QUARTERLY REPORT ON INFLATION
December 2011

MAGYAR NEMZETI BANK

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

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

In order to provide the public with clear insight into the operation of monetary policy and to enhance transparency, the Bank publishes the information available at the time of making its monetary policy decisions. The Report presents the inflation forecasts prepared by the Monetary Strategy and Economic Analysis and Financial Analysis Departments, as well as the macroeconomic developments underlying these forecasts. The Report is published quarterly. The forecasts of the Monetary Strategy and Economic Analysis and Financial Analysis Departments are based on assumption of endogenous monetary 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. From chapters 1 to 4 and 6 were prepared under the general direction of Ágnes Csermely, Director while chapter 5 was directed by Áron Gereben, Director. The project was managed by Barnabás Virág, Senior Economist of Monetary Strategy and Economic Analysis. The Report was approved for publication by Ferenc Karvalits, Deputy Governor.

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Other contributors to the analyses and forecasts in this Report include various staff members of the Monetary Strategy and Economic Analysis and the Financial Analysis Departments.

The Report incorporates valuable input from the Monetary Council's comments. 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 available in the period to 15 December 2011.

Contents

Summary

Monetary policy can facilitate the development of a predictable economic and financial environment with a continued mild increase in the interest rate

In the period ahead, the situation in the Hungarian economy will simultaneously be hampered by the deepening of the European debt crisis and the necessity of fiscal adjustment. Growth prospects will deteriorate further as a result of the significant exchange rate weakening compared to the previous quarter. This depreciation was caused by a deterioration in risk assessment and increasingly compels economic agents to carry out balance sheet adjustments and the banking sector to reduce credit supply. According to the baseline scenario of the forecast, the Bank will continue its slight tightening of monetary conditions in the coming quarter. The higher interest rate path facilitates the achievement of longer-term price stability and the maintenance of financial stability.

The deepening of the European debt crisis and ensuring the sustainability of Hungarian public finances together result in a nearly stagnant economic situation in 2012; growth is expected to be slow in 2013

In the third quarter of 2011, there was an upturn in economic growth again. External demand continued to be the driving force of the economy, while developments in domestic absorption items were restrained. Fiscal easing was hardly perceived in developments in household consumption, as households spent their additional incomes on savings and loan repayment. At the same time, a remarkable duality was observed in the changes in accumulation: machinery investment increased considerably, while building investment fell drastically. International economic momentum declined in the last quarter, and thus domestic growth possibilities also narrowed by the end of 2011.

The domestic economic environment is expected to be very unfavourable in the coming years. Firstly, due to the deepening of the European debt crisis, growth prospects in Hungary's most important export markets will be much less favourable than before. Secondly, the worsening of the financing problems in the European banking system will make it more difficult and more expensive for domestic banks to obtain funds. Finally, deteriorating growth prospects will require an additional adjustment of the budget.

The slowdown in global growth will restrain the dynamics of Hungarian exports as well. The resulting effect may partly be offset by the gradual launch of production at new, large-scale manufacturing projects. Nevertheless, the increasingly tight household and corporate credit environment, the recent considerable weakening of the exchange rate and the protracted balance sheet adjustment of the private sector, as well as the adjustment of the budget, all point to weaker-than-expected domestic demand. As a result of the above factors, GDP is expected to be nearly stagnant next year, and restrained growth is forecast for 2013. Economic output will only slowly approach its potential level; accordingly, the output gap will remain negative over the entire forecast period.

In addition to the European debt crisis, country-specific factors also impaired financial markets' assessment of the domestic economy; a slow improvement in risk premiums is assumed in the baseline scenario

The risk assessment of the Hungarian economy has worsened considerably since September. The shift in domestic indicators in an unfavourable direction is partly attributable to global and European factors. At the same time, although with significant variations, domestic events also played a decisive role in the changes in the indicators. The legislation on the early repayment of foreign currency loans and the sovereign credit rating downgrade were unfavourable events with a substantial market-moving effect. At the same time, the effect of the announcement by the Government regarding its intention to start talks with the IMF had an opposite effect. Overall, throughout the entire period, Hungary's risk premiums increased, the forint weakened and yields rose. In the government securities market, tensions were reflected in the lower demand at auctions, as well as declines in non-residents' holdings; in the FX swap market, widening spreads and non-residents' rising net foreign currency lender position indicate a growing demand for foreign currency by the domestic banking sector.

In our forecast, country risk premiums are expected to remain at their current historically high levels in the short run, before starting to decline slowly.

Stricter lending conditions, further balance sheet adjustment by banks and a decline in loans outstanding are expected

Although credit spreads have stagnated in the corporate segment since 2010 H2, the banking sector has increasingly focused on corporate clients with good creditworthiness, and non-price terms have become tighter. Interest rate conditions in the household segment remained practically unchanged in 2011 Q3, although according to the Bank's latest lending survey a wide range of banks plan to tighten interest rate conditions in the coming quarters. Due to the deteriorating capital position and the increasingly expensive external financing, the balance sheet adjustment of the banking sector continued; loans outstanding declined in both the corporate and household segments.

According to the baseline scenario of our forecast, the external and domestic conditions that are unfavourable for the banking sector will only improve very slowly. Accordingly, the balance sheet adjustment of the sector will continue until the end of the forecast period, and a further decline in outstanding corporate and household loans is expected.

As a consequence of government measures, contradictory trends are expected in the labour market; apart from the temporary effect of the minimum wage increase, wage dynamics will remain restrained

In parallel with the repeated worsening of growth prospects, the slow expansion of whole-economy employment observed in previous quarters came to a halt in mid-2011. The number of those working in the public sector stagnated, while a decline in the demand for labour was already perceived in the private sector. In addition, wage growth in the private sector decelerated, due to deteriorating external economic activity and declining domestic demand, in parallel with the expanding activity.

Our labour market forecast is mostly influenced by government measures and the deteriorating growth prospects. As a result of the government measures aimed at the expansion of labour market activity, activity may continue to increase, but labour demand may be very restrained due to the weak economic environment. As a result of all the above, a persistently loose labour market conditions are expected, and the unemployment rate may increase slightly above the current level. The significant increase in minimum wages effective from 2012 may result in a temporary acceleration in wage dynamics, although this may become restrained again by 2013.

Inflation will be kept high by government measures and cost shocks next year, but by 2013 the effect of the weak demand environment will become the determining factor; therefore, the inflation target is attainable in the first half of the year

Inflation increased considerably following the summer months as the unfavourable demand environment could only mitigate the price increasing effect of high commodity prices and the weak exchange rate. In addition to the increase in fuel prices, the effect of high commodity prices from earlier quarters was perceived in a widening range of consumer goods, while developments in prices of services remained very restrained.

According to our baseline scenario, the consumer price index may be around 5 per cent next year, but with a rapid decline it may attain the 3 per cent target in 2013 H1. In 2012, the consumer price index will be kept high by the indirect tax and regulated price increases that will enter into force and by the cost-increasing effect of the substantial weakening of the exchange rate of the forint seen since the end of the summer. As the effect of indirect tax increases wanes, the impact of the weak demand environment may become a dominant factor, and thus the price index may decline rapidly.

In 2011, the budget significantly stimulated aggregate demand, but a narrowing of demand corresponding to 2.5 per cent of GDP is expected in the coming two years In 2011, fiscal developments led to a considerable increase in demand, exceeding two and a half per cent of GDP, primarily as a result of the reduction of income taxes. In 2012, the budget bill and the series of measures substantiating the budget are expected to result in a nearly two and a half percentage point restraint of fiscal demand. As a result of the measures revealed to date, a further slight demand contraction is expected for 2013.

The financing capacity of the economy may continue to grow as a result of fiscal adjustment and prudent corporate behaviour

The strong improvement in external equilibrium may continue in the forecast period; based on our calculations, the external surplus may increase by more than 2 per cent of GDP in 2012, which may be followed by a further slight improvement in 2013. While households' willingness to save is expected to remain at the present level, the budgetary adjustment and the further subdued developments in investment activity of the corporate sector will result in a further increase in the position.

In the case of a deepening of the European debt crisis, ensuring the stability of the economy will necessitate further gradual but strong interest rate increases

The baseline scenario of the forecast is surrounded by significant uncertainties. Of these, in the opinion of the Monetary Council, a possible further deepening of the European debt crisis represents one of the most important risks. In the event of a scenario of this nature, in the coming two years the Hungarian economy may follow a path which is significantly different from the one described in the baseline scenario.

The weakening of the capital position of the European banking sector and the deterioration in business confidence affect the Hungarian economy through several channels. Firstly, demand for Hungarian products in the country's export markets is declining considerably; the euro area will sink into recession next year. Secondly, the decline in the willingness to take risks adds to the risk premium of Hungarian instruments and makes it more difficult for domestic economic agents to obtain funds.

In a situation like this, due to the deterioration in the external business conditions as well as the balance sheet adjustment of the domestic banking sector, households and corporations, the downswing in the Hungarian economy may be stronger than the average of the area. In this case, monetary policy is able to stabilise the situation of the economy by a gradual but strong increase in interest rates. A decisive reaction to the risk premiums is necessary in order to avoid a rapid weakening of the exchange rate, which would result in an accelerating balance sheet adjustment of economic agents and a deterioration in the capital position of the banking sector.

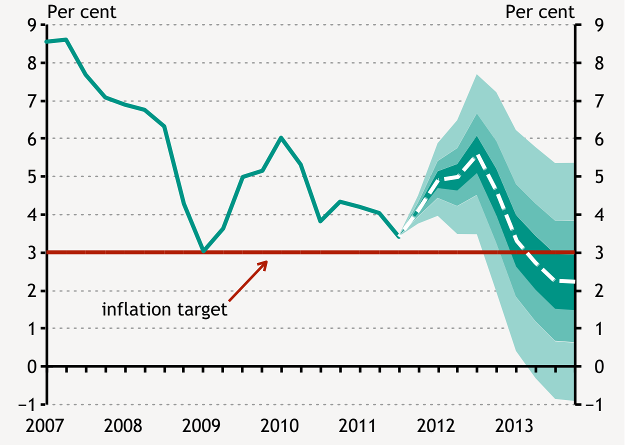
The current interest rate level may remain in place even with an improvement in the international environment

In connection with the developments in the international environment, the Council sees chances for the evolution of a situation that is more favourable than the current one. If European decision-makers take quick and determined steps in the coming quarter to settle the debt crisis, global risk tolerance may strengthen and international business activity may improve, which may have a favourable effect on the Hungarian economy as well. In such a situation, the economy may expand in 2012 as well. A decline in country risk premiums allows the maintenance of the current interest rate level and its subsequent cautious reduction.

