile manufacturing plants in the Czech Republic in the 2000s. Due to the additional capacity, our potential growth rate may increase by a similar magnitude.

The transformation of the personal income tax regime will channel substantial extra income to households. However, the resulting demand-boosting effect will be partially offset by the expected layoffs and wage freeze in the public sector. The tax cut will primarily benefit upper-income households, whose consumption rate is lower than average. Meanwhile, a larger-than-average share of family benefits is likely to be consumed. The same effect is expected from tax cuts on extra-wage benefits. In sum, the consumption rate of households could increase slightly, mostly due to the improving employment outlook. Nevertheless, the saving rate[15] should persistently exceed the levels experienced before the crisis. Its major reason is the higher saving propensity of better-off households, who are mainly affected by the new personal income tax regime. Finally, tight lending conditions are expected to keep households' investment activity subdued over the entire forecast horizon.

Chart 3-3
Use of household income*



** The traditional saving rate takes into account household net financial saving excluding compulsory transfers into private pension funds.*

[15] In the statistical sense, financial savings will be reduced by the freezing of payments to private pension funds, and also by the reduction in wealth owing to returns to the state pension system. Thus, the saving rate based on financial accounts data could deteriorate significantly over the forecast horizon.

Box 3-3
Impact of PIT measures on household incomes and household consumption/savings patterns

Changes in the system of personal taxation (with the assumption of unchanged gross wages) – due to changes in the PIT rates and the introduction of family tax breaks – will increase households' disposable income by approximately HUF 370 billion. The impact of the tax measures will, however, vary from one wage-earner to the other depending on their income levels and family situation. Furthermore, differences in income levels also mean significant differences in consumption/savings patterns. Therefore, when assessing the growth impacts of lower taxes, it is important that household patterns be analysed in a more disaggregated manner than would otherwise be customary.

We based our calculations of the responses of households on household budget surveys looking at households' consumption/savings patterns at the micro level. The most recent public data of the survey (CSO, Annals of Household Statistics) pertain to 2005. Although 5 years old, the publication can be relied on for the calculation of some major indicators that still apply. The underlying reason for this is that the subsidised home loan programme had been brought to an end by 2005, and FX lending, which led to a fast build-up of debts in the pre-crisis years, was not significant at the time. Accordingly, consumption-to-savings ratios with general applicability to households were similar to the current ones, thus, they also offer an appropriate initial benchmark for our analysis.

Approved by the Hungarian Parliament, the new tax regime will benefit mainly families with children and wage-earners in the higher income brackets, the latter bearing high tax burdens in a regional comparison. In contrast, tax burdens on wage earners with no children and households with lower incomes will be slightly higher due to a 0.5 percentage point rise in employee contribution and tighter tax credit rules. Overall, in 2011, the tax reform will mean higher net wages for close to 40% of households even if gross wages remain unchanged. There will be no change in the tax burdens for close to 20% of the households; by contrast, taxes and contributions will be higher in the case of 40% of wage-earners.

Both income effects in the different income deciles of households and households' consumption/savings decisions

Table 3-3

Impacts of changes in the system of personal taxation on households' incomes in a breakdown by the number of children and income brackets*,**

(assuming gross incomes are unchanged)

2011	Lowest	2	3	4	5	6	7	8	9	Highest	Alltogether
0	220	210	228	238	237	227	242	240	245	226	2,314
child	−83	−240	−1,946	−2,416	−2,304	−2,104	−1,921	−3,057	−4,125	41,160	2,149
1	73	94	73	67	87	94	89	81	84	79	822
child	−83	−240	−77	2,542	5,977	8,118	8,385	7,212	6,487	54,933	9,305
2	76	41	69	69	55	55	44	55	48	71	583
child	−83	−240	−77	2,542	5,977	10,928	16,411	17,481	17,098	68,706	14,551
3 or more	28	51	27	23	18	20	22	21	19	20	249
child	−83	−240	−77	2,542	5,977	10,928	16,513	24,947	48,491	155,778	21,446
Alltogether	397	397	397	397	397	397	397	397	397	397	3,967
	−83	−240	−1,155	−448	1,049	2,812	3,411	3,339	3,185	54,795	6,666

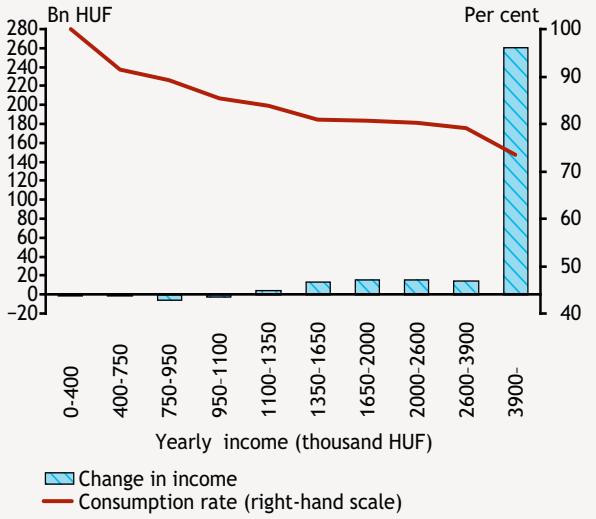
	Thousand person	***: Due to the rise in employee's pension contribution to 10%, an insignificant, 50-250 HUF tax liability arises for the lowest two income deciles	Worse off:	41.8%
	HUF/month		No change***:	20.0%
			Better off:	38.2%

** We based our calculations on CSO's 2008 Household Budget Survey and Tax Authority data. The combined use of databases relied on the findings of the Fiscal Council.16*

*** The results show the approximate impact of the measures on the individual groups; the impact of personal income tax measures at the macroeconomic level may be slightly higher than the aggregate value derivable from the table.*

[16] For more detail, see 'Assessment of the Fiscal Council of the Republic of Hungary of the Fiscal Impacts of Bill No. T/1376 on the Amendment of Tax and Social Contribution Legislation, the Accounting Act and the Act on the Chamber of Auditors as well as Tax and Customs Related Acts for Harmonisation with European Union Laws' [az adó- és járuléktörvények, a számviteli törvény és a könyvvizsgálói kamarai törvény, valamint az európai közösségi jogharmonizációs kötelezettségek teljesítését célzó adó- és vámjogi tárgyú törvények módosításáról].

Chart 3-4
Developments in the rate of consumption and the impacts of tax measures in the individual income deciles of households



varied widely.[17] Consistent with this, the short-term demand-side effects of the tax measures are also likely to be diverse, depending on the level of and changes in net income. While the entire income is spent on consumption in the lower income deciles, the rate of consumption in the higher income brackets declines gradually and an increasingly high proportion of incomes is saved.

Assuming an unchanged consumption/savings pattern, and relying on historical data, we propose that, assuming that gross wages do not change, the consumption of the households in the four lowest deciles will decrease somewhat, and their savings, which are modest anyway, will remain unchanged. Consumption in the next deciles up to the ninth may pick up, and, overall, savings are likely to be a few billion forints higher. Expansion in consumption with whole-economy implications will, in effect, be the result of a favourable change in the income position of the tenth deciles (Chart 3-4). Overall, households will likely to spend over two-thirds of their surplus income on consumption. We expect financial savings to become dominant among the various forms of savings. Lending criteria, which are likely to remain tight in the short run, and unemployment, which is considerably higher than the pre-crisis average are both likely to push incomes to be saved towards financial savings.

However, it should be noted that, in addition to the assumptions derived from average historical patterns, a number of other factors may come into play, which can easily modify our findings.

Likely causes of *lower* consumption

- Caution may be an especially important consideration for households with – mainly FX-denominated – loan debts. A weaker CHF/HUF exchange rate and higher loan rates have increased households' repayment burdens considerably in recent years, which have led, in a number of cases, to debt restructuring. Households facing the above situation are likely to spend surplus income on the re- and/or pre-payment of their outstanding loans.

- The temporary suspension of private pension fund transfers and the anticipated transformation of the private pension fund scheme may also boost households' willingness to save. This is a likely scenario if households arrive at the conclusion that the transformation of the private pension fund scheme will, in the long run, incur them a permanent loss in wealth, which they can already offset by savings. Another argument for higher savings is when households deem moderation in taxation temporary, and think that once the government has used up private pension fund transfers, it will increase taxes in order to compensate loss of revenue.

Likely causes of *higher* consumption

- If households deem that the tax measures are permanent and increase the potential output of the economy, this may trigger stronger consumption responses in the short run already. The underlying reason for this is that favourable long-term income prospects prompt households to increase consumption in the present. There was a similar response prior to Hungary's EU accession, when improved longer-term income expectations generated an immediate rise in consumption.

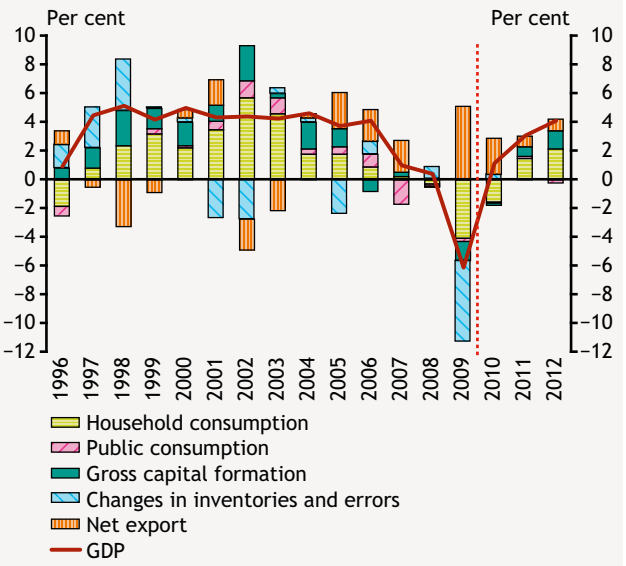
- Moderation in taxes will materialise mostly through tax breaks for families. It is a safe assumption that as the average consumption ratio of families with children is higher, most of their surplus income will also be spent on consumption.

Although, on the whole, our estimates involve considerable uncertainties, under our baseline scenario, 70% of the reduction in taxes that will materialise via the system of personal taxation is expected to be spent on consumption. However, we do not expect a consumption/savings pattern considerably different from past patterns to evolve. Accordingly, we do not expect the consumption ratio to increase in connection with these surplus incomes either.

[17] Savings means that portion of disposable income in a given period that is not spent on consumption. Savings can take the form of financial savings and/or investment in real assets (typically residential investment).

In the context of the rebound in domestic demand expected next year, the growth effect of net exports may decline. As a result of a potential surge in the export sales of the Mercedes plant, export sales may record a net-export growth again from 2012. Meanwhile, the improvement in domestic demand could be to be stronger than we had expected, which could bolster a more balanced growth structure. We expect growth to reach around 3% in 2011 and 4% in 2012. Despite improving demand, the output gap will remain negative over the entire forecast horizon.

Chart 3-5
Composition of GDP growth



Box 3-4
Impact of the announced government measures on potential GDP

In this Box, we quantify the effect of the 2011 budget on potential GDP growth. Although we already published an analysis on the expected macroeconomic effects of the single-rate tax system in our August *Report*,[18] we essentially relied on qualitative findings due to the lack of details available at the time.

Our earlier analysis highlighted the fact that the potential growth of the Hungarian economy has fallen short of regional performance at an increasing rate over the past decade, the underlying reason of which was primarily the problems affecting the input markets of production. The high tax wedge on labour and the generous social welfare system have contributed to the lowest labour market activity by far in the region in Hungary over the past years, while the lack of macroeconomic stability has pushed risk premiums on Hungarian investments up, keeping the investment rate protractedly low. Earlier findings show that the problems affecting the labour market have a much stronger distorting effect than capital market problems.[19] Although there have been positive developments over the past one and a half years from the perspective of labour market incentives (the tax wedge on labour was decreased and other activity incentives reinforced), Hungary still lags behind regional competitors from the aspect of incentives. Following the stabilisation measures in recent years, the risk premium on investments in Hungary have fallen somewhat, but still remain rather high, hampering rapid capital accumulation.

Taking into account the above, it is a positive development that the government has undertaken a reform of the tax system. The fact, however, that the financing of the more than HUF 600 billion tax cut in 2011 compared to 2010 are based on partially temporary revenues is risky and may affect the investment climate adversely. These include sector-specific extra taxes and the use of private pension fund savings. As a result of all this, the cut in personal income tax and corporate tax rates can be in part considered as tax restructuring (sectoral taxes), and in part uncovered tax cuts. According to government announcements, in the long term, a portion of the tax cut may be funded by sector-specific extra taxes, kept in place at a lower rate than in 2011. Long-term sectoral taxes, which include the 30% corporate tax rate levied on the financial sector, however, could lead to a negative investment climate and cause a drying up of credit and high credit premia for market players.

We based the calculation of long-term growth effects on the legislation pertaining to the budget for 2011, and made some assumptions as regards the direction the tax system will take in the long run, summarised in the table below.

[18] See Box 3-3 of the August *Report*.
[19] See for example *Analysis of the Convergence Process* May 2010.

Table 3-4
Quantified tax changes for potential GDP measures

	2011	Long run
PIT system	16% rate on supergross wages, family and basic tax allowance according to the 2011 budget 10% employee pension contribution	16% rate on gross wages, family allowance at 2011 real value, half of the 2011 basic tax allowance remains 10% pension contribution
Capital income tax	16%	16%
Corporate income tax	10% up to 500 million HUF	10%, but 30% on the financial sector
Sectoral taxes	340 Bn HUF sectoral tax	0,5% of GDP (already contains the 30% corporate tax rate on the financial sector)

If we want to consider the growth effects of the tax measures, we should review how it affects the accumulation of production factors and the expected developments in productivity (TFP). We try to deduce developments in the latter as the resultant of the former two markets.

How do labour market incentives change?

As mentioned in our previous material, the labour market effects of changes in the tax system primarily depend on developments in the average and marginal tax wedge. The former exerts an influence on labour market entry and exit (extensive limit), while the latter exerts an influence on labour intensity and productivity (intensive limit) developments. The extent of elasticity of the average and marginal tax wedge varies in the different income brackets (see table below). Based on international and domestic experience,[20] it is found that there are two segments where labour supply reacts sensitively to tax changes. Sensitivity to the average tax wedge is primarily high among low-income families, and influences labour market exit and entry, that is, developments in employment. Above-average, but not extraordinarily high incomes are quite sensitive to the marginal tax wedge, and developments therein influence effective labour, that is labour intensity and productivity.[21]

Table 3-5. briefly sums up the effects of the 2011 tax laws on each income bracket, and the developments of net incomes in function of family situation, which is determined by the change in the average tax wedge. The table shows that tax measures affect the various income brackets and various sized families unequally. Overall, it appears that families are affected more adversely in lower income brackets, but the degree of the fall in net income only amounts to HUF 1000-2000 per month. The additional income among above-average earners is substantially higher, especially among families.

As a result of the measures, the degree of the tax system's progressivity is approaching the model typical for Visegrád countries, that is the large tax wedge surplus is diminishing for above-average income brackets, while slightly increasing for below-average income brackets.

Regarding developments in the marginal tax rates, it is apparent that the marginal burden remains broadly unchanged for below-

Table 3-5
Effect of the tax cut from the perspective of labour market incentives

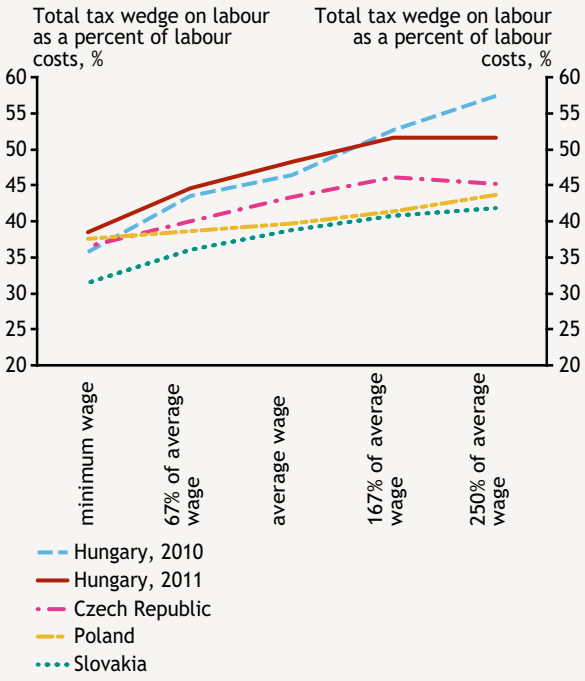
	Families with low-income	Families with average income	Families with above average income	Families with high income
The effect of the average tax rate on employment growth	**high**	low	low	low
The effect of the marginal tax rate on an increase in labour intensity*	low	low	**high**	low

** Changes in the average tax wedge also affect labour intensity (income effect), with an opposing sign to that of the marginal tax change (substitution effect), i.e. in our case, a diminishing effect. Excepting very high income levels, the substitution effect is greater than the income effect, that is tax cuts have an overall positive effect on labour intensity.*

[20] See Bakos et. al. (2008) "The Elasticity of Taxable Income". *MNB Working Papers*, 2008/7.

[21] We essentially examine impacts on primary earners in the table. Among high income families, tax cuts may have an overall curbing effect in the case of secondary earners. The reason for this is that the tax cut results in such an increase in the net income of the primary earner that it becomes more worthwhile for the secondary earner to allocate more time to family.

Chart 3-6
Developments in the average tax wedge in 2011 compared to Visegrád countries*



** Data refer to employees.*
Sources: OECD, APEH data.

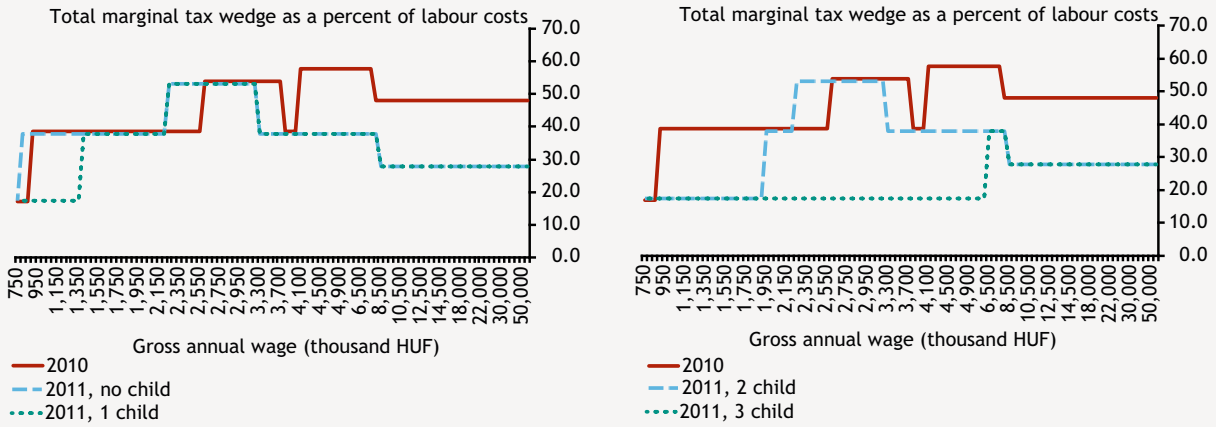
average incomes, it decreases significantly for above-average incomes.

To sum up the above results in a qualitative manner, the average tax wedge does not change significantly in groups sensitive to it, while the marginal tax wedge decreases significantly in the groups sensitive to it. In other words, similarly to our August report, we can expect additional GDP growth from higher labour intensity and better productivity of the higher than average income, better educated labour, and the increasingly formal nature of the economy.[22] The reduction of the shadow economy may accelerate once the other elements of the personal income tax system are harmonised with the 16% tax rate Positive employment effects may only be achieved if it can be assumed that qualified and unqualified labour are not perfectly substitutable, that is, surplus GDP growth also generates new jobs for unqualified labour.

How does the package affect investments?

We therefore expect positive growth effects from the personal income tax system, all other things being equal, but additional GDP would require additional investments. From the perspective of investments, however, the measures cannot be considered as stimulating, as overall detrimental effects tend to dominate instead.[23]

Chart 3-7
Developments in the marginal tax wedge as a function of income and number of children in the 2011 tax system



[22] According to our analyses, the tax wedge surplus, which is high in an international comparison, is the source of problems not only from the perspective of employment, but also from the perspective of productivity. This finding may hold especially true for qualified labour with above-average earnings. The underreporting of wages of qualified labour impedes the formation of a mid-sized enterprise strata, as it does not make economic sense for dynamically growing companies to develop from small enterprises into medium-sized ones with a stable workforce. The lack of a large mid-sized enterprise strata impedes transfers of technology between more developed (primarily foreign-owned) and less developed Hungarian firms, slowing down TFP growth. See Chapter 3.2 of the *Analysis of the Convergence Process* 2010.

[23] In the case of unchanged capital costs, additional investment is created from the simple fact that, ceteris paribus, tax cuts lead to a fall in gross wages, because labour supply increases, forcing firms to employ more labour and increase the diminished capital-labour proportion. The rise in risk premia, however, renders capital more expensive, restraining necessary investments.

Although the corporate tax rate may fall to an overall level of 10% by 2013, the levying of the sector-specific extra tax until 2012 will cause an effective increase in corporate tax at the aggregate level. In the longer run, the sector-specific extra tax – assuming, in line with government announcements, that half will remain permanently in place – will offset approximately half of the decreasing effect of the 10% tax rate applicable from 2013.

The long-term 30% corporate tax on the banking sector is especially risky from the aspect of future economic growth. This additional burden, which is very high in international comparison, will render the effective funding of the corporate and retail sectors by the banking sector improbable in the period following the economic recovery. The additional corporate tax increases credit institutions' capital and funding costs, and has a negative effect on foreign-owned banks in the resource allocation decisions of their parent banks. Moreover, the protracted deterioration of the banking sector's capital position may be reflected in rising credit premia as well.