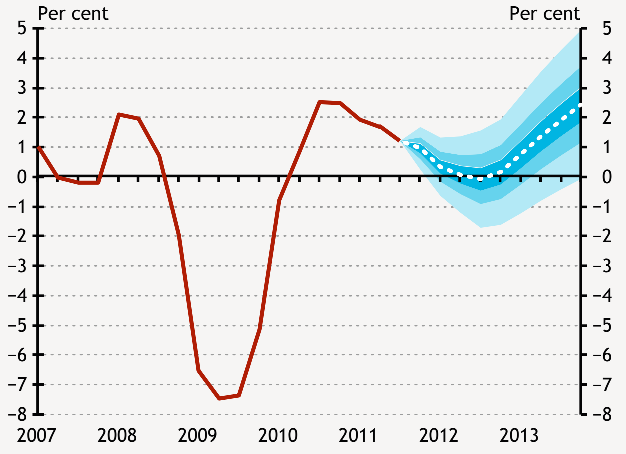
If the supply capacity of the economy is lower than the assumption in the baseline scenario, the interest rate may not decline below the current level in the second half of the forecast period either

In the Council's opinion, the uncertainty related to the measuring of the output gap is a risk factor similar in importance to the above ones. The data received since the outbreak of the financial crisis indicate that, simultaneously with the fall in GDP, the narrowing of the capacities of the economy may also have been strong. The rapid sectoral transformation of the economy, mounting financial constraints and increasing bankruptcy rates all point to a decline in potential growth. If supply capacities are lower than what was assumed in the baseline scenario, weak demand may have a disinflationary effect falling short of our assumption. In this case, monetary policy is compelled to permanently keep the base rate above the present level in order to meet the inflation target in the medium term.

Fan chart of the inflation forecast



Fan chart of the GDP forecast
(based on seasonally adjusted and reconciled data)



Summary table of baseline scenario
(Our forecasts were based on assumption of endogenous monetary policy)

	2010	2011	2012	2013
	Fact	Projection		
Inlation (annual average)				
Core inflation[1]	3.0	2.8	4.6	2.4
Core inflation without indirect tax effects	1.4	2.5	2.7	2.1
Consumer price index	4.9	3.9	5.0	2.6
Economic growth				
External demand (GDP based)[2]	2.7	2.5	0.9	1.9
Household consumption expenditure	−2.1	−0.1	−0.7	0.2
Gross fixed capital formation	−9.7	−6.3	−1.4	1.9
Domestic absorption	−0.5	−1.5	−1.3	0.2
Export	14.3	9.4	6.3	9.2
Import	12.8	6.6	5.5	8.6
GDP*	1.2	1.4	0.1	1.6
External balance				
Current account balance	1.1	2.1	3.8	4.5
External financing capacity	2.9	4.2	6.4	7.8
Government balance[3]				
ESA balance	−4.2	4.2	−3.7	−3.9
Labour market				
Whole-economy gross average earnings[4]	1.8	4.2	3.6	2.9
Whole-economy employment[5]	0.0	0.8	2.9	0.2
Private sector gross average earnings[6]	3.2	4.7	7.1	3.8
Private sector employment[5]	−1.0	1.2	−0.2	0.3
Unit labour costs in the private sector[5,7]	−2.6	5.0	4.9	3.0
Household real income[8]	−1.3	1.1	−1.2	−0.1

[1] *From May 2009 on, calculated according to the joint methodology of the CSO and MNB.*
[2] *In line with the changes in Hungarian export structure by destination countries we revised the weights in our external demand indicator.*
[3] *As a percentage of GDP.*
[4] *Calculated on a cash-flow basis.*
[5] *According to the CSO LFS data.*
[6] *According to the original CSO data for full-time employees.*
[7] *Private sector unit labour costs calculated with a wage indicator excluding the effect of whitening and the changed seasonality of bonuses.*
[8] *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 adjusted by working day effect.*

1 Inflation and real economy outlook

The economy is expected to be stagnant next year, and slow growth may start only in 2013. Output will fall short of its potential level over the entire forecast period. In 2012, the consumer price index may remain above the inflation target. At the same time, following the fading of the effect of the indirect tax increases and the weakening of the exchange rate, the disinflationary effect of the low domestic demand will already prevail. According to our forecast, the inflation target may be met in early 2013, which requires a slightly higher interest rate level than the current one. The increase in the base rate is justified by the less favourable inflation outlook and the deterioration in risk assessment. As a result of the increasingly strict monetary condition and the permanently weak domestic demand, the risk of a permanent increase in inflation expectations and of the development of second-round effects is moderate. Accordingly, a reduction of the base rate may take place in the second half of the forecast period if the developments in inflation are in line with the forecast, and the notable uncertainty surrounding global and domestic growth prospects as well as the financial markets becomes lower.

1.1 Inflation forecast

Inflation on the forecast horizon is shaped by the combined impact of the government's indirect tax increases, the higher commodity prices due to the depreciating exchange rate and the permanently weak demand environment. The indirect tax increases that will come into affect gradually beginning from the end of this year and the weaker level of the exchange rate, are likely to keep the price index around the five percent level in 2012. In the permanently weak demand environment, and as the direct inflationary impact of the tax measures fade, the price index could decrease rapidly and could reach the 3 per cent target in 2013 H2.

Chart 1-1
Fan chart of the inflation forecast

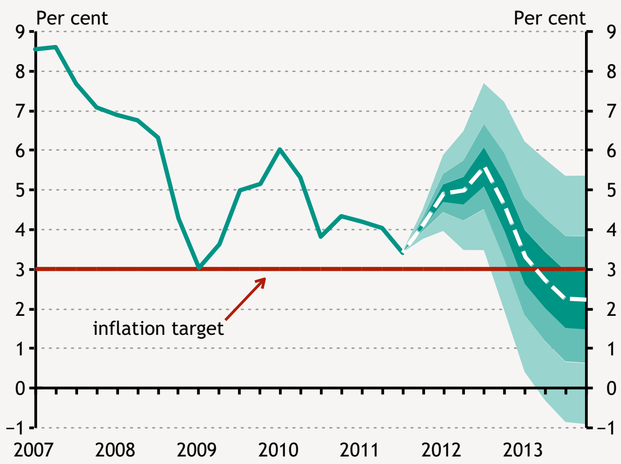
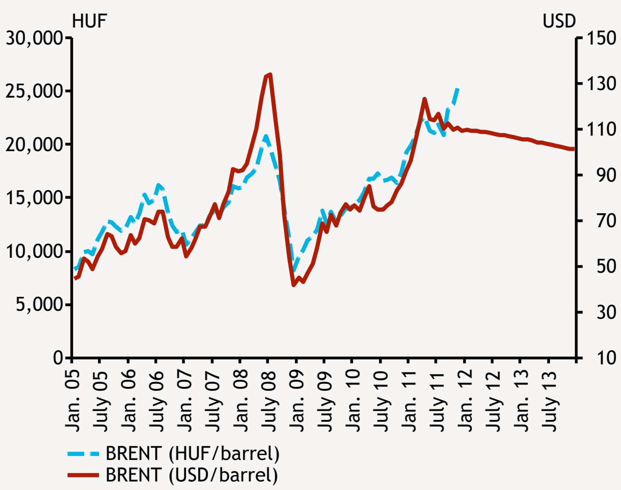


Chart 1-2
Changes in oil price assumption

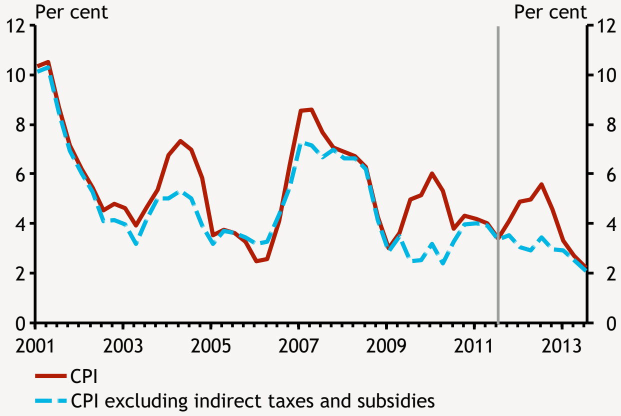


Notwithstanding the continued weak demand environment, inflation is expected to be higher than the level published in the September issue of the *Quarterly Report on Inflation*. Assuming further tightening of the monetary environment it is expected to reach its target in 2013 H2 (Chart 1-1). The inflation path significantly exceeding the target is attributable to several factors. The increase in the risk premium of Hungary resulted in a considerable depreciation of the exchange rate of the forint, and this weaker rate may continue to exist for a longer period of time. The weakening of the exchange rate directly increases the prices of imported products, thus contributing to the growth in core inflation as well. The indirect tax increases that will enter into effect in 2012 (raising the excise tax on alcohol and tobacco, environmental product fee, public health product tax, accident tax, VAT) will also entail a significant increase in inflation in the first half of the forecast period. At the same time, during the entire forecast period, the weak demand environment allows the embedding of the weaker exchange rate and the cost shocks in consumer prices only to a limited extent. The inflation index excluding the impact of indirect taxes – which better captures the basic inflationary processes – could stay around 3 percent during the entire 2012 year.

In the permanently weak demand environment, and as the direct inflationary impact of the tax measures fade, the price index decreases rapidly and could be in line with the medium run inflation target in 2013.

Labour market conditions are expected to remain permanently loose, which also renders a low inflationary pressure likely over the medium term. Next year's administrative wage increases significantly raise the growth rate of wages, however, once the impact of this measure is over, in line with the permanently high unemployment rate, we expect to see historically low wage increases in the

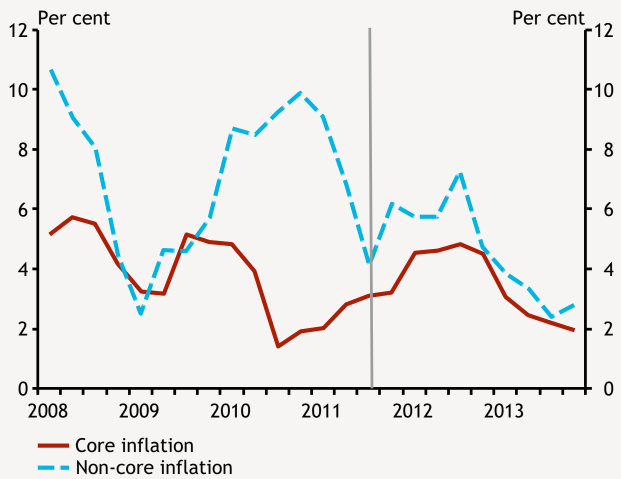
Chart 1-3
CPI with and without indirect taxes and subsidies



private sector in 2013. Due to the wage compensation the effect of the minimum wage increase on corporate wage costs will be muted, therefore the minimum wage increase is not expected to have any significant impact on inflation in the near term. In parallel with the partial termination of the wage compensation in 2013, the effect of the minimum wage increase may appear in inflation as well. However, this effect may also remain insignificant (Chart 1-4).

The developments in the prices of the most important items of the consumer basket – apart from the indirect tax change – may be characterised by the following processes: the inflation of industrial products may increase in the coming quarters, as the effect of the weaker exchange rate of the forint to the euro will gradually be reflected in the consumer prices as well. However, in this market the price increasing effect of the weak exchange rate is limited by the more restrained than usual consumption demand; accordingly, tradables' inflation may already start to decline from 2012 H2 on, and may sink to nearly 0 per cent by the end of the forecast period. At the beginning of next year, the inflation of market services will rise sharply as a result of the introduction of the accident tax and the price increase of mobile phone services, which have a high weight in the consumer basket, before declining – due to the weak domestic demand – to a low level, similar to the one experienced this year. In the case of processed food, the effect of the decline in commodity prices resulting from the 2011 crop results, which are more favourable than the ones last year, may be included in the consumer prices as well. This process, however, may be hindered by the effect of the weak exchange rate. With the fading of the exchange rate effect, processed food inflation may fall to a level below the historical average in 2013.

Chart 1-4
Our forecast for core and non-core inflation
(2008–2013)



The inflation of alcohol and tobacco products will significantly be influenced by the excise tax increases; according to our assumption, this will be typical over the entire forecast period in the case of tobacco products. Excluding the tax measures, we expect that the inflation of this product group may remain below the inflation target.

Of the items outside core inflation, the inflation of unprocessed food is determined by global commodity prices; accordingly, following the strong decline observed in the recent period, unprocessed food prices may increase only slightly over the short run. Subsequently, according to our assumption, the increasing trend observed in the past decade may continue in the price index of the product group. The changes in fuel prices will be in line with the oil prices calculated in forints. In accordance with our assumption that is applied to the oil price path and is based on futures prices as well as with the expected changes in

Table 1-1
Details of the inflation forecast
(annual change)

		2011	2012	2013
Core inflation		2.8	4.6	2.4
Non-core inflation	Unprocessed food	4.4	7.8	2.6
	Gasoline and market energy	13.9	6.8	−0.9
	Regulated prices	4.2	4.9	5.0
	Total	6.6	5.9	3.1
Consumer price index		**3.9**	**5.0**	**2.6**

monetary conditions, prices are expected to decline gradually from the middle of next year on (Chart 1-2).

Overall, in line with government announcements, price increases of regulated items are expected to be close to inflation in 2012. Accordingly, price rises of regulated energy (gas, electricity, district heating) below the raw material cost increases may take place next year as well. It is assumed that the inflationary pressure stemming from the increased costs may only appear distributed over time and gradually in 2013. Of the regulated prices, another item worth highlighting is long-distance transport, where price increases next year are expected to exceed inflation considerably; the underlying reason is that the reduction of consumer price subsidies is assumed to be reflected in the consumer prices.

Box 1-1
Main external assumptions underlying our forecast

As a result of the deepening of the problems of the euro area, a gradual weakening of the euro against the dollar was observed in recent months. In our forecast, the EUR/USD exchange rate is fixed at the December 2011 average value; thus the average exchange rate in 2012 may be nearly 4 per cent lower than in this year. Based on information priced in money market yields, considering the deteriorating prospects the European Central Bank may keep the base rate at a permanently low level, which is expected to increase only in 2013.

Table 1-2
Assumptions applied in the forecast

Money and capital market	**December 2011**			**Annual change (per cent)**	
	2011	**2012**	**2013**	**2012**	**2013**
USD/EUR exchange rate	1.39	1.34	1.34	−3.8	0.0
Eurozone interest rate	1.4	1.1	1.4	–	–
Commodity prices	**December 2011**			**Annual change (per cent)**	
	2011	**2012**	**2013**	**2012**	**2013**
Brent oilprice (USD/barrel)	111.2	107.9	103.3	−3.0	−4.3
Agricultural prices (domestic, 2000 = 100)	166.2	160.8	166.7	−3.2	3.7
Cereals (2000 = 100)	222.5	185.5	191.6	−16.6	3.3

In line with the worsening prospects for international business activity, a decline in demand and prices is expected in international commodity markets. According to our assumption based on futures prices, an 8 per cent fall in global oil prices is expected until the end of our forecast period. In the case of agricultural raw materials, selling the globally favourable crop of this year in the market may result in a further adjustment over the short run. For lack of definitive information, for the time being an average harvest is expected for the coming agricultural year. Crop results in Hungary, which were more favourable compared to last year, resulted in a decline in agricultural producer prices, but at the same time the depreciating HUF exchange rate may add to domestic sales prices as well through the price increases in imported products and the strengthening of export sales. Developments in producer prices in 2012 may still significantly be influenced by next year’s crop results. As for the time being only little information is available in this respect, the trends of the past decade were taken into account in the price developments in 2012 and 2013. Compared to 2011, an overall 3 per cent decline may take place in the level of agricultural producer prices. The fall may particularly be strong in cereals prices.

1.2 Real economy outlook

Our assessment of Hungarian economic growth steadily deteriorated over the past quarter. Slowing global growth and the protracted problems of the European banking system point to a less favourable external environment, which also restrains the dynamics of Hungarian exports. The resulting effect may partly be offset by the gradual launch of production at some new, large-scale manufacturing projects. Nevertheless, the increasingly constrained household and corporate loan environment, the recent considerable weakening in the exchange rate and the protracted balance sheet adjustment of the private sector all suggest weaker-than-expected economic growth. Economic output will only slowly approach its potential level. The output gap is set to remain negative over our entire forecast horizon.

Chart 1-5
Fan chart of the GDP forecast
(based on seasonally adjusted, balanced data)

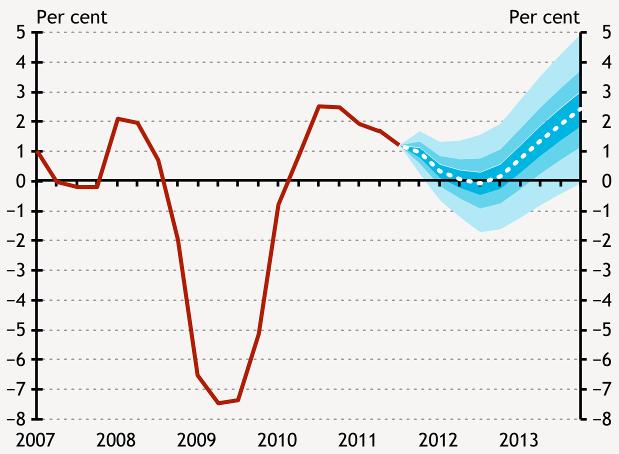
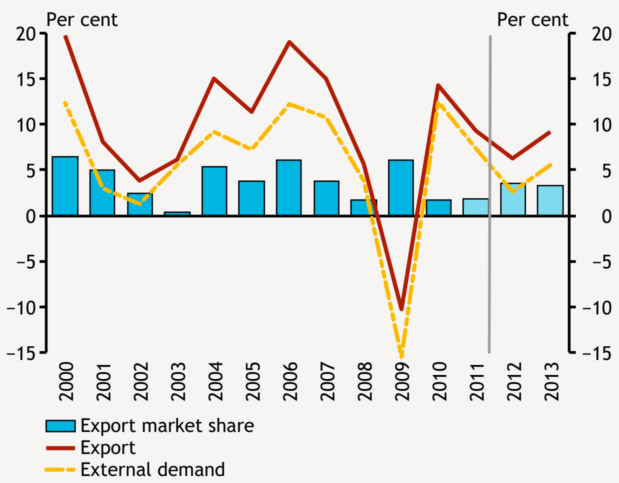


Chart 1-6
Changes in export market share

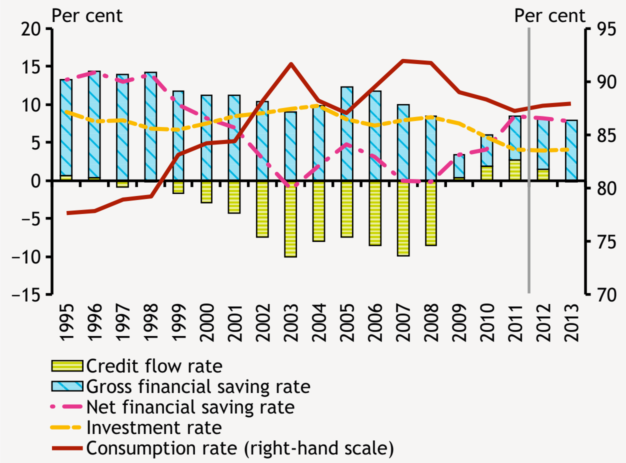


Our forecast for the real economy points to a considerable slowdown in economic growth. While 1.5 per cent growth is estimated for this year, the economy may stagnate in 2012 and grow again by 1.6 per cent in 2013 (Chart 1–5). Our weaker-than-earlier GDP forecast is primarily attributable to less favourable external demand and to weaker domestic demand, resulting from the further decline in consumption and investment. Despite the fact that exports are decelerating considerably in line with the slowdown in Hungary's external markets, this item will continue to be the pillar of (modest) domestic growth in the coming two years as well. Domestic demand may only contribute to GDP growth in 2013. Economic output will remain below potential over the entire forecast period, and the output gap will only start to close gradually in 2012 H2.

Global economic growth prospects deteriorated significantly in the recent period. Problems in the European banking system and the fiscal austerity measures taken for the sustainability of the government debt of several EU Member States will result in slower growth in Hungary's export markets. In line with international forecasts, over the short term we expect a technical recession in the euro area, which is Hungary's main export market, and for 2012 as a whole we project mild growth of 0.3%. Even though the weaker real exchange rate may have a positive impact on exports, our assessment of export prospects has deteriorated considerably (Chart 1–6), due to the depressed demand environment.

In parallel with the expected slowdown in external business activity, the decline in household consumption demand foreshadows deterioration in domestic growth prospects. Real household income may generally decline in 2012. Despite the significant rise in the minimum wage and the further loosening expected in the personal income tax

Chart 1-7
Use of household income*
(as a percentage of disposable income)



* *Net financial savings of households exclude mandatory contributions payable to private pension funds.*

Chart 1-8
Forecast for corporate lending

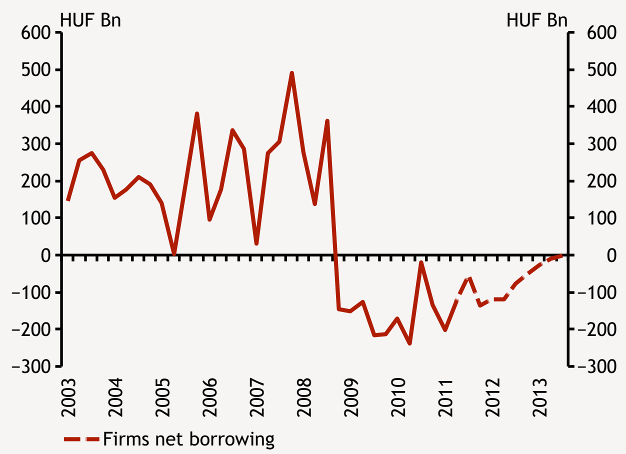
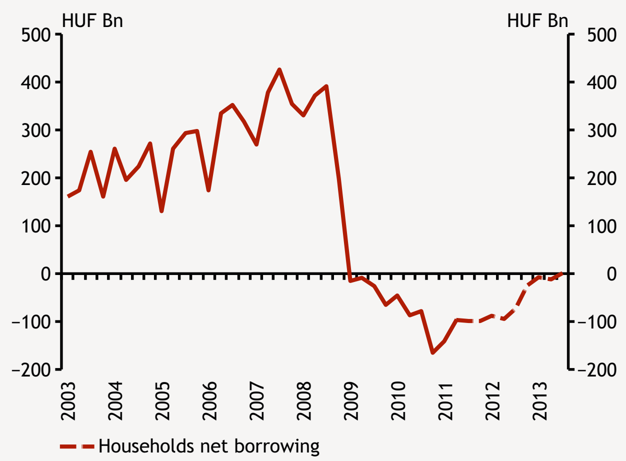