Furthermore, we also have to take into account that the method of levying the extra taxes (retroactive effect, uncertainty over its temporary nature), consumption of private pension savings, and the financing of decreased personal income tax and corporate tax with temporary revenues is in itself detrimental to investor confidence, and may lead to a rise in the expected risk premia on Hungarian instruments. In other words, although the personal income tax system could create additional GDP and exert a positive effect on employment, it is uncertain whether the additional investments necessary for this will be achieved.

Quantifying effects with a small general equilibrium model

We used a small general equilibrium model to quantify the long-tem macroeconomic effects of the government measures. The model uses the extensive and intensive labour supply elasticity of various income brackets and the effect of capital costs on investment behaviour, and the overall effect of these factors on growth.[24]

We primarily used simulations to quantify the impact of measures that may be relevant from the perspective of long-term growth.

- Regarding measures affecting the labour market, we quantified two packages of measures: on the one hand – based on Table 3-5 – the long-tem effect of the personal income tax system on labour demand and labour supply; and on the other hand, the effect of the reinstatement of three-year entitlement to child care allowance and child care benefit (GYES-GYED), which may dampen the long-term activity rate.[25]

- As for developments in capital costs, we also proceeded in two steps. On the one hand – in line with government announcements – we assumed that half of the 2012 level of sector-specific extra taxes will remain in place over the long run. Moreover – based on various accounts – the assumption can be made that on the whole measures will increase risk premia on investments, as well as credit premia, resulting in an adverse effect on corporate cost of capital. As there is great uncertainty regarding the latter, we did not settle for any of the scenarios, but illustrated how an increase in risk premia could dampen the additional growth achieved by the changes in the personal income tax system.

The table below demonstrates that the revision of the tax system could contribute to an increase of about 3% in GDP, if risk premia remain unchanged. In other words, assuming that the impact of the measures will occur uniformly over a span of approximately ten years, additional growth of 0.3% per annum can be expected in the upcoming period. In this scenario, we assumed, besides the overhaul of the personal income tax and child care benefit/allowance, that corporate tax would be cut by 0.5% as a proportion to GDP. We do not, however, assume a rise in risk premia.

Taking into account, however, the probable rise in risk premia – the amount of which is uncertain, but the direction seems probable – it appears that the additional growth stemming from tax reform progressively peters out. A protracted rise in risk premia of 150 basis points or of the degree mentioned above could turn the sign of GDP effects into the negative domain.

It should also be noted that additional growth yields slight additional employment only, even in the more favourable GDP scenario. The primary reason for the above is that the tax wedge does not diminish in the groups sensitive from the perspective of labour market entry and exit, but rather increases slightly. Moreover, it should be highlighted that in scenarios yielding lower potential GDP, the fall in net wages is offset in the long term by inflation. The reason for this is that gross equilibrium wages fall to a greater degree than the original tax cut due to the substantial

[24] The model's structure and calibration is described in Scharle et. al. (2010) "Efficiency of the Hungarian tax system". *MNB Working Papers* 88.

[25] Due to a lack of detailed data, we cannot quantify any additional draft legislation affecting long-term activity and employment, such as the planned measures regarding the retirement age of 40 for women, the tightening of social transfer payments and support for flexible forms of employment.

fall in capital volume. In other words, in the case of a long-term, significant rise in risk premia, the tax cut can only create additional revenue for employees temporarily.

In the baseline scenario of our November Report, due to the uncertainty of risk premia, we assumed that measures have no significant influence on potential GDP.

Table 3-6
Long-term macroeconomic effects of the tax measures for various changes in risk premia*

Change in risk premium	Gross wage	Employment	Labour intensity/ Productivity	Capital stock	GDP
0 bp	0.3%	0.4%	3.3%	4.0%	3.5%
50 bp	–1.2%	0.3%	3.3%	0.9%	2.4%
100 bp	–2.7%	0.2%	3.3%	–2.2%	1.2%
150 bp	–4.2%	0.1%	3.3%	–5.3%	0.1%
200 bp	–5.7%	0.0%	3.3%	–8.4%	–1.1%

** The effect refers to the value of variables.*

3.2 Tax measures point to more moderate wage dynamics in a loose labour market

Labour market data received since the August issue of the *Quarterly Report on Inflation* suggest that the growth in employment began earlier and proved to be stronger in the private sector than we had expected. However, with persistently high unemployment, wage dynamics continued to decelerate. This indicates a higher employment path and a lower wage path than we had assumed for the next few quarters. The improvement in economic activity over our forecast horizon would warrant accelerated growth in employment and wages. However, the transformation of the personal income tax regime may slacken wage dynamics and, by decreasing the relative price of labour, may increase the labour intensity of production. In addition, the cost shocks induced by the adoption of sector-specific extra taxes will give rise to renewed adjustment pressures – primarily in the services sector – which will restrict wage growth further. Thus, the sectoral heterogeneity of labour market developments may become even more pronounced.

The recovery in economic activity may expand employment primarily in the manufacturing sector. Labour hoarding was more typical in the services sector during the recession, reducing the need for new workforce in the sector in the starting phase of the recovery. In addition, corporate profitability will be hurt by the extra taxes imposed on the particularly labour intensive commercial sector, which may also be an obstacle to staff increases. While staff numbers may increase continuously in the private sector, the number of public employees is expected to decrease from 2011 on.

Despite growing employment in the national economy the unemployment rate may decline only slowly, as government measures in recent years, and some changes in the personal income tax regime point to a gradual increase in labour market participation. Consequently, we expect a loose labour market over our entire forecast horizon, which may slow wage dynamics over the long term.

The government measures will affect wage-setting decisions in 2011 via multiple channels, with transformation of the personal income tax regime having the largest impact. Employees will collect an increasing portion of the gross wage bill primarily in the higher income brackets. This will allow gross wage growth to remain subdued and assist in

Chart 3-8
Changes in corporate profitability

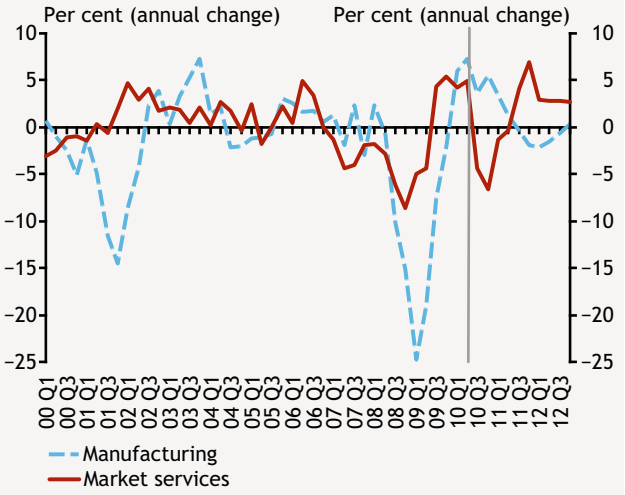
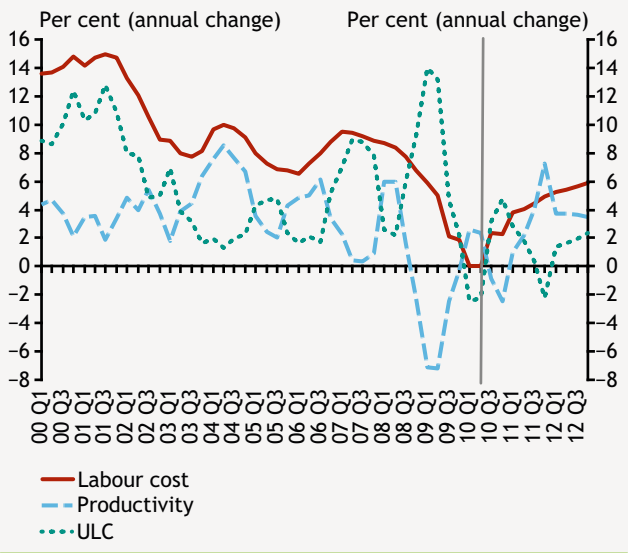


Chart 3-9
Changes in unit labour cost and its components in the private sector



restoring the profitability of the corporate sector. Accordingly, in our forecast we assume that, despite a recovery in net wages, gross wage dynamics may decelerate in 2011.

The cost shocks hitting Hungarian firms also put downward pressure on wages. Particularly in the services sector, firms might respond to profit deterioration associated with the extra taxes by limiting pay increases. On the other hand, the increase in the minimum wage accompanying the tax changes will raise the employment costs of lower-income employees, which firms may offset by restricting wage increases for higher-income employees.

In our baseline projection, loose labour market conditions and persistently restrained wages generate only slight inflationary pressures from the side of the labour market. At the same time, with inflation expectations stuck at a level above the medium-term target, wage dynamics may be actually higher than indicated by the forecast, which poses a risk.

3.3 Inflation may persistently overshoot the target, due to strong supply shocks amid recovering consumption

In the baseline scenario of our forecast, inflation overshoots the 3% target over the monetary policy horizon. The negative output gap, restrained wages stemming from loose labour market conditions and strengthening of the exchange rate since our August forecast point to lower inflation (see Chart 3-10). However, the powerful supply shocks anticipated over the short term exert upward pressure on the inflation path. Against this background, the greatest challenge for monetary policy is to reduce the second-round effects of supply shocks. The fact that the impact of these shocks will span several quarters poses a risk: their pass-through to wages may generate prolonged inflationary pressures. This risk is further aggravated by the fact that inflation expectations are still not anchored around the 3% target.

The output gap remains negative over our entire forecast horizon. Our expectations regarding the recovery of internal demand have slightly improved since the August issue of the Quarterly Report on Inflation. While government measures encourage household consumption, this is offset by the decline in government consumption expenditures. Although capacity utilisation in the manufacturing industry is approaching pre-crisis levels already, we anticipate substantial additional capacities to be developed over our forecast horizon. We continue to perceive significant free capacities in the services sector, which is confirmed by ongoing employment developments in this sector.

Inflationary pressures from the labour market may remain subdued. As activity is steadily increasing along with a moderate expansion in employment, we expect loose labour market conditions to prevail over our forecast horizon. Accordingly, wage growth may remain moderate even in the context of a continuous improvement in productivity. In addition, low wage dynamics may be fostered by the transformation of the personal income tax regime as well, since the desired increase in net wages can be implemented in the higher-than-average wage brackets even with more modest wage increases. As a result, the growth rate of unit labour cost remains at historically low levels in our baseline projection.