Chart 1-9
Forecast for household lending



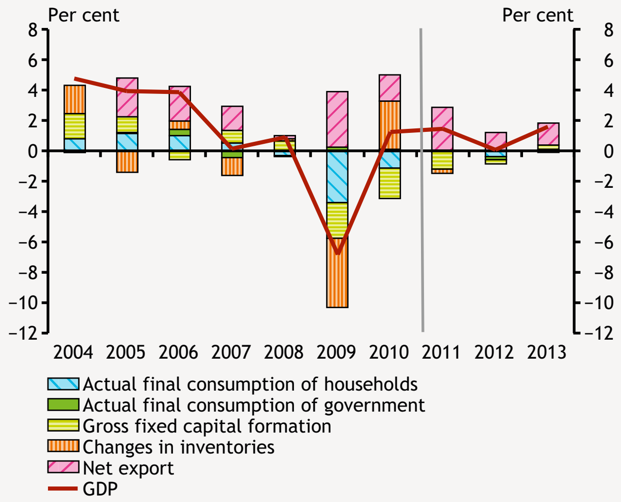
system, the real value of net earnings will decline as inflation accelerates. This may be particularly significant in the case of low-income households with a high propensity to consume, where the increase in the minimum wage may only result in maintaining the level of nominal net earnings (for more details see Box 1-2). The government measures which prioritise compliance with the fiscal deficit targets will result in a fall in the demand effect of the state, and thus the real value of financial transfers will also be lower. While the net financial wealth of households choosing the fixed-rate early repayment of foreign exchange loans will increase by the difference stemming from the calculation of the borrowed amount at the market rate and the fixed exchange rate, the resulting positive wealth effect is expected to materialize only over the longer term. In the years to come, the agreement concluded between the government and the Hungarian banking association will significantly mitigate the problems of households with loans denominated in foreign exchange. The reduction in instalment payments will also have a favourable effect on the consumption path of these households (Chart 1-7).

The worsening prospects for business activity and permanently tight lending conditions are generally restraining household and corporate investment. The weak corporate investment activity will only partly be compensated by the new, large-scale individual projects implemented in manufacturing. In line with the deterioration in households' income situation, no turnaround is expected in household investment. As a result of the decrease in own funds required for projects, the utilisation of EU funds may increase in the coming years, although in parallel with that the magnitude of projects implemented from direct budgetary sources may decline. Overall, a further decline in investment activity is expected for next year, and only a slow upturn is expected in 2013.

Over the forecast period, lending will remain very restrained both in the household and corporate markets; debt repayment by households and corporations will exceed borrowing over the entire period (Charts 1-8 and 1-9). In addition to slack demand for loans coupled with deteriorating growth prospects, supply side constraints have also strengthened. While in the past willingness to lend has played a decisive role in the tightening supply of credit, looking ahead, weak ability to lend may become an increasingly dominant aspect. Both international and domestic developments are contributing to this. The euro-area debt crisis is weakening the liquidity and capital positions of parent banks, and this may be reflected in a decline in the financing of the domestic banking sector and thus in more restrained lending as well. At the same time, in addition to the weaker exchange rate, the early repayment of foreign exchange loans considerably impairs the capital position of the banking sector, and adds to the loss suffered on the loan portfolio of households not participating in the early repayment scheme, which also leads to a decline in lending.

Another factor contributing to the deterioration in growth prospects is that our assessment of longer-term economic developments (which determine potential growth) is more pessimistic. While the real convergence of the economy with the more developed euro-area region will continue over the long term, the extent of this convergence may be very modest in the coming years. This is partly explained by the declining potential growth rate of Hungary's export markets, as this reduces the trend of Hungarian exports as well, which also has a negative effect on the magnitude of the potential growth of Hungary. In terms of the supply side, potential growth is hindered by the expected continuation of weak investment activity (due in part to the tight lending conditions), which has been going on for years, while measures to facilitate activity and labour supply will not result in any substantial increase in employment in the near term, due to weak economic conditions. As a result of the protracted balance sheet adjustment of households and corporations, domestic demand is expected to remain persistently low, which may reduce the capacities of the domestic services sector over the long term (Chart 1-10).

Chart 1-10
Changes in GDP growth



1.3 Labour market forecast

Our assessment of the labour market is determined by the dual nature of the government measures aiming at the expansion of activity and the weaker demand for labour, resulting from the uncertain growth prospects and the increased burdens on companies. In our forecast, we expect a loose labour market environment, in line with the weak outlook for economic activity. The increase in minimum wages effective from 2012 may result in a temporary acceleration in wage dynamics, which may be restrained again in 2013.

Chart 1-11
Employment and unemployment in the national economy
(2002–2012)

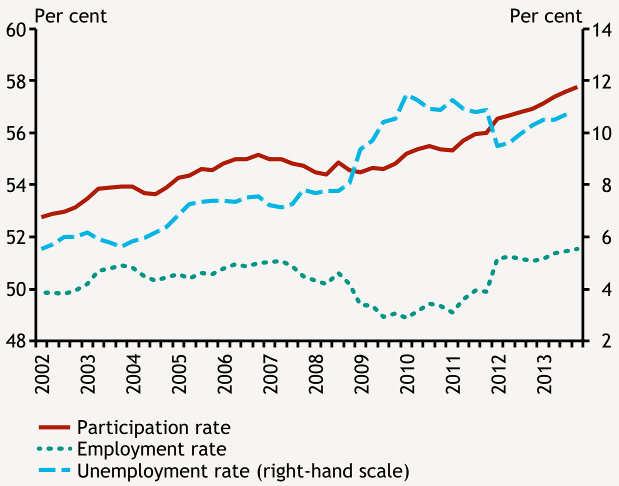
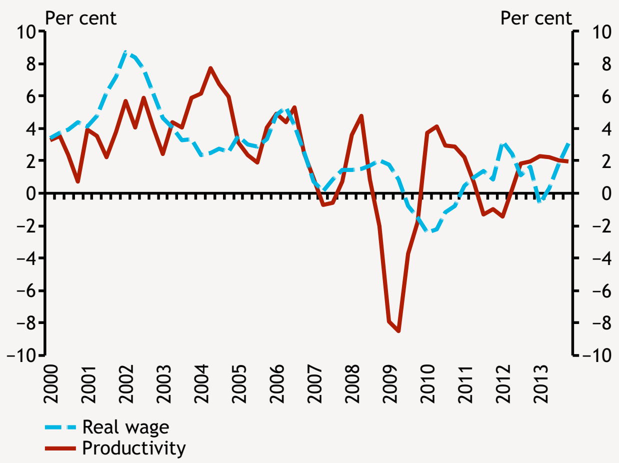


Chart 1-12
Changes of gross real wages and productivity in the private sector



Earlier government measures aimed at boosting activity (raising the retirement age, tightening of eligibility conditions for disability pensions) are resulting in a continuous increase in the activity rate. Moreover, this process may continue to strengthen in 2012, in line with the additional measures announced (revision of disability pensions, tightening of old-age pensions below the age limit) (Chart 1-11). Further government measures targeting an expansion of activity result in a slight increase in labour supply.

At the same time, the weaker real economic outlook and the increase in the burdens on companies due to the raising of the minimum wage hinder the expansion of employment; accordingly, during the forecast period no significant short-term effect is expected from the activity-increasing measures. The slowdown in private sector labour demand is also reflected by the fact that the number of announced new vacancies is below the pre-crisis level.

Companies reacted to the increasing uncertainty due to the deteriorating growth environment by utilizing more flexible forms of employment (part-time employment, employment of rented labour) to an increasing extent. In the first half of the year, expansion was still observed in the manufacturing industry, but this trend seemed to stop in H2; the use of labour shifted towards more flexible forms of employment in this sector as well. Although the number of participants in public work programmes announced by the state did not increase significantly at the beginning of the year, it grew faster in H2. However, the number still remained below the average for 2010.

As a result of uncertain growth prospects and increasing burdens on companies, private sector labour demand is expected to grow only slowly, and the current trends – e.g. the use of more flexible forms of employment – may remain in place for a longer period of time. In line with the above, the unemployment rate may stay at the current high level until an upturn in economic activity begins. Accordingly, it is unlikely that unemployment will decline below 10 per cent by the end of our forecast period.

The high wage dynamics which characterised the first half of the year seem to have decelerated in the past quarter. Restrained developments in average gross wages and regular wages were typical of a wide range of sectors last quarter. The minimum wage increase planned for 2012 may result in a temporary acceleration in wage dynamics. However, we project more restrained wage developments again in 2013 (Chart 1–12).

Box 1-2

The impact of measures affecting wage costs on inflation and household income

Further changes in the personal income tax system will come into force in 2012. The tax credit will be terminated together with the supergrossing of the tax base of incomes below a monthly gross amount of HUF 202,000, and employee's contributions will increase by one percentage point. In addition, the extent of the health contribution to be paid by employers on fringe benefits will also increase. The objective of this box is to present the expected effect of the shock to corporate wage costs on inflation and on household income.

With unchanged gross wages, the changes taking place in the personal income tax system by themselves would result in a considerable decline of up to 15–20 per cent in the net wages of those who earn below the average wage. In order to maintain the level of net wages, as of the beginning of next year the government is raising the minimum wage and the guaranteed wage minimum by 20 and 15 per cent, respectively. As roughly one third of employees work below the guaranteed wage minimum, and the increase in the minimum wage passes through to the upper segments of the wage scale as well, wage cost in the competitive sector will increase to a greater extent than in previous years, considerably adding to the burdens of corporations and impairing their profitability.

In order to offset this effect, the government will introduce wage compensation, granting a reduction in employer's contributions for the companies that maintain the level of net wages. Although the wage compensation covers nearly two thirds of the additional costs, we assume that companies will also use other channels of adjustment to avoid deterioration in their profitability.

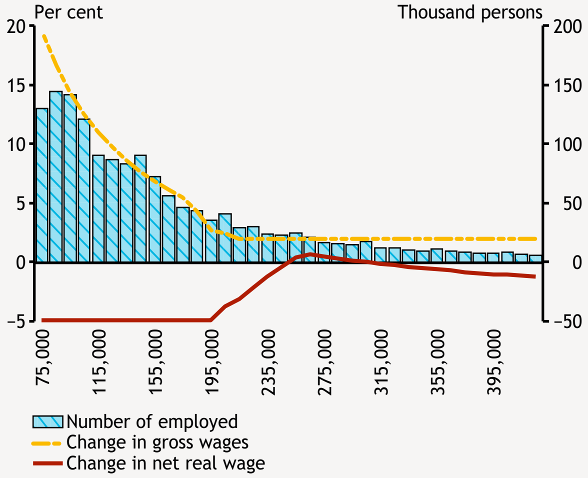
Given the worsening economic environment, the declining real incomes and the strongly restrained demand, companies will presumably be unable to include the cost increase in their sales prices. Accordingly, the effect of the minimum wage on inflation may be negligible in 2012. Companies may reduce their costs through the following channels:

- The partial cancellation of the super gross tax base allows restrained waging in the case of employees with higher earnings. This assumption may be supported by the expected weak economic activity and slack labour market next year.
- In the otherwise weak economic environment, companies do not increase the number of employees.
- The companies that pay concealed incomes as well in addition to the minimum wage (so-called 'paying into the pocket') may reduce the proportion of untaxed wages, causing at the same time the whitening of the economy.
- This impact may be attenuated if firms have some of their employees reregistered as part-time workers, as it was observed at the time of minimum wage increases in 2001 and 2002.[1]
- Even in the case of the effectiveness of these mechanisms, corporate profitability situation may be less favourable than in a scenario without restructuring the tax system and raising the minimum wage. As a consequence, companies may even decide to postpone some of their planned investment.

[1] For more details see September 2011 Inflation Report in box 1-2.

Chart 1-13
Expected net real wage changes in different income brackets

(in private sector, in case of employees without children)



According to our assumption, of the aforementioned mechanisms the restraining of the gross wages of employees who have higher wages – and mainly earn above the average wage – may be the strongest.

The amount of wage compensation will decline to about one half in 2013, and will completely cease to exist in 2014. However, the gross wage cost of companies will remain at the high level to which it increased in 2012. We assume that with the upturn in demand already expected to take place by then, the increased wage costs may have a perceptible but still insignificant effect on inflation. Nevertheless, corporate labour demand may remain restrained during the entire forecast period.

The government measures that result in an increase in wage costs may have a major impact on household income. As the utilisation of the wage compensation is able to significantly reduce the increased burdens of companies, we assume that above the guaranteed wage minimum gross wages will increase in accordance with the conditions of the compensation. As a result, up to gross earnings of approximately HUF 190,000 net wages may remain at the 2011 level. However, with the inflation expected for 2012, real earnings will decline by some 5 per cent even in this case. Above average earnings, wage compensation is not effective any longer, although here – even in the case of low wage increases – the decline in personal income tax burdens may mostly offset the effect of accelerating inflation on real net earnings.

Overall, in the environment of deteriorating business activity and accelerating inflation, net earnings may decline almost across the complete wage scale in 2012. In terms of the effect on consumption it may be important that the decline in real earnings of lower-income employees with a generally higher willingness to consume may be stronger than the average.

Table 1-3
Changes in our forecasts compared to September 2011

	2010	2011		2012		2013	
	Fact	Projection					
		September	Current	September	Current	September	Current
Inflation (annual average)							
Core inflation[1]	3.0	2.8	2.8	3.2	4.6	–	2.4
Core inflation without indirect tax effects	1.4	2.6	2.5	2.4	2.7	–	2.1
Consumer price index	4.9	3.9	3.9	3.9	5.0	–	2.6
Economic growth							
External demand (GDP-based)[2]	2.7	2.7	2.5	1.3	0.9	–	1.9
Household consumer expenditure	−2.1	0.4	−0.1	0.6	−0.7	–	0.2
Government final consumption expenditure	−2.1	−1.4	0.2	−1.6	−2.9	–	−1.2
Fixed capital formation	−9.7	−3.8	−6.3	1.6	−1.4	–	1.9
Domestic absorption	−0.5	−0.5	−1.5	0.0	−1.3	–	0.2
Export	14.3	9.4	9.4	8.5	6.3	–	9.2
Import	12.8	7.6	6.6	7.7	5.5	–	8.6
GDP	1.2	1.6	1.4	1.5	0.1	–	1.6
External balance							
Current account balance	1.1	3.0	2.1	4.2	3.8	–	4.5
External financing capacity	2.9	5.4	4.2	6.8	6.4	–	7.8
Government balance[3]							
ESA balance	−4.2	1.9	4.2	−3.7	−3.7	–	−3.9
Labour market							
Whole-economy gross average earnings[4]	1.8	2.1	4.2	2.3	3.6	–	2.9
Whole-economy employment[5]	0.0	1.2	0.8	1.3	2.9	–	0.2
Private sector gross average earnings[6]	3.2	4.8	4.7	4.5	7.1	–	3.8
Private sector employment[5]	−1.0	0.9	1.2	0.6	−0.2	–	0.3
Private sector unit labour cost[5,7]	−2.6	3.4	5.0	3.2	4.9	–	3.0
Household real income[8]	−1.3	1.5	1.1	−0.4	−1.2	–	−0.1

[1] *From May 2009 on, calculated according to the joint methodology of the CSO and MNB.*
[2] *In line with the changes in Hungarian export structure by destination countries we revised the weights in our external demand indicator.*
[3] *As a percentage of GDP.*
[4] *Calculated on a cash-flow basis.*
[5] *According to the CSO LFS data.*
[6] *According to the original CSO data for full-time employees.*
[7] *Private sector unit labour costs calculated with a wage indicator excluding the effect of whitening and the changed seasonality of bonuses.*
[8] *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.*

Table 1-4
MNB basic forecast compared to other forecasts

	2011	2012	2013
Consumer Price Index (annual average growth rate, %)			
MNB (December 2011)	3.9	5.0	2.6
Consensus Economics (November 2011)[1]	3.7 – 3.9 – 4.0	3.7 – 4.6 – 5.4	–
European Commission (November 2011)	4.0	4.5	4.1
IMF (September 2011)	3.7	3.0	3.0
OECD (November 2011)	3.9	4.9	2.9
Reuters survey (December 2011)[1]	3.8 – 4.0 – 4.1	4.2 – 4.8 – 5.5	2.5 – 3.2 – 4.2
GDP (annual growth rate. %)			
MNB (December 2011)	1.4	0.1	1.6
Consensus Economics (November 2011)[1]	1.1 – 1.5 – 2.0	(–1.0) – 0.4 – 2.4	–
European Commission (November 2011)	2.7	2.6	–
IMF (September 2011)	1.4	0.5	1.4
OECD (November 2011)	1.5	–0.6	1.1
Reuters survey (December 2011)[1]	1.2 – 1.5 – 1.7	(–2.0) – (–0.3) – 0.7	–
Current account balance (percent of GDP)			
MNB (December 2011)	2.1	3.8	4.5
European Commission (November 2010)	1.7	3.2	3.8
IMF (September 2011)	2.0	1.5	1.3
OECD (November 2011)	1.9	1.4	1.2
Budget Balance (ESA-95 method, percent of GDP)			
MNB (December 2011)[4]	4.2	-3.7	-3.9
Consensus Economics (November 2011)[1]	(–2.9)–(–4.8)–(–7.0)*	(–2.8)–(–3.0)–(–3.5)	–
European Commission (November 2011)	3.6	-2.8	-3.7
IMF (September 2011)	2.0	-3.6	-3.2
OECD (November 2011)	4.0	-3.4	-3.3
Reuters survey (December 2011)[1]	(–3.4) – 2.1 – 3.8	(–2.6) – (–3.2) – (–4.5)	–
Forecasts on the size of Hungary's export markets (annual growth rate, %)			
MNB (December 2011)	7.4	2.6	2.6
European Commission (November 2011)[2]	5.8	3.8	5.7
IMF (September 2011)[2]	7.7	4.5	4.9
OECD (November 2011)[2]	5.9	3.0	5.4
Forecasts on the GDP growth rate of Hungary's trade partners (annual growth rate, %)			
MNB (December 2011)	2.5	0.9	1.9
Consensus Economics (November 2011)[1]	2.5	1.4	2.4
European Commission (November 2011)[2]	2.4	1.2	2.0
IMF (September 2011)[2]	2.2	1.8	2.2
OECD (November 2011)[2]	2.6	1.1	2.2
Forecasts on the GDP growth rate of euro area (annual growth rate, %)			
MNB (December 2011)[3]	2.2	0.3	1.1
Consensus Economics (November 2011)[1]	1.6	0.4	–
European Commission (November 2011)	1.5	0.5	1.3
IMF (September 2011)	1.6	1.1	1.5
OECD (November 2011)	1.6	0.2	1.4

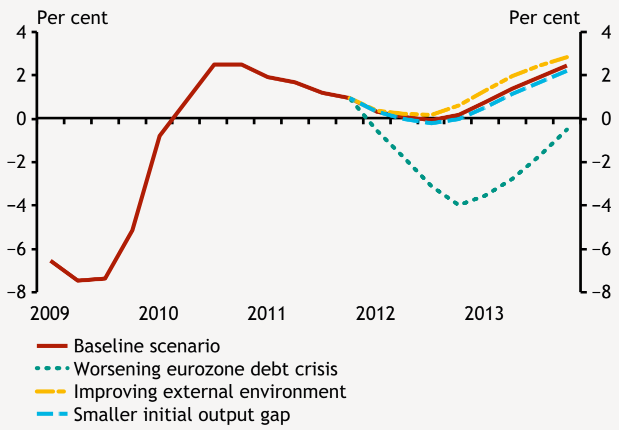
[1] *For Reuters and Consensus Economics surveys, in addition to the average value of the analysed replies (i.e. the medium value), we also indicate the lowest and the highest values to illustrate the distribution of the data.*
[2] *Values calculated by the MNB; the projections of the named institutions 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. Certain institutions do not prepare forecast for all partner countries.*
[3] *Aggregate based on Euro area members included in our external demand indices.*
[4] *As a percentage of GDP.*
* *Without incomes from private pension funds.*
Sources: Eastern Europe Consensus Forecasts (Consensus Economics Inc. [London], November 2011); European Commission Economic Forecasts (November 2011); IMF World Economic Outlook Database (September 2011); Reuters survey (December 2011); OECD Economic Outlook No. 90 (November 2011).

2 Effects of alternative scenarios on our forecast

In the followings three alternative scenarios – considered as the most relevant by the Monetary Council – are presented to illustrate the risks corresponding to the baseline scenario. The deepening of the debt crisis of the euro area, the easing of the tense international investor sentiment and the uncertainty related to the cyclical position of the Hungarian economy are depicted in the three scenarios. Of the risk scenarios, the improvement in the external environment allows looser monetary conditions, but if economy follows one of the other two risk scenarios, that justifies tighter monetary conditions compared to the baseline scenario.