Chart 3-10
Expected changes in inflation and key macroeconomic variables determining inflation

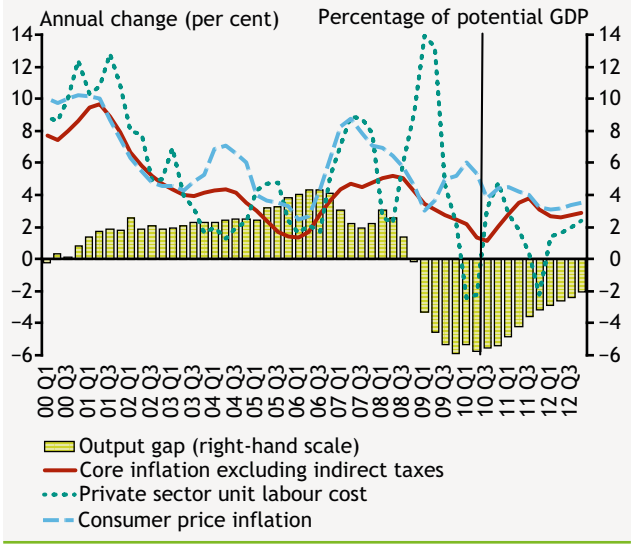
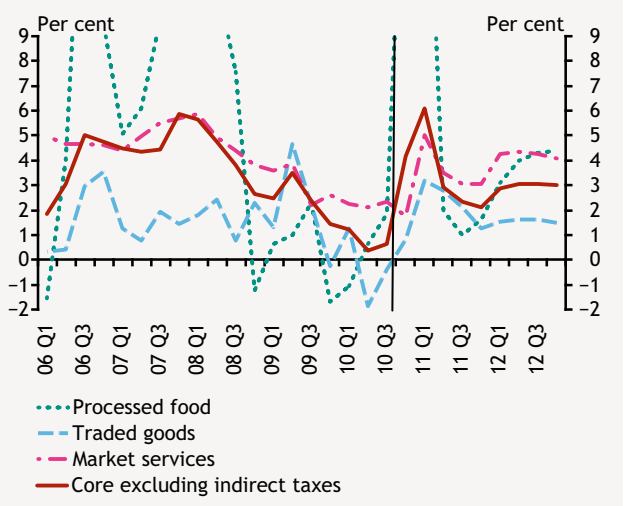


Chart 3-11
Trend inflation developments
(seasonally adjusted, annualised quarterly growth)



At the same time, negative supply shocks affecting the economy could result in an acceleration of inflation over the short term. Agricultural products may see higher and more sustained price increases than we have expected, the effect of which may pass through to processed food prices more aggressively in late 2010 and early 2011. The extent and persistence of food price increases is expected to be similar to those observed in 2007.

Sector-specific extra taxes may also put upward pressure on prices in 2011. Firms are likely to pass on a part of these taxes to consumers, especially in the less profitable commercial sector. As a result, the extra taxes may notably increase core inflation in 2011. For similar reasons despite of the stronger exchange rate assumption than in August, the inflation of industrial products may also pick up in 2011.

As regards supply shocks, our current forecast foresees a higher number of stronger and more lasting shocks than the August issue of the Quarterly Report on Inflation. Thus, there is a stronger risk of the higher inflation environment being built into wages and hence generating notable inflationary pressures on the side of the labour market over the monetary policy horizon. This appears even more likely considering that inflation expectations are still not anchored around the 3% target. Accordingly, in our forecast we have included a risk path, in which the faster nominal wage increase driven by persistently high inflation expectations leads to higher inflation, particularly in 2012.

Box 3-5
Short-term macroeconomic effects of sector-specific extra taxes

The government has imposed sector-specific extra taxes on the telecommunications, energy and retail trade sectors for a period of 3 years between 2010 and 2012. However, based on the communications of the government, it appears that part of these taxes may remain in place beyond that period, although we have no information about the exact rate. The annual sum of the extra tax and the different financial indicators of specific sectors are shown in Table 3-7. Taking into account that these taxes reduce the corporate tax base, the additional sum actually payable by the three sectors amounts to HUF 130 billion annually.

These taxes were essentially defined as a lump sum tax, as they are not influenced by firms' decisions (prices, wages, staff number, investment).

According to traditional theoretical economic models, lump sum taxes do not induce changes in the behaviour of firms (i.e. they are not distorting taxes). As such, these taxes reduce profits directly. The reason behind this is that the above models are based on the assumption that firms set their prices, wages and investment optimally, and thus have maximised their profits. They base their price-setting decisions on marginal costs, wage-setting decisions on marginal productivity, and investment decisions on the present value of the return on additional investment – items not influenced by the payment of a lump sum tax. Indeed, even after paying the lump sum tax, they will remain in the profit maximum, albeit obviously smaller than it would have been without the tax, so they have no reason to change their behaviour.

Having said that, firms might still change their decisions in response to the extra tax. The adoption of these taxes may aggravate uncertainty about the investment environment, which could raise the expected rate of return on investment, to which firms may respond by restraining their investment activity. Another effect pointing to firms' slashing of investment activity is the fact that less funds will remain to spend on investment projects after these taxes have been paid, and external borrowing is usually a more expensive option. In addition, firms may not look at these taxes as temporary, but assume instead that profitable sectors or sectors collecting large revenues will be subjected to extra taxes in the long run. They may respond by altering their behaviour and by adjusting their prices and wages in addition to investment. Moreover, this shock affects several companies within the same sector, which is another consideration supporting the behaviour-changing effect of extra taxes: firms knowledge about the extra tax burden on their competitors might play a coordinating role and encourage firms to pass the tax on to prices. Finally, contrary to theoretical models, in making their price-decisions firms may rely on simple rules of thumb, such as a fix profit rate, instead of marginal costs. In this case, again, extra taxes may have a behavioural effect.

In view of the above, in preparing our forecast we assumed that firms may respond to their increased tax burden by raising prices, reducing wages and staff, and by postponing investment. How each sector responds may be very different depending on sectoral profitability, the specific sector's wage bill, the volume of pre-scheduled investment projects and the strength of competition.

Table 3-7
Sum of sector-specific extra taxes and the main financial indicators of the affected sectors

Branch (NACE code)	Extra tax (billion HUF)	Total income (billion HUF)	Pre-tax profit (billion HUF)	Payed corporate income tax (billion HUF)	Total personal costs (billion HUF)	Wage cost (billion HUF)	Number of employees (person)	Gross average wage (HUF)	Investment at current prices in 2009 (billlion HUF)
Energy (35)	**70**	4,820	201	30	172	105.2	25,091	345,560	205.2
Retail trade (47)	**30**	5,670	–31.6	10.5	498	262.7	233,653	139,414	137.6
Telecom (61)	**61**	1,160	53.9	8.1	159	88	17,916	453,714	131.6

Note: For the energy sector, the legislation does not apply to firms on the basis of NACE codes; it is not taken into account in the statistical calculations in the table.

All of these effects – higher inflation, lower investment, restrained outflow of wages – inhibit economic growth over the short run.

If firms passed 100% of the tax on to consumers, it could raise prices and the level of inflation by around 1%. However, we believe that the inflationary effect may prove to be significantly less pronounced. The retail trade sector is likely to demonstrate the highest pass-through rate.

Indeed, since this sector sustained losses in the previous year already, it does not have sufficient profits to absorb the taxes, even temporarily. On the other hand, a pass-through to wage costs may be hindered by the fact that the average wages within the sector are substantially lower than those in the national economy, and thus the new personal income tax measures do not imply a tax cut for employees in this sector. In the case of the energy and telecommunications sectors, the inflationary effect may be smaller. In these areas firms are expected to compensate for the greater tax burden primarily by restraining investment activity and curbing wage costs. The latter impact is all the more likely in view of the fact that average wages within the sector are significantly higher than those in the national economy, which means that the personal income tax measures could result in considerable net wage increases even if nominal wages remain unchanged. According to our calculations, freezing nominal gross wages and slashing bonuses may contribute to the payment of the tax burden by HUF 10 billion annually, which reduces the wage index by 0.2 percentage points.

In our estimation of the investment effects, we treated sector-specific extra taxes as if they were taxes charged on capital. This generates an increase in the effective tax rate by 1 percentage point, which would raise capital cost by 26 basis points. Since the sectors in question are capital-intensive, this would trigger a sharp decline in investment projects, amounting to HUF 40 billion annually. However, as they do not have an opportunity to respond to the extra tax in 2010, we assume that the decline in investment will be more pronounced in 2011 and 2012. Consequently, for the next two years we envisage a HUF 60 billion decline in investment for these sectors (representing slightly less than 15% of the sectors' total investment and 0.9% of total investment in the national economy).

Based on the rise in capital cost the estimated increase of the price level would be 0.3% in 2011 and 2012, which would increase inflation in 2011. In other words, this would imply a pass-through rate of around one third.

Table 3-8
Effects of sector-specific extra taxes on investment, inflation and wages

	Direct effect of sector-specific extra taxes			Indirect effect (more uncertainty in the investment environment)
	Investment (billion HUF)	Inflation (percentage point)	Wages (percentage point)	Investment (billion HUF)
2010	0	0	0	0
2011	–60	0.3	–0.2	–80
2012	–60	0.2	0	–120

However, based on information received in recent weeks, it appears likely that these extra taxes will become permanent. In that case firms would be less willing to put up with the profit losses resulting from the extra tax. In such a scenario pass-through could be bigger and it could last longer. On this basis, we expect a pass-through rate of 0.5 percentage points relative to the 1 percentage point of a potential full pass-through, of which 0.3 percentage points would be realised in 2011 inflation compared to 0.2 percentage points in 2012.

The sectors concerned would be forced to endure a loss in profits against those portions of the tax which they cannot pass on or cover with savings in the ways described above. In line with our assumption that the affected sectors have no time to respond to the taxes in a meaningful way this year, profits are expected to deteriorate mainly in 2010.

In addition to the direct consequences, we need to consider the effects of an increasingly uncertain investment environment. The measures warrant an overall decline in investment in the entire national economy in addition to the sectors directly concerned. Consequently, we lowered the projection for investment projects over our forecast horizon by an additional HUF 200 billion overall, of which a decline by HUF 80 billion is expected to take place in 2011 followed by a decline by HUF 120 billion in 2012.

Our expectations regarding the items outside of core inflation have been adjusted upward over the short term to reflect rapidly rising unprocessed food prices. These price increases are not expected to continue at the same pace after the 2011 harvests, resulting in marked base effects in annual price indices. The shift in our basic assumptions points to a more moderate increase in regulated prices over our forecast horizon. In our current forecast we assumed that – contrary to our previous assumptions – the gas price subsidy system would not be eliminated, pointing to smaller inflationary effects.

In our baseline projection – assuming fixed exchange rate and interest rate levels – inflation consistently overshoots the 3% inflation target across our forecast horizon. Although the negative output gap, the loose labour market environment and the stronger exchange rate would, overall, warrant a lower inflation path, strong supply shocks are expected to increase inflation. The effect of these shocks will be perceived for several quarters to come. Moreover, since inflationary expectations are not firmly anchored, there is an increased risk of second-round inflationary effects arising.

Table 3-9
Details of our inflation forecast

	Weight	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4
Unprocessed food	*5.8*	1.1	-2.7	12.6	16.3	13.7	8.1	1.8	1.3	0.6	3.2	5.0	5.4
Vehicle fuel and market energy	*7.6*	21.3	20.8	14.4	13.9	5.5	1.1	1.1	2.4	3.3	3.4	3.1	2.8
Regulated prices	*16.7*	6.5	8.0	6.0	5.6	6.7	5.8	5.9	6.6	5.9	5.7	5.2	4.9
Core inflation	*70.0*	4.8	3.9	1.5	2.2	3.1	3.6	4.0	3.5	2.7	2.7	2.9	3.2
Consumer price index	***100.0***	**6.0**	**5.3**	**3.8**	**4.4**	**4.5**	**4.0**	**3.9**	**3.8**	**3.1**	**3.3**	**3.4**	**3.5**

3.4 Effects of alternative scenarios on our forecast

Effective from this issue of the Quarterly Report on Inflation, we have modified the presentation of risks surrounding our forecast. In our previous reports, we assigned probabilities to the risk paths drawn up in the alternative scenarios on the basis of the staff's judgement, and the skewness of the fan chart thus produced indicated the staff consensus with regard to risk perception. The current Report presents only the exact quantifications of our alternative scenarios, while the fan chart drawn around the baseline is symmetrical, indicating – based on estimated past forecast errors – the uncertainty surrounding our forecast.

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

The decline in inflation expectations has slowed in recent months, and they continue to significantly overshoot the medium-term inflation target. This phenomenon may be attributed to the unfavourable domestic inflation history and significant one-off shocks, which continue to keep inflation high in Hungary. Although in the current environment of economic recession the indicators measuring short-term inflationary pressure gradually decelerate, the annual inflation rate continues to overshoot the medium-term inflation target significantly as a result of indirect tax measures, regulated price increases and rising global energy prices. In view of the fact that inflation in Hungary has never resided around the 3% inflation target for a prolonged period since the political transition, it is difficult to foresee the extent to which the inflation target could 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 baseline inflation scenario, it has an almost neutral effect on the GDP path.

Our second scenario presents the effects generated by an earlier-than-expected return of employment to pre-crisis levels. On the one hand, this could be driven by the better-than-expected effect of the government's economic package on labour supply; and on the other hand, previously labour hoarding sectors may start to record a faster growth in employment in parallel with the decline in the relative price of labour and the pick-up in domestic demand. If investors find that the benefits of the personal income tax and corporate tax changes outweigh the unfavourable effects of sector-specific extra taxes, the risk premia of investment may decrease (as opposed to the baseline scenario, where we expect an increase in risk premia). The expansion of accessible workforce could therefore contribute to a further rebound in investment projects. A more favourable labour market environment could result in a substantial increase in household consumption. This scenario implies faster GDP growth than in our baseline projection. At the same time, by generating a potentially significant increase in the wage bill, higher employment may ultimately accelerate inflation.

Our third risk scenario involves the deterioration of the Hungarian economy's risk perception. In part, this may reflect the materialisation of threats to the global economic

Chart 3-12
Baseline inflation projection, the extent of its uncertainties and the effect of alternative scenarios

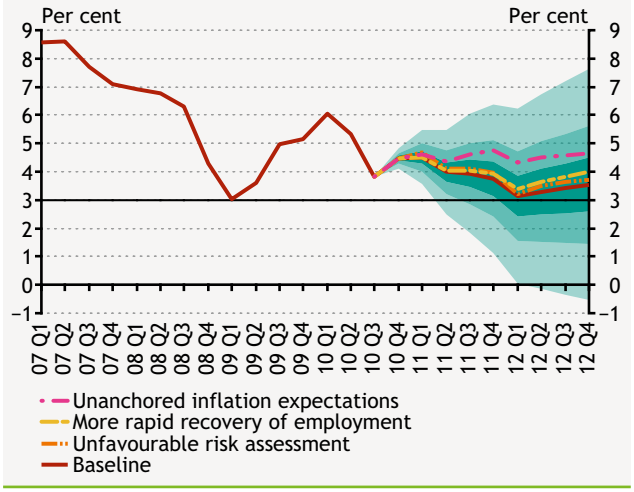
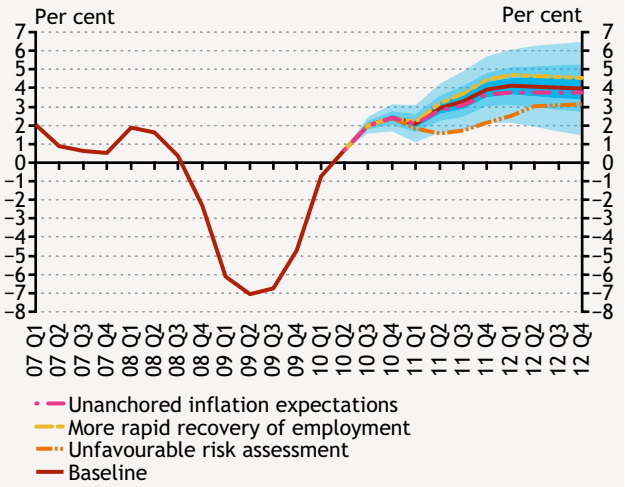


Chart 3-13
Baseline GDP projection, the extent of its uncertainties and the effect of alternative scenarios

(annual changes, seasonally adjusted and reconciled data)



recovery, which may be reinforced by risks related to fiscal sustainability and rising external borrowing costs. Even in the short run, this scenario could have a major impact on growth. The deterioration of the external environment reduces exports, while the deterioration of risk perception increases firms' cost of equity and tightens corporate and household lending conditions, bringing about a sharp decline in investment activity and consumption. Growth could remain 1.5-2 percentage points below our baseline forecast in 2011. The increase in the risk premium could also manifest itself in currency depreciation, aggravating short-term inflationary pressures. Slower domestic demand growth and lower imported inflation may only partially offset this effect, resulting in a slightly higher inflation path than in the baseline projection.

3.5 A gradual decline is expected in external financing capacity

Hungary's external financing capacity is expected to remain significant over the entire forecast horizon, but its size is likely to decrease gradually due to the widening deficit on the income balance. The dynamics of the net saving position have changed compared to the earlier forecast as the sector-specific extra taxes will have significant impact on profit withdrawal. Data received on foreign trade developments would indicate a better-than-expected external balance path. However, this effect is likely to be offset by the impact of methodological changes to the balance of payments and the demand-increasing effect of government measures.

The substantial surplus of the real economic balance – which can primarily be attributed to export growth fuelled by external demand – will remain in place in the coming years. The import-boosting effect of rising investment and consumption growth could be offset by the net export-boosting effect of production picking up with the completion of investment projects scheduled in the automobile industry.

Following the deterioration observed in 2008 and 2009, corporate profitability has gradually improved, which implies a continuously rising income balance deficit. The extra taxes imposed on corporations will have an opposite effect: in 2010 they decrease the profits of foreign-owned firms significantly, which in turn reduces the income balance-deteriorating effect of the revenue outflows associated with these firms. However, since the firms concerned are expected to offset these taxes by weaker wage increases or higher prices in the coming years, this effect will stop decreasing the income balance deficit from 2011. In addition, current euro and forint yield curves point to a slow increase in net interest expenditures on debt. Thanks to the massive inflows of EU transfers, a substantial surplus has been recorded on the capital balance, which is expected to contribute significantly to sustaining Hungary's external financing capacity in the coming years.

The financial savings of the private sector are more than sufficient to offset the financing requirement of the general government over our forecast horizon. Although the reduction in the personal income tax rates is primarily set to increase the disposable income of households with a higher income ratio, and thus a higher savings ratio, thus pointing to an increase in household savings in the coming years, the faster growth in consumption implies gradually declining household savings. In addition, since the measures affecting the pension fund scheme (see details at the in the

Table 3-10
Structure of external financing capacity
(in proportion to GDP, expressed in percentages unless otherwise indicated)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
	Fact/Preliminary fact						Forecast		
1. Balance of goods and services	–3.2	–1.6	–1.4	0.9	0.4	5.1	6.8	6.8	7.0
2. Income balance	–5.2	–5.7	–5.9	–7.3	–7.2	–5.9	–5.4	–6.2	–6.7
3. Balance of current transfers	–0.2	–0.3	–0.3	–0.5	–0.6	0.4	0.0	–0.2	–0.2
I. Current account balance (1+2+3)	*–8.6*	*–7.6*	*–7.6*	*–6.9*	*–7.4*	*–0.5*	*1.3*	*0.3*	*0.1*
Current account balance in EUR billions	*–7.1*	*–6.7*	*–6.8*	*–7.0*	*–7.8*	*–0.4*	*1.3*	*0.3*	*0.1*
II. Capital account balance	*0.1*	*0.7*	*0.8*	*0.7*	*1.0*	*1.3*	*2.0*	*2.3*	*2.3*
External financing capacity (I+II)	**–8.5**	**–6.9**	**–6.8**	**–6.2**	**–6.4**	**0.8**	**3.4**	**2.6**	**2.3**

Table 3-11
Changes in the net financing capacity of the household sector
(as a percentage of GDP)

	2010	2011	2012
Underlying net financial saving	**5.4**	**4.9**	**4.4**
– Suspension of the contribution to the second pillar of the pension system	*0.3*	*1.1*	–
– Lower contribution resulted from the decreasing number of contributories	–	–	*0.4*
= Financial saving consistent with SNA deficit	**5.1**	**3.8**	**4.0**
*– Wealth effect due to leaving the second pillar**	*0.1*	*1.9*	*1.8*
= Net financial saving in the financial accounts	**5.0**	**1.9**	**2. 2**

** Including the wealth effect resulted from leaving the second pillar of the pension system at the end of 2009.*

chapter on budget) will also reduce the financing capacity of this sector in 2011 and 2012, financing capacity is expected to decline significantly over the next two years (see Table 3–4). The suspension of the contributions to the second pillar in 2011 will reduce the net financial savings of households by more than 1% of GDP. The option to return to the state pension scheme has an even bigger impact: according to our assumption, which is based on the budget for 2011, nearly 40% of members are expected to return to the state pension scheme, in equal proportion between 2011 and 2012. As a result, compared to our earlier forecast, the financial savings of the household sector may decrease by nearly 2% of GDP in both years. However, owing to the temporary decline in deficit, this effect will not be reflected in the SNA deficit of the general government, and accordingly, we excluded that effect from the financing capacity of households as well, as it is consistent with the SNA deficit.

The extension of the preferential corporate tax rate, the favourable external demand and the – presumably still substantial – EU transfers point to a continuing high financing capacity in the corporate sector in the coming period. The taxes imposed on financial institutions may contribute to sustaining the high level of the private sector's financial savings through a presumably subdued lending activity. From 2012 a notable pick-up in investment may reduce the financial savings of the corporate sector, parallel to the external financing capacity of Hungary.