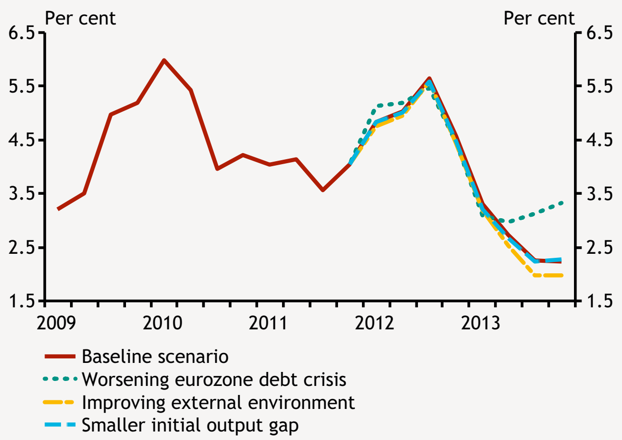
The primary reason for the deterioration in global economic prospects in the past quarter was the debt crisis that affects the EU countries. The concerns related to the sustainability of the debt of some Member States and the weakened capital position of the banking sector resulted in a widening confidence crisis. A decline in the European credit supply and a resulting further worsening in the economic activity of the euro area were assumed in the risk scenario. The export markets of Hungary may sink into recession in 2012, which will be followed only by stagnation in 2013 as well. Based on past correlations, it can be assumed that on a path like this, import-based external demand, which is determining from the aspect of export sales, deviates from the baseline scenario to a much greater extent than GDP. Deteriorating external business conditions impair exports, although this impact is somewhat attenuated by the weakening of the exchange rate.

Chart 2-1
The impact of alternative scenarios on the GDP forecast



As a result of parent banks' worsened capital position, global risk aversion is strengthening, which increases the risk premiums of Hungary. Due to the increase in risk premiums and the less favourable situation of parent banks, it is becoming increasingly difficult and expensive for the domestic banking sector to obtain funds. As a result, it is primarily the credit supply to the corporate sector that is narrowing drastically. The growing credit spreads and the weaker exchange rate restrain the increase in domestic demand items. The total economic downturn may even equal half the size of the recession in 2009 (Chart 2-1). The strong adjustment of the banking sector leads to an increase in the number of corporate bankruptcies, also entailing an unfavourable effect on the long-term growth of the Hungarian economy.

Chart 2-2
The impact of alternative scenarios on the inflation forecast



The slowing growth of the export markets of Hungary results in a lower external inflationary pressure, and the worsening of European growth prospects restrains the increase in commodity prices. In addition, domestic inflation is also reduced by domestic demand, which is lower than the baseline scenario. However, an increase in the risk premium may result in a weakening of the forint exchange rate and thus in a stronger inflationary pressure through the price increases of imported goods (Chart 2-2).

The deceleration in external business activity in itself would justify a lower interest rate level, but in the case of a surge in the risk premium, which is included in our assumptions, the impact of the exchange rate weakening on inflation and financial stability dominates, which makes a significant raising of the base rate necessary. After the consolidation of the situation, this may be followed by a gradual reduction of the interest rate level.

As a risk in the opposite direction compared to the above one, the second risk scenario depicts an improvement in the international economic and financial environment. With the contribution of both the widening of the debt crisis of the euro area and the worsening of investors' country-specific sentiment, the risk premium of Hungary has increased considerably in the recent period. The baseline scenario of the forecast already in itself contains the consolidation of the current situation, but in this risk scenario we assumed that the unfavourable sentiment surrounding the solution to the debt crisis of the euro area will improve earlier. In the event that measures pointing to the solution to the debt problems of the euro area are adopted and announced, following the improvement in investor sentiment abroad, the domestic risk premium may also decline faster than it was assumed in the baseline scenario. In addition, the growth prospects of the euro area may also improve, and the growth rate of the economy of the euro area may be around 1 per cent in 2012.

The strengthening of the exchange rate only attenuates the additional increase in exports stemming from the more favourable external environment. In addition, domestic demand also increases considerably, as a result of the declining credit spreads and the stronger exchange rate. Over the entire forecast period, growth may exceed the expectation included in the baseline scenario by nearly 0.4 percentage points on average. Compared to the baseline scenario, a slight downside risk is seen in inflation developments, which may also be attributable to the stronger exchange rate. The more benign external and domestic economic activity points to higher inflationary pressure. As a result of all these effects, the current interest rate level needs to be maintained over the short run, which will be followed by a gradual reduction of the interest rate level.

Finally, in the third risk scenario the uncertainty related to the cyclical position of the economy is depicted. In the present environment, the measuring of the cyclical position is extremely uncertain; the dispersion of available indicators is wide ranging. There is a serious risk that in the past period the production capacities of the economy suffered stronger damages than what was assumed in the baseline scenario, if the economy adjusted itself to the permanently weak demand and the extremely tight corporate financing constraints through a decline in supply capacities. Thus the third risk scenario depicts the effect in the case when at end-2011 the output gap is one per cent smaller than what was assumed in the baseline scenario. This means a downside risk to economic growth.

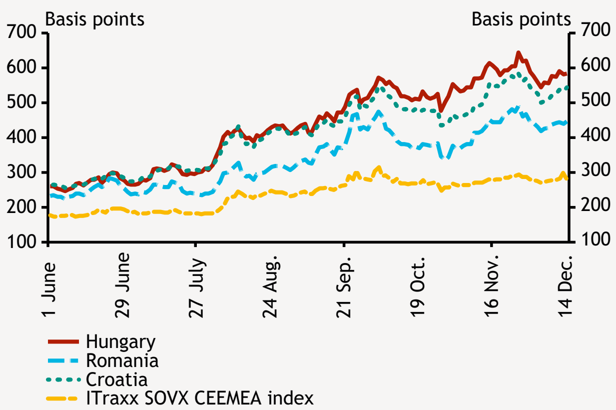
In the event that the current GDP figure reflects a more favourable cyclical and less favourable potential GDP picture, the disciplining effect of weak economic activity on prices may be smaller than what was assumed in the baseline scenario. In order to achieve the inflation target, tighter monetary conditions are necessary compared to the baseline scenario, thus offsetting the rise in inflationary pressure resulting from the smaller output gap.

3 Financial markets and interest rates

3.1 Domestic money market developments

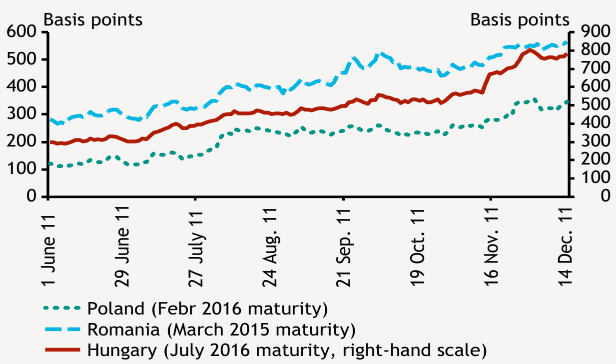
The risk perception of Hungary deteriorated considerably in the last quarter. Domestic indicators shifted in an unfavourable direction. This was partly attributable to global factors; similar developments took place in other emerging and developed countries as well. At the same time, domestic events also played a significant role in the deterioration of indicators during the period. The downgrade of the sovereign credit rating had a major unfavourable impact, whereas the plans for a new IMF loan agreement were received positively by the market. Throughout the entire period, the risk premia of Hungary increased, the forint weakened and yields rose. In the government securities market, tensions were reflected in the lower demand at auctions, as well as declines in non-residents' holdings; in the FX swap market, widening spreads and non-residents' rising net foreign currency lender position indicate a growing demand for foreign exchange by the domestic banking sector.

Chart 3-1
5-year sovereign CDS spreads in the region



Source: Bloomberg.

Chart 3-2
5-year foreign currency bond spreads in the region



Source: Bloomberg.

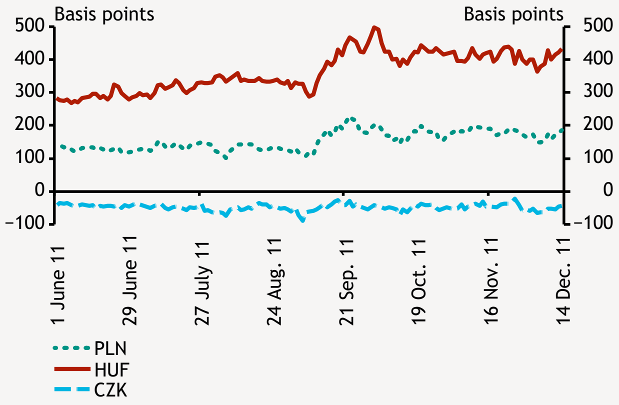
3.1.1 RISK PERCEPTION OF HUNGARY

The risk perception of Hungary deteriorated markedly over the last three months. The deteriorating trend in risk perception was partly caused by global factors, but country-specific events also played a key role in the developments of domestic indicators.

In October, Hungarian indicators underperformed relative to peers due to the announcement of the scheme for the early repayment of foreign exchange loans, and in part to the related rise in expectations of a downgrade. Consequently, the effect of the relatively favourable international atmosphere owing to the EU summit at the end of October was less strongly reflected in domestic indicators, as compared to other emerging countries. In the first half of November, the government's announcement of its intention to cooperate with the Hungarian Banking Association and the news that negotiations would be launched for a new IMF credit facility were country-specific factors with significant favourable effects, which mitigated the impact of the gloomier international investment atmosphere in the second half of November. Moody's downgrade of the sovereign credit rating at the end of November, however, once again strengthened pessimism related to Hungary.

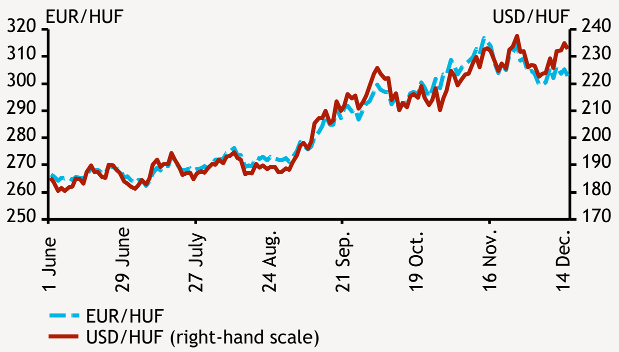
Of Hungary's risk indicators, the 5-year CDS spread increased from 472 basis points at the beginning of the period to 585 basis points at the end of the period, with the spread fluctuating between 472 and 644 basis points over the period as a whole (Chart 3-1).

Chart 3-3
5-year implied spreads over euro rates in 5 years' time



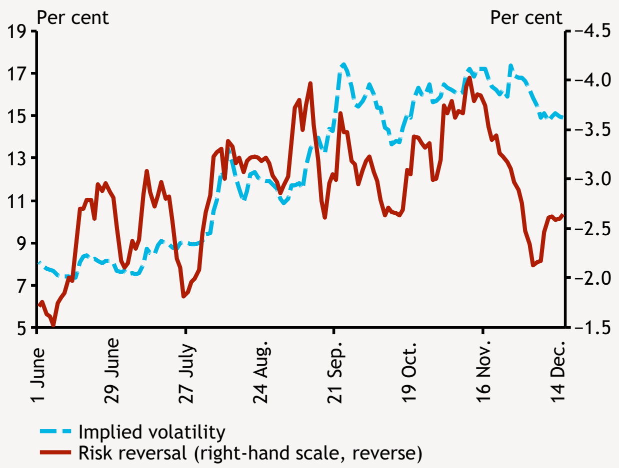
Source: *Bloomberg.*

Chart 3-4
Changes in the exchange rate against the euro and the US dollar



Source: *Thomson Reuters.*

Chart 3-5
1-month implied volatility and risk reversal



Source: *Bloomberg.*

Hungary's foreign currency bond spreads followed a different trajectory as CDS spreads. Premiums on FX bonds also rose considerably during the period, and the spread of Hungary's euro bond maturing in 2016 compared to the German benchmark increased above the value observed at the beginning of the period by almost 300 basis points (Chart 3-2). At the same time, the improvement experienced in the CDS spread at the middle and end of November (attributable to the talks with the IMF and international events) was less pronounced here, and the premia continued on an upward trend in this period as well. This difference between FX bond spreads and CDSs was observed in other Eastern European countries as well, albeit to a lesser extent, and indicates the development of a considerable liquidity premium on euro-denominated bonds in the region.