Table 3-12
GDP-proportionate net financing capacity of specific sectors
(as a percentage of GDP)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
	Fact/Preliminary fact						Forecast		
I. Augmented general goverment*	–7.6	–8.9	–9.1	–5.4	–3.3	–4.2	–4.3	–4.7	–5.0
II. Households**	2.3	4.3	3.3	1.6	1.5	3.5	5.1	3.8	4.0
Corporate sector and "error" (= A – I. – II.)	*–3.2*	*–2.3*	*–1.0*	*–2.3*	*–4.6*	*1.6*	*2.6*	*3.6*	*3.3*
A. External financing capacity, "from above" (=B+C)	–8.5	–6.9	–6.8	–6.2	–6.4	0.8	3.4	2.6	2.3
B. Current account balance	–8.6	–7.6	–7.6	–6.9	–7.4	–0.5	1.3	0.3	0.1
C. Capital account balance	0.1	0.7	0.8	0.7	1.0	1.3	2.0	2.3	2.3
D. Net errors and omissions (NEO)***	–2.0	–2.2	–1.9	–0.3	–2.4	–0.2	–1.3	–1.2	–1.1
External financing capacity "from below" (=A+D)	–10.5	–9.1	–8.8	–6.5	–8.8	0.6	2.1	1.4	1.2

** 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 but formally implemented under PPP schemes. The forecast related to the borrowing requirement of the general government does not include stability and interest rate risk reserves.*
*** Financing capacity consistent with the SNA deficit of the general government which, owing to the temporary nature of such effect, does not take account of the loss of financial wealth generated by the returning members of private pension funds. The official financing capacity of households could be significantly lower (see Table 3-11).*
*** In forecasting the "errors and omissions" item of the balance of payments, we assumed that the cumulated figure for the last four quarters would remain unchanged.*

Table 3-13
Changes in our projections compared to August 2010

	2009	2010		2011		2012	
		Projection					
	Fact	August	Current	August	Current	August	Current
Inflation (annual average)							
Core inflation[1]	**4.1**	3.0	**3.1**	2.5	**3.5**	2.9	**2.9**
Consumer price index	**4.2**	4.7	**4.9**	3.5	**4.0**	3.4	**3.3**
Economic growth							
External demand (GDP-based)	**−4.2**	1.7	**2.1**	1.8	**1.9**	2.0	**2.0**
Household consumer expenditure	**−7.6**	−3.5	**−3.0**	2.2	**2.8**	3.6	**4.0**
Government final consumption expenditure	**−1.2**	−0.1	**−0.1**	1.5	**0.9**	0.9	**−1.1**
Fixed capital formation	**−6.5**	1.0	**−0.9**	2.8	**3.2**	5.3	**6.4**
Domestic absorption	**−11.5**	−0.9	**−1.5**	2.2	**2.5**	3.4	**3.5**
Export	**−9.1**	11.6	**14.5**	7.5	**10.5**	9.5	**9.8**
Import	**−15.4**	10.4	**12.5**	7.2	**10.7**	9.7	**9.7**
GDP*	**−6.7**	0.9	**1.1**	2.8	**3.1**	3.8	**4.0**
External balance[2]							
Current account balance	**−0.5**	0.7	**1.3**	0.9	**0.3**	0.1	**0.1**
External financing capacity	**0.8**	2.9	**3.4**	3.3	**2.6**	2.3	**2.3**
Government balance[2]							
ESA balance	**−4.4**	−4.3	**−3.8**	−4.1	**−2.7**	−3.7	**−3.1**
Labour market							
Whole-economy gross average earnings[3]	**0.6**	2.7	**2.0**	4.4	**2.2**	5.4	**5.7**
Whole-economy employment[4]	**−2.5**	−0.3	**0.1**	0.4	**0.5**	0.6	**0.4**
Private sector gross average earnings[5]	**4.4**	4.2	**3.9**	4.6	**4.4**	5.6	**5.6**
Private sector employment[4]	**−3.8**	−1.5	**−0.7**	0.3	**0.9**	0.8	**1.2**
Private sector unit labour cost[4,6]	**8.3**	−1.9	**0.8**	1.7	**0.7**	2.7	**1.9**
Household real income[7]	**−5.8**	−2.7	**−1.1**	1.9	**1.3**	3.0	**3.1**

[1] From May 2009 on, calculated according to the joint methodology of the CSO and MNB.
[2] As a percentage of GDP. In our forecast we have not taken into consideration any risk from debt assumptions.
[3] Calculated on a cash-flow basis.
[4] According to the CSO LFS data.
[5] According to the original CSO data for full-time employees.
[6] Private sector unit labour costs calculated with a wage indicator excluding the effect of whitening and the changed seasonality of bonuses.
[7] MNB estimate. In our current forecast we have corrected the data of household income with the effect of changes in net equity because of payments into mandatory private pension funds.
** The table contains data excluding calendar effects.*

Table 3-14
MNB basic forecast compared to other forecasts

	2010	2011	2012
Consumer Price Index (annual average growth rate, %)			
MNB (November 2010)	4.9	4.0	3.3
Fiscal Council (November 2010)	4.8	3.7	3.1
Consensus Economics (October 2010)[1]	4.5 – 4.8 – 4.9	2.5 – 3.3 – 4.0	–
European Commission (May 2010)	4.6	2.8	–
IMF (October 2010)	4.7	3.3	3.0
OECD (November 2010)	4.9	2.9	3.1
Reuters survey (November 2010)[1]	4.7 – 4.8 – 5.1	3.0 – 3.6 – 4.0	2.7 – 3.1 – 3.8
GDP (annual growth rate. %)			
MNB (November 2010)[4]	1.1	3.1	4.0
Fiscal Council (November 2010)	0.9	2.8	3.3
Consensus Economics (November 2010)[1]	0.5 – 1.0 – 1.2	1.5 – 2.4 – 3.0	–
European Commission (May 2010)	0.0	2.8	–
IMF (October 2010)	0.6	2.0	3.0
OECD (November 2010)	1.1	2.5	3.1
Reuters survey (November 2010)[1]	0.8 – 1.0 – 1.4	1.8 – 2.6 – 3.0	–
Current account balance (percent of GDP)			
MNB (November 2010)	1.3	0.3	0.1
European Commission (May 2010)	−0.2	−0.3	–
IMF (October 2010)	0.5	0.7	−0.7
OECD (November 2010)	−0.3	−1.1	–
Budget Balance (ESA-95 method, percent of GDP)			
MNB (November 2010)[6]	−3.8	−2.7	−3.1
Fiscal Council (November 2010)	−3.7	−2.4	–
Consensus Economics (November 2010)[1]	(−3.0)−(−3.9)−(−5.0)	(−2.3)−(−3.1)−(−4.0)	–
European Commission (May 2010)	−4.1	−4.0	–
IMF (October 2010)	−4.2	−4.5	−5.2
OECD (November 2010)	−4.2	−3.1	−2.9
Reuters survey (November 2010)[1]	(−3.8)−(−3.8)−(−4.1)	(−2.5)−(−2.9)−(−3.2)	–
Forecasts on the size of Hungary's export markets (annual growth rate, %)			
MNB (November 2010)	10.7	5.4	4.6
European Commission (May 2010)[2]	4.5	5.1	–
IMF (October 2010)	9.9	5.1	–
OECD (November 2010)[2,3]	10.8	6.7	5.2
Forecasts on the GDP growth rate of Hungary's trade partners (annual growth rate, %)			
MNB (November 2010)	2.1	1.9	2.0
European Commission (May 2010)[2]	1.4	2.0	–
IMF (October 2010)[2]	2.2	2.1	2.5
OECD (November 2010)[2,3]	2.7	2.3	2.4
Forecasts on the GDP growth rate of euro area (annual growth rate, %)			
MNB (November 2010)[5]	1.6	1.4	1.5
European Commission (May 2009)	0.9	1.5	–
IMF (October 2010)	1.7	1.5	1.8
OECD (November 2010)	1.7	1.7	2.0

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] In our forecast we have not taken into consideration any risks from debt assumptions.
Sources: Eastern Europe Consensus Forecasts (Consensus Economics Inc. [London], November 2010); European Commission Economic Forecasts (May 2010); IMF World Economic Outlook (October 2010); Reuters survey (November 2010); OECD Economic Outlook No. 88 (November 2010).

3.6 Government deficit targets are attainable through major temporary revenue measures

The government measures announced in the autumn have transformed the fiscal path fundamentally. As the 2nd Economic Action Plan and the budget bill intend to achieve the annual fiscal targets in 2010 and 2011 through temporary measures aimed to generate a large increase in revenues, the ESA-based fiscal deficit is likely to drop to an all-time low. Besides the temporary measures aimed at generating higher revenues, there are also longer-term measures which would, ceteris paribus, result in a higher fiscal deficit through tax cuts and higher expenditures. Overall, fiscal policy will use the sizeable temporary revenues in three ways: to reduce the fiscal deficit, to offset the impact of tax cuts and to cover the expenditures which are higher than what was assumed in August.

Excluding the temporary measures,[26] the structural deficit is expected to rise significantly compared to the trajectory projected in August, mostly because of the cut in personal income taxes. Owing to the temporary measures the ESA deficit in 2011–2012 can be lower than its structural level of 4 per cent of GDP, but over the long term and without further action it may converge to this higher level.

The fiscal impulse arising from fiscal policy will be expansionary in 2011 and contractionary in 2012. The reason why the fiscal impulse moves in an opposite direction of changes in the ESA-based fiscal deficit is that most of the latter is due to the measures related to the private pension fund scheme, which do not affect the disposable income of the sectors outside the general government. The expansionary fiscal impulse in 2011 will be due to personal income tax cuts and corporate tax cuts. In 2012, however, lower expenditures and higher tax revenues stemming from the economy's improved cyclical position will result in a contractionary fiscal impulse to the economy.

In 2010 underlying fiscal developments proved to be somewhat more unfavourable than we indicated in the August 2010 issue of the *Quarterly Report on Inflation*. The incoming data, ceteris paribus point to an ESA deficit figure higher by a half percentage point than the 4.3% figure indicated in our August projections. Since the August issue of the *Quarterly Report on Inflation,* corporate tax revenues have fallen significantly short of our projections, and in addition budgetary institutions have yet to start curbing their nominal expenditures; therefore we adjusted the relevant projections in the direction of a higher deficit. By contrast, the sector-specific extra taxes and private pension fund contributions will improve the budget balance by around 1.0% of GDP, and thus ESA deficit may be equal to 3.8% of GDP.

In 2011 we expect the ESA deficit to drop to 2.7% of GDP, which is influenced by two measures with opposing fiscal effects. Major, lasting tax cuts will come into effect through the personal income tax regime; however, this will be offset by the temporary balance-improving effect of the measures affecting the private pension fund system. The latter is composed of the re-channelling of private pension fund contributions and the one-off capital income from members returning to the state pension scheme. Assumptions about the number of those leaving the private pension funds and the relevant statistical accounting could considerably influence our deficit and debt projections for 2011.