The indicator of the long-term yield convergence – i.e. the premium on the 5-year forward HUF rate 5 years ahead over the similar EUR rate – has only changed slightly since the major rise at end-September and the correction in October, and stood at 432 basis points at the end of the period (Chart 3-3).

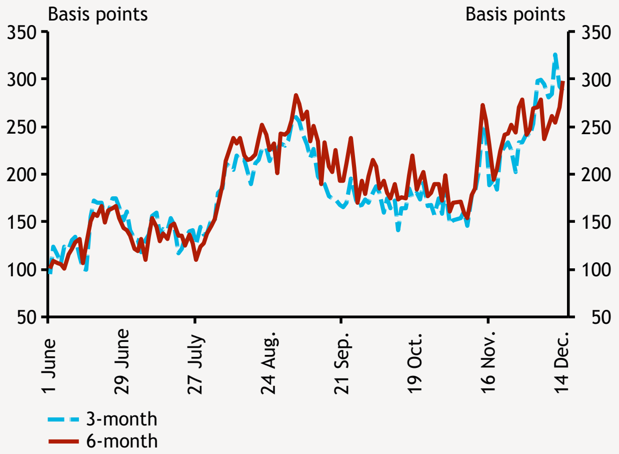
3.1.2 DEVELOPMENTS IN FOREIGN EXCHANGE MARKETS

The aforementioned risk factors also determined developments in the exchange rate of the forint, although the individual events had different effects on the foreign exchange market than on the risk indicators. From the initial level of EUR/HUF 288, the exchange rate of the forint increased to above EUR/HUF 316 by mid-November, thus exceeding the peak observed in early 2009. The exchange rate reacted with a significant strengthening of around 10 forints to the announcement of talks with the IMF, while the subsequent downgrade by Moody's entailed a weakening of similar magnitude. In this regard, domestic events had a greater effect on the foreign exchange market than they did on the risk indicators (Chart 3-4).

Based on FX options, the implied volatility of the EUR/HUF exchange rate increased markedly in the period under review. The risk reversal quotes that capture the risk of extreme shifts fluctuated considerably. However, the price of insurance against a further major forint depreciation – i.e. the market risk of a such event – remained below the historical peaks (Chart 3-5).

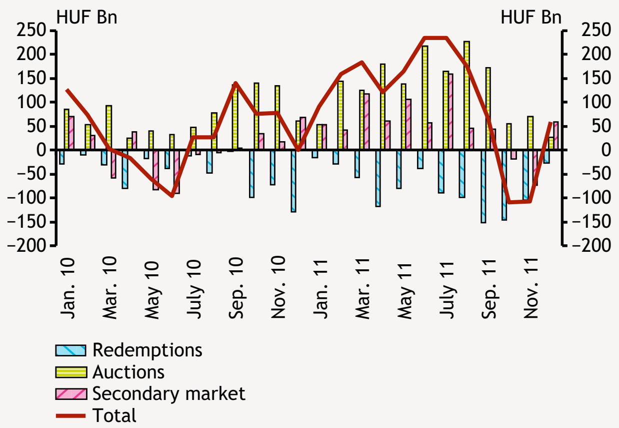
In the period since September, the non-resident sector has sold Hungarian currency equivalent to approximately HUF 200 billion in the foreign exchange market. Non-residents' FX swap market activity was characterised by an increase

Chart 3-6
Changes in FX swap spreads



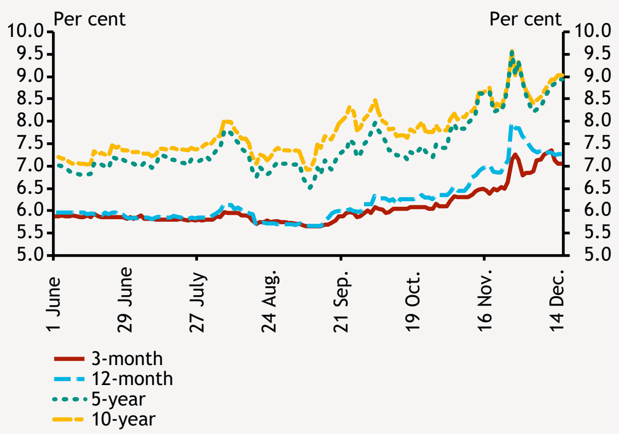
Source: Thomson Reuters.

Chart 3-7
Non-residents' government securities holdings by factors



Source: Reuters.

Chart 3-8
Changes in government securities market reference yields



Source: Reuters.

(of HUF 600 billion) of swaps involving foreign currency liquidity providing (buying of forint liquidity). Consequently the parallel spot market forint sales indicate the build-up of synthetic short positions (Chart 3-6).

FX swap spreads rose well above the initial level at most maturities. The 3- and 6-month USD/HUF FX swap spreads increased above the end-August levels of around 250 basis points, and the use of the central bank's 3-month swap facility also increased.

The traditionally strong relationship between the forward holdings of the domestic corporate sector and the exchange rate, which reflects the HUF-stabilising market participation of domestic agents, broke down during the period. This may be the result of either reaching capacity limits due to the export volume that can be hedged or due to a change in domestic agents' exchange rate expectations. Accordingly, domestic corporate agents' forward deals did not materially mitigate exchange rate depreciation during the period.

3.1.3 GOVERNMENT SECURITIES MARKET AND CHANGES IN YIELDS

Deteriorating investor confidence was reflected in the government securities auctions, as well as in primary and secondary market yields. During the period, as a result of the weak demand, the Government Debt Management Agency issued less government securities than announced at several auctions, and in the case of two treasury discount note tenders, the auctions were cancelled (Chart 3-7).

Fading demand for government securities was reflected in changes in non-residents' holdings as well. Compared to earlier months, non-residents' purchases of government securities in the primary market declined, and they acted as sellers in the secondary market for the first time since August 2010. Non-residents' government securities holdings declined from the historical peak of HUF 4,015 billion in September by HUF 255 billion to HUF 3,760 billion.

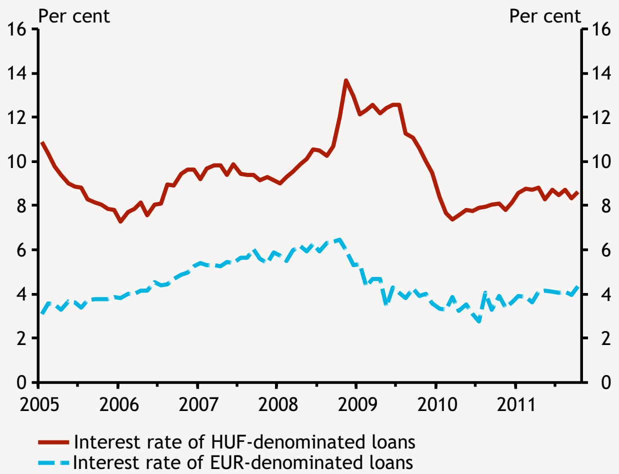
Yields increased at all maturities, with the highest rises seen in the medium maturities, where a significant 100–150 basis point premium evolved relative to interbank yields. At the 3-month and the longest, 10–15-year maturities the reference yields exceeded the initial level by approximately 100 basis points, whereas 150- to 200-basis point increases were typical of medium maturities (Chart 3-8).

3.2 Credit conditions in the financial intermediary system

In the corporate segment, interest rate spreads have stagnated at around 2.5 percentage points since 2010 H2, despite the significant rise in both the credit risk costs and external funding costs in 2011 Q3. At the same time, the banking sector mainly focuses on more creditworthy clients, with strong price competition for them; therefore, interest rate premiums also primarily reflect interest rate conditions of such clients. Based on the lending survey, the non-price conditions of small and micro enterprises and of commercial real estate loans were reported to have tightened in Q3. In the household segment, the average interest rate on housing loans remained practically unchanged between August and October 2011, whereas interest rates on home equity loans continued to increase, albeit slightly. Rates on unsecured consumer loans declined in October, which was exclusively attributable to hire purchase loans. Overall credit conditions of household loans were reported to have remained unchanged based on the lending survey, but at the same time, a wide range of banks expected a tightening in interest rate conditions for mortgage loans over the period of 2011 Q4 and 2012 Q1, which in many cases occurred already in October, as banks raised their offer rates on mortgage loans. However, due to the time span of credit evaluation, this is not reflected yet in the interest rate statistics. Developments in forward-looking real interest rates are determined by the increase in inflation expectations.

3.2.1 CREDIT CONDITIONS OF CORPORATE LOANS

Chart 3-9
Interest rates on corporate loans by denomination

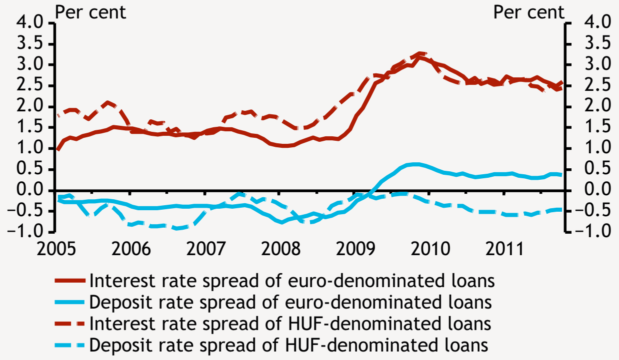


Source: MNB.

The nominal HUF interest rate on corporate loans was largely unchanged as an average of the 3-month period up to October, remaining at around 8.5 per cent (Chart 3-9), which corresponds to a 2.5 percentage point spread above the interbank rate. The interest rate on EUR-denominated loans also remained unchanged around 4 per cent in Q3. In October, however, it increased by nearly 40 basis points, resulting in an increase in the 3-month moving average interest rate spread to 2.6 percentage points, after having been on a downward path for 4 months.