In 2012 the ESA deficit is expected to hover around 3.0% of GDP. The deficit increase can be explained by two factors: firstly, the contributions of those staying in the private pension fund system will no longer be part of the budget; secondly, we assume that the special tax on financial institutions will be reduced by one half. In addition, the

[26] Temporary measures: sector-specific extra taxes above their long-term expected level; temporary rechanneling of SSC payments from private pension fund; capital revenues from switching back private to public pension scheme.

Table 3-15
Deficit indicators of the general government
(as a percentage of GDP)

	2009	2010	2011	2012
1. ESA balance	−4.4	−3.8	−2.7	−3.1
2. Gap between ESA and augmented (SNA) balance*	0.2	−0.5	−2.0	−1.9
3. Cyclical component	−1.5	−2.1	−1.6	−1.4
4. Cylically adjusted augmented (SNA) balance (1+2-3)	−2.7	−2.2	−3.1	−3.6
5. Cylically adjusted augmented (SNA) balance without temporary taxes**	−2.7	−2.9	−4.3	−3.8
memo: ESA primary balance	0.1	0.2	1.1	0.6
memo: primary augmented (SNA) balance adjusted by revenues related to private pension funds	0.2	−0.6	−2.2	−1.3

** Main adjustments: wealth effect of returning private pension fund members, PPP investment projects, quasi-fiscal activities.*
*** Temporary measures: the temporary part of sector-specific taxes, rechanneling of SSC payments from private pension funds.*

further reduction of the tax base set forth by legislation implies a cut in personal income taxes; however, its effect is offset by the assumed tightening of tax allowance for employees, the details of which are currently unavailable. The deficit-increasing effects will be largely offset by an improvement in the cyclical position of the economy and an expected limited increase in expenditures.

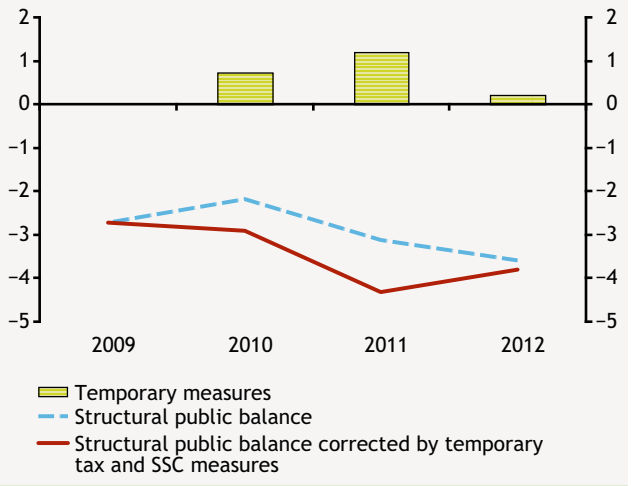
Combined with the expected higher economic growth, the drop in the ESA deficit will contribute to a faster decline in the GDP-proportionate gross public debt. Public debt may peak at around 79% of GDP in 2010, and drop to 75% by 2012.

Excluding the effects of temporary measures, the structural position is expected to deteriorate slightly

The cyclically adjusted augmented (SNA) balance is used regularly in our analyses in order to present the structural deficit. In addition to this conventional structural balance, on this occasion we also present a structural balance from which the effects of the temporary measures were excluded, because the difference between the actual structural balance and the level of the structural balance without temporary effects may become important in the present circumstances. The difference between the two indicators reflects the fact that the latter does not include the temporary re-channelling of contributions and the net balance-improving effect of the portion of sector-specific extra taxes and that of bank tax above its expected permanent level.[27]

Excluding temporary measures, the structural deficit is expected to rise significantly in 2011 and 2012 compared to the trajectory projected in the August issue of the *Quarterly Report on Inflation*, of which the cut in personal income taxes accounts for 1 percentage point, while the remaining part reflects higher-than-expected expenditures. The structural deficit is expected to jump to 4.3% in 2011, due to the changes in personal income tax scheme. In 2012 the expected limited increase in expenditures causes a slight decrease of the structural deficit. The increase of the ESA-deficit in 2012 is not reflected in the structural indicator because the former is mainly driven by the partly cease of temporary measures, but temporary measures are excluded from this kind of structural deficit. Excluding temporary measures, the structural deficit fluctuates

Chart 3-14
Changes in the structural balance vs. structural balance fully adjusted for revenues from temporary measures
(as a percentage of GDP)



[27] Owing to their unambiguously one-off nature, revenues from the wealth effect of returning private pension fund members are not included even in the traditional structural indicator.

around 4% of GDP and this level indicates where the ESA-deficit would converge when the negative economic cycle comes to an end and the specifically temporary measures are phased out. Consequently, further measures will be necessary in order to meet the Maastricht criteria beyond 2012, especially if the planned corporate income tax cut in 2013 is taken into consideration.

In 2011 and 2012 the effect of fiscal policy on the disposable income of other sectors, namely the fiscal impulse, will change to the opposite direction to what the change in the ESA-deficit suggests. The reason is that the ESA-based deficit is largely influenced by two measures – the one-off wealth effect of private pension fund members returning to the state pillar and the re-channelling private pension fund contributions into the budget – which do not directly affect the disposable income of private sector. Neither accumulated savings nor social security contributions belong to the freely disposable wealth and income of households. For the calculation of the fiscal impulse, it is reasonable to use the primary augmented (SNA) balance adjusted for the private pension scheme related measures, because its changes suggest the effect of fiscal policy on the – freely usable – disposable income of other sectors.

The fiscal impulse will be expansionary in 2011, despite a lower ESA-based deficit and amount to approximately 1.5% of GDP. The anticipated increase in the disposable income of the private sector will materialise through personal income tax cuts and expanded eligibility for preferential corporate tax rate. The sector-specific extra taxes will not affect the 2011 fiscal impulse, as they are already in force in 2010. The 2012 fiscal impulse will move in the opposite direction of changes in the ESA-based fiscal deficit again, because the higher deficit will be attributable to the partial termination of the recognition of private pension fund contributions. The reasons why the fiscal impulse adjusted for the measures related to the private pension funds moves in an opposite direction are a rise in revenues, due to economic growth and our assumption for a limited rise in expenditures.

As a result of the measures, revenues are expected to increase significantly on a temporary basis

Developments in fiscal revenues depend mainly on whether fiscal policy intends to reduce the deficit which may arise concurrent with longer-term tax cuts by way of temporary measures aimed at generating higher revenues. A sizeable portion of the temporary revenues is capital revenue, thus, it does not affect the extent of tax centralisation. Due to the introduction of sector-specific extra taxes and the reallocation of contributions, consolidated revenues are higher in 2010 and will also be higher in 2011 than previously thought, even if the capital revenues are excluded. In 2012 the revenues may decline to the earlier expected level as the temporary revenues will partially phase out. Overall, between 2010 and 2012, the consolidated revenues less capital revenue related to private pension funds are likely to decrease by 3% of GDP.

Table 3-16
Fiscal effects of the 1st and 2nd Economic Action Plan
(as a percentage of GDP)

	2010	2011	2012
1. Net income from the temporary part of sectoral taxes*	0.5	0.5	0.2
2. Temporary rechanneling of SSC payments from private pension funds	0.2	0.7	0.0
3. Capital revenue from people switching back from private to public pension scheme	0.0	1.9	1.7
I. Temporary measures on revenue side (1+2+3)	**0.7**	**3.1**	**2.0**
4. Net revenue from the permanent part of sectoral taxes and taxes on financial institutions*	0.5	0.5	0.5
5. PIT changes	0.0	−1.0	−1.1
6. Extension of preferential CIT rate	−0.3	−0.5	−0.5
7. SSC revenue from people switching back from private to public pension scheme	0.1	0.4	0.4
8. Increase of SSC rate	0.0	0.1	0.1
9. Increase of excise duties	0.0	0.1	0.1
II. Permanent measures on revenue-side (4+…+9)	**0.4**	**−0.4**	**−0.4**
III. Permanent increase of expenditures	**−0.4**	**−1.1**	**−1.0**
IV. Total (I+III+III)	**0.8**	**1.6**	**0.6**

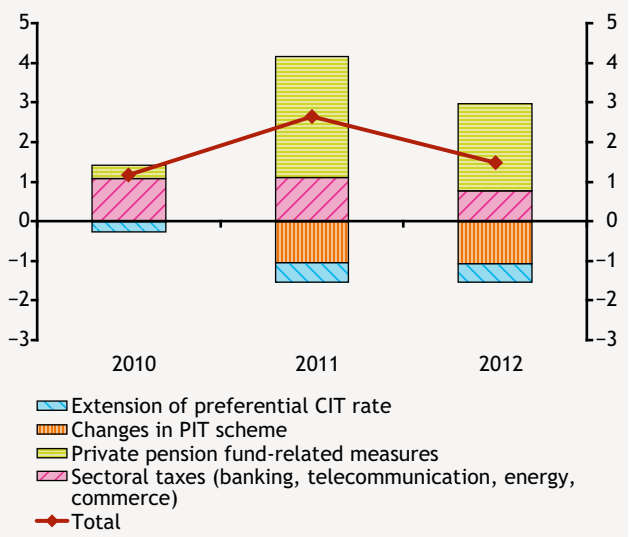
** Assuming that half of the tax on financial institutions and certain sectors remains permanent.*

Another important effect, albeit rather modest compared to the measures, is the revenue-increasing effect of the economic recovery following the cyclical bottom in 2010. In 2010 the cyclical effect reduced revenues by 0.6% relative to the previous year, while the annual extra revenues from the positive effect of the cyclical recovery will amount to 0.5% and 0.2% of GDP in 2011 and 2012, respectively. Owing to the stimulating effect of the government measures on the economy, the Hungarian economy may return to its potential level sooner than expected. Thus, economic growth should have a stronger fiscal effect in 2011 than we had anticipated in our previous forecast.

The most important measures with permanent effects relate to personal and corporate income taxes. Despite spreading over several years, almost the full effect of the transformation of the personal income tax regime will be felt in 2011 already (PIT revenue is to decrease by 1% of GDP), with only a slight increase expected for subsequent years in tax cuts. Indeed, in 2011 the amendment of the tax table and the adoption of the family tax allowances will be only slightly offset by the reduction of the tax allowance of employees; however, in 2012 a further expected reduction of the tax allowance will practically offset the gradual return from the super gross tax base system to the gross tax base. For lack of legislation eliminating the tax allowance, we assumed in our forecast that it would be reduced by a half in 2012. Other permanent changes in the tax regime include the extension of the preferential corporate tax rate and the lowering of the normal tax rate to 10% from 2013. While the measure aimed at increasing contributions by 0.5 percentage points are less sizeable, it has a permanent effect. The excise tax increase improves the balance by less than 0.1% of GDP.

Offsetting personal income tax cuts, the attainment of the deficit target will be ensured by a substantial – but only temporary – increase in other revenues. Of these measures, the ones affecting the private pension fund system will have the most significant impact. They include three effects: (1) re-channelling private pension fund contributions into the budget, affecting 2010 and 2011; (2) the one-off capital transfer from private pension fund members returning to the state pillar, affecting 2011 and 2012; (3) continuous contribution revenues to be collected from returning members from 2011, with a permanent effect. In line with the budget bill for 2011, in our forecast we assumed capital revenue of HUF 530 billion, which is consistent with a return ratio of 19%. In addition we assume that the administration of returning will be ended in 2012, thus it generates further revenue of HUF 530 billion in 2012 (detailed description of our assumptions can be found in Box 2.)

Chart 3-15
Budgetary effect of major revenue-related government measures
(as a percentage of GDP)



Taking into account their corporate tax-reducing effect, the sector-specific extra taxes – affecting financial institutions, energy providers, telecommunication companies and commercial chains – will improve the balance by 1% of GDP in 2010 and 2011 and to a lesser extent in 2012, as we expect the bank tax to be reduced by one half.

In terms of long-term sustainability, the most essential components of the government's fiscal programme include a transformation of the pension fund system, the temporary suspension of private pension fund contributions, and the option to return to the social security pillar. In view of the expected decline in population and the significant increase in the number of the elderly, we cannot disregard the long-term effects of decisions related to the pension system. In this respect, it is not only the public debt figure shown by current statistics that counts, but also the level of currently hidden, future liabilities, which will only become explicit over time. If the revenues transferred from private pension funds are used for financing current expenditures in a broadly unchanged structure, the decline in explicit debt will fall considerably short of the total future liabilities deriving from the pension scheme (i.e. the increase in implicit debts), which will deteriorate the sustainability of the pension system and the budget. Over the long term, with growing pension expenditures the level of explicit debt may reach, and subsequently exceed, the level prevailing in the current mixed funded pension system.

Box 3-6
Comparison to the draft budget

The ESA deficit indicated in our forecast for 2011 is lower than the figure shown in the budget bill by 0.25% of GDP. In the context of different macro paths we expect higher tax revenues; moreover, the budget bill presumably does not reflect the effect of the subsequently announced, 0.5 percentage point increase in social security contributions. By contrast, the deficit of local governments and the interest expenditures are higher in our forecast than in the budgetary bill.

Table 3-17
Difference between our forecast and the budget bill
(as a percentage of GDP)

	2011
Taxes and SSC	0.5
Local government balance	−0.1
Interest expenditure	−0.1
Total	0.3

Box 3-7
Our technical assumption with respect to the wealth effect of returning private pension fund members

Private pension funds have around 3 million members, with a combined wealth of HUF 2,842 billion. The government would allow fund members to return to the state pension scheme by 31 December 2011, and the state would have 90 days to process the applications. According to ESA methodology, the accumulated savings of returning fund members will appear as revenue in the budget for the year the portfolio is transferred, and thus returns will reduce the budget deficit. Consequently, assumptions about the ratio of returning members, the relevant portfolio value and the timing of the returns are fairly significant from the perspective of the budget forecast. Since the ratio of returning members cannot be foreseen,[28] we have accepted the revenues indicated in the draft budget for 2011 as technical assumptions, which are consistent with the return of one fifth of the members.[29] Moreover, we have assumed that half of the return applications would be processed in early 2012, which implies an overall return ratio of nearly 40%. Accordingly, we calculated with revenues from portfolio transfers in the amount of HUF 530 billion for each year in 2011 and 2012. We understand that the statistical methodology of the European Union does not allow the accounting of these amounts in a fund not included in the budget, therefore the returns would improve the budget deficit figure only at the time of the acceptance of the relevant applications, i.e. in 2011 and 2012.

The fiscal effects of the measures related to the private pension funds are surrounded with significant uncertainties. The ratio of returning members, the total value of the transferred portfolio, the potential subsequent measures and the accounting of the revenues are all uncertain from the perspective of the calculation of the ESA-deficit, and evaluation of the EDP process.

[28] In 2009, 60% of the concerned age group returned to the state pension fund system, but back then those who have returned undoubtedly achieved a better position, while now the uncertainty in connection with returning is significantly higher.

[29] At the time fo producing our forecast the government plans regarding the pension reform was not yet revealed in details. The Box 3-8 deals with the potential consequences of the new plans.

Expenditures may be higher than previously expected

The fact that the government is set to meet the deficit target through temporary revenues has, over the short run, eliminated the previous need for adjustments on the expenditure side to ensure deficit reduction. Consolidated expenditure are expected to be higher by 0.4% of GDP in 2010 and by 1% of GDP in 2011-2012 relative to the previous forecast. However, the declining trend between 2010 and 2012 is likely to remain; expenditures may be lower by 2.5% of GDP in 2012 compared with 2010. However, spending part of the temporary revenues to cover rising expenditures is detrimental to the structural position of the budget. The draft budget does not include measures that would markedly affect expenditures, even though medium-term structural changes may be required on the expenditure side as well.

In 2011 appropriations for the public wage bill will be slightly reduced, but this tightening is rather mild relative to its expected effect on the basis of the announced layoffs. Purchase of goods and services and investment expenditures, as well as current transfers to companies may increase substantially compared to this year. On the whole, there is no evidence for notable adjustments in the area of expenditures related to the operating costs of the general government and the expenses of the major welfare systems. According to our forecast, with a declining debt path as the primary contributor, there will be a GDP-proportionate decline in interest expenditures. As we have no knowledge of any further measures for 2012 at this time, and the draft budget does not provide a more detailed outlook either, our forecast is based on technical assumptions. On this basis, the growth rate of the government's wage expenditures is expected to be consistent with the wage increases of the private sector, while expenditures not affected by one-off factors will increase, in real terms, at the rate of potential economic growth. Overall, this will generate slightly decreasing expenditures in proportion to GDP.

Strong pressures from quasi-fiscal activities – which have been a burden on the budget from time to time – may remain relevant. Since there are no discernible shifts towards more efficient financial management of state-owned transport companies, the assumption of their continuously accumulating debts or some other state intervention may still be required. However, in view of the deficit targets, the ESA deficit does not provide a sufficient margin to consolidate these companies and, for the lack of additional measures, the room for manoeuvre will narrow even further over our forecast horizon.

Box 3-8
The expected effect of planned reconstruction in the pension system

According to the Government's proposal announced at the end of November 2010, members of private pension funds will be allowed to return to the state pension scheme; however, those remaining in the mixed funded pension system will lose their entitlement to future state pension. We believe that this proposal provides a very strong incentive for rejoining the state system; in fact, the eventual return ratio could be close to 100 per cent. Based on this, if Parliament approves the proposal put forward by the Government, in addition to the revenues indicated in our baseline projection, 2011 will see a significantly higher one-off capital income; secondly, the contribution revenues collected by the state will increase on a permanent basis; and thirdly, the decline in public debt will be accompanied by lower interest expenditures.

Since the deadline for the return is the end of January 2011, in line with the current statistical rules, the full amount of the capital income will be reflected in the budget balance for 2011. Consequently, in 2011 the ESA-based public balance would indicate a surplus of around 6.5 per cent of GDP due to the accounting of private pension fund savings, which amounted to nearly HUF 3 trillion at the end of 2010 Q3.

Our forecast regarding 2012 has also changed relative to our baseline scenario in that we can no longer expect a wealth effect; however – assuming a near maximum return rate – state pension fund contributions may become permanently higher, while – as in 2011 – the deficit may be further improved by the decline in interest expenditures in the context of a lower public debt level. As a net result of these three effects – without the substantial one-off wealth effect – the ESA-based public balance could indicate a deficit of around 3.5 per cent of GDP.

While our structural deficit ratio will not be influenced by the wealth effect in relation to 2011 – indeed, this ratio is specifically used to exclude temporary effects –, the sustained high level of contribution income combined with lower interest expenditures could improve our structural deficit ratio by more than 1 percentage point both in 2011 and 2012 relative to the baseline projection.

In addition to short-term effects, it is important to reiterate that, in terms of the sustainability of the pension system, a near maximum return rate would be clearly unfavourable over the long run, as it implies a substantial increase in implicit public debt.

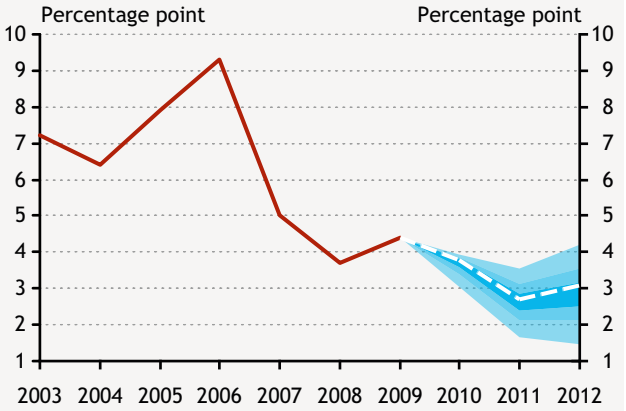
In addition to the position of the general government, the Government's proposal obviously has an impact on household savings as well. Apart from a potential long-term impact on propensity to save, changes in the pension scheme could significantly alter the officially recorded financial savings of households through statistical accounting. Due to the rechanneling of pension fund savings, the financial savings of households will be reduced by nearly HUF 3 trillion in 2011 year-on-year; consequently, household net borrowing may reach 7 per cent of GDP. In addition to the major one-off effect, the loss of private pension fund payments may permanently lower the level of financial savings, leading to a year-on-year decline in net lending of households by around 0.8 per cent of GDP. At the same time, due to the loss of the wealth effect in 2012, net lending reported in the statistics may exceed the figure indicated in our baseline scenario by around 1 percentage point.

With respect to the proposal we must continue to emphasise the importance of statistical accounting; as indeed, there is no international precedent for handling transactions of this magnitude.

Risks related to normal revenues and expenditures point towards a slightly lower deficit

Risks to the baseline scenario for the fiscal deficit suggest a slightly lower deficit. As the risk distribution along the macro-economic path is, under the new projection rule, symmetric, the forecast is influenced by expert risk perception in its entirety. Risk perception does not include the considerable uncertainties surrounding the amount of the revenues related to the measures affecting the private pension fund system, the issues of statistical recognition of these revenues or any potential debt assumptions. Therefore, the fan chart reflects the risks inherent in the customary current revenues and expenses of the central budget, with revenues and expenses suggesting a lower deficit.

Chart 3-16
Fiscal fan chart



Boxes and Special topics in the Report, 1998–2010

February 2005

May 2005

August 2005

Boxes:

Special topics:

November 2005

Boxes:

May 2006

Boxes:

November 2006

Boxes:

February 2007

Boxes:

May 2007

Boxes:

Aug 2007

Boxes:

Nov 2007

Boxes:

February 2008

Boxes:

May 2008

Boxes:

August 2008

Boxes:

November 2008

Boxes:

February 2009

Boxes:

May 2009

Boxes:

August 2009

Boxes:

November 2009

Boxes:

February 2010

Boxes:

June 2010

Boxes:

August 2010

Boxes:

November 2010

Boxes:

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QUARTERLY REPORT ON INFLATION

November 2010

Print: D-plus

H–1037 Budapest, Csillaghegyi út 19–21.