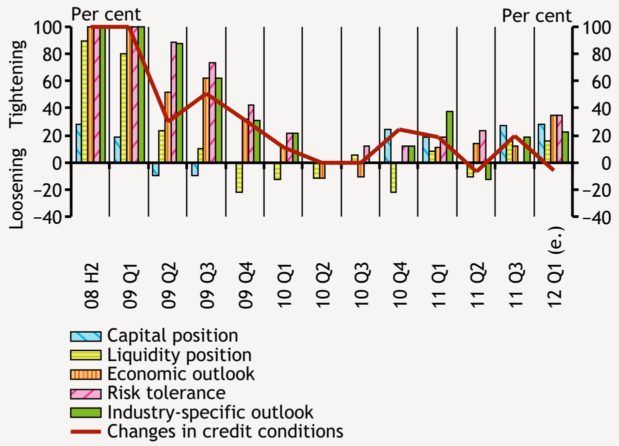
The interest rate premiums can be considered low; moreover, compared to Q2 they even became relatively more favourable, especially in the case of EUR-denominated loans. The underlying reason is that, after having followed a declining trend for a year, loan losses increased considerably – by more than one-half of a percentage point as a proportion of total loans – in Q3, exceeding 2.5 percentage points (Chart 3-10). Furthermore external funding costs abroad have also increased considerably since July 2011. Hungarian sovereign and bank CDS spreads were stuck at a 1.5-2 percentage point higher level compared to Q2. This suggests that interest rate statistics primarily reflect the conditions of clients whose creditworthiness is considered to be good, even under the

Chart 3-10
Interest rate spreads on corporate loans by denomination



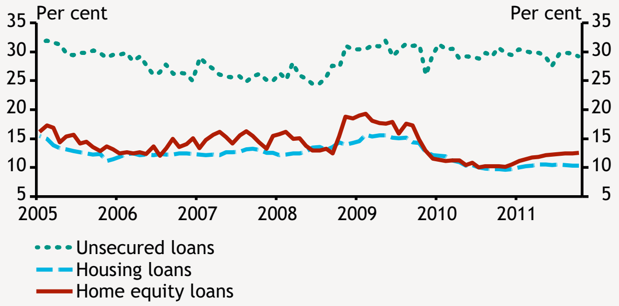
Note: The spread on the moving average of the 3-month BUBOR and EURIBOR, respectively.
Source: MNB.

Chart 3-11
Changes in credit conditions and factors contributing to changes in the corporate segment



Note: Net percentage balance of respondents reporting tightening/easing, weighted by market share.
Source: MNB lending survey, based on the responses of banks.

Chart 3-12
Annual percentage rate (APR) on housing and consumer loans



Source: MNB.

present strong risk aversion, with strong competition for these clients.

The non-price credit conditions of micro- and small firms and commercial real estate lending were reported to have tightened based on the lending survey, while there was no change in the terms of large and middle-sized enterprises (Chart 3-11). Looking ahead, at the aggregate level banks expected easing over the next half year, which is the combined outcome of net tightening[2] in the case of large and middle-sized firms and easing in the case of micro- and small-sized enterprises. It is important to stress, however, that such forward-looking plans for easing were not realised in previous quarters, and thus, their materialisation remains uncertain.

3.2.2 CREDIT CONDITIONS OF HOUSEHOLD LOANS

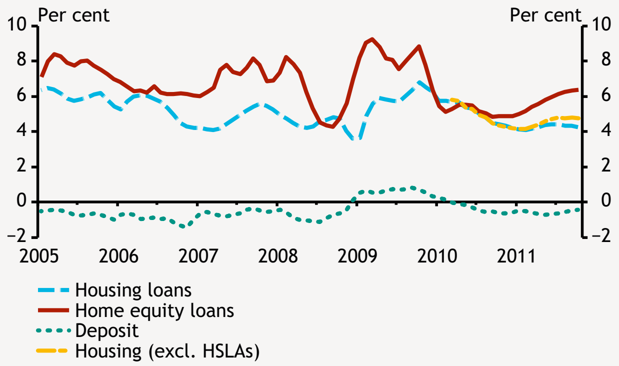
The interest rate conditions of housing loans decreased slightly as the annual percentage rate charged (APR) declined from 10.5 per cent to 10.3 per cent between July and October 2011 (Chart 3-12). This was attributable to the increasing weight of home savings and loan associations within new lending, as the interest rates on loans extended by these institutions are markedly lower than rates on traditional housing loans. Although interest rates on home equity loans continued to increase, the rate of increase was slower. As a result, the APR reached 12.5 per cent in October, corresponding to 6.4 per cent interest rate spread (Chart 3-13). Overall, the difference between the interest rates on housing and home equity loans continued to widen, which may partly be explained by the higher risk of home equity loans and partly by the much higher concentration on the home equity lending market.

It is important to emphasise that the current HUF-denominated APR level is significantly higher than the 6–8 per cent level of FX-denominated mortgage loans prior to the crisis. Consequently, the number of households that can afford housing investment may have declined considerably, as the roughly 13 per cent fall in housing prices[3] since the onset of the crisis does not completely offset the increase in instalments due to the higher interest, while there has been no significant, broad-based increase in household incomes either.

Following a strong decline in June, in Q3 the APR of unsecured consumer loans increased again to a level of around 30 per cent (Chart 3-12). This was attributable to

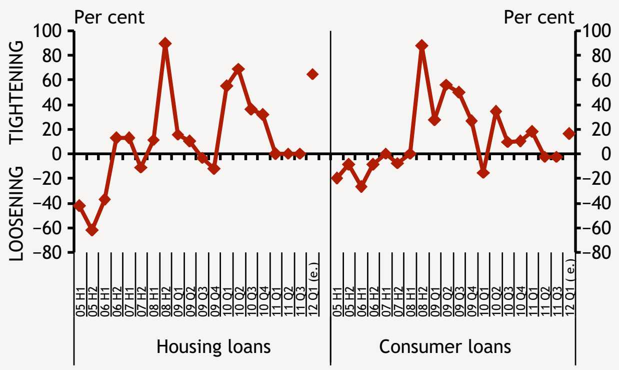
[2] The difference between tightening and easing banks, weighted by the market share. The ratio does not reflect the magnitude of tightening/easing.
[3] Nominal decline on the FHB housing price index.

Chart 3-13
Interest rate spread over the 3-month BUBOR



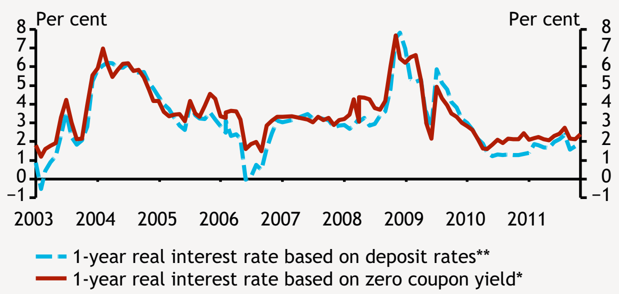
Note: 3-month moving average. HSLA is the abbreviation of Home Savings and Loan Associations.
Source: MNB.

Chart 3-14
Changes in credit conditions to the household sector



Note: Net percentage balance of respondents reporting tightening/ easing, weighted by market share.
Source: MNB lending survey, based on the responses of banks.

Chart 3-15
Changes in forward-looking real interest rates



*Note: * Based on the one-year forward-looking inflation expectations of analysts calculated by the MNB using the 1-year zero coupon yields and the Reuters poll. ** Based on the one-year forward-looking inflation expectations of analysts calculated by the MNB using deposit rates with maturity up to 1 year and the Reuters poll.*

the expiry of special offers on hire purchase loans. However, it dropped again – by about half a percentage point – in October, again as a result of a decrease in the APR of hire purchase loans.

Based on the lending survey, conditions of household loans were reported to have remained unchanged in Q3, but over the next half year (2011 Q4 and 2012 Q1) a net 65 per cent and 16 per cent of the reporting banks expected to tighten credit conditions for housing and consumer loans, respectively (Chart 3-14). Tightening was mainly expected in lending rates. Based on banks' reports, in many cases this already occurred in October, as banks raised their offer rates. However, due to the time span of credit evaluation, this is not reflected yet in the interest rate statistics. Furthermore, a few banks also expected tightening even in the loan-to-value ratio, maturity and the payment-to-income ratio.

3.2.3 DEVELOPMENTS IN REAL INTEREST RATES

Over the three months following the previous Quarterly Report on Inflation, from the one and a half year peak of 2.74 per cent in August, the 1-year real interest rate fell back to a level of around 2.1 per cent, which had been typical in the previous one-year period, before rising again to 2.4 per cent in November (Chart 3-15). The decline in the real interest rate, calculated on the basis of the one-year government securities yield deflated by inflation expectation,[4] was attributable to the sharp increase in inflation expectations in September, whereas the rising real interest rate in November was attributable to a rise in government securities yields. The real interest rate calculated on the basis of deposit interest rates with a maturity of up to one year[5] points to a similar trend until October, whereas current data for November are not available yet.

[4] Based on the one-year forward-looking inflation expectations of analysts calculated by the MNB using the 1-year zero coupon yields and the Reuters poll, which is usually carried out at the beginning of the month.

[5] Derived by the weighting of corporate and household deposit rates.

4 Macroeconomic overview

4.1 The international environment

Despite the better-than-expected Q3 GDP figure, in recent months the global environment has been characterised by worsening prospects for business activity, rising risk aversion and a significant decline in asset prices. Developed countries still have not introduced measures that would adequately reduce uncertainties relating to debt sustainability. The resulting contagion effects caused a considerable increase in risk indicators in an ever wider range of countries. Growth in the developing countries continues to be robust, but there are more and more signs of deceleration there as well. With the deteriorating demand outlook, the increase in commodity prices clearly came to a halt in recent months, but no major adjustment has taken place so far.

Chart 4-1
Economic growth in the USA, the euro area, Japan and China

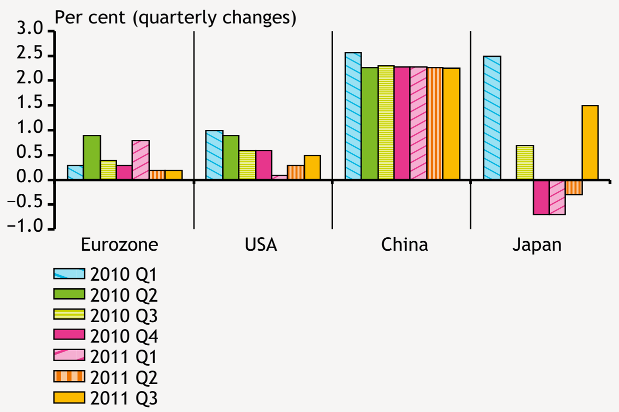
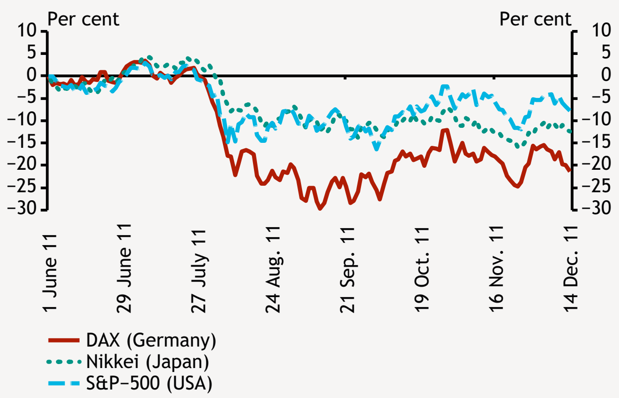


Chart 4-2
Changes in leading stock exchange indices



Source: Thomson Reuters.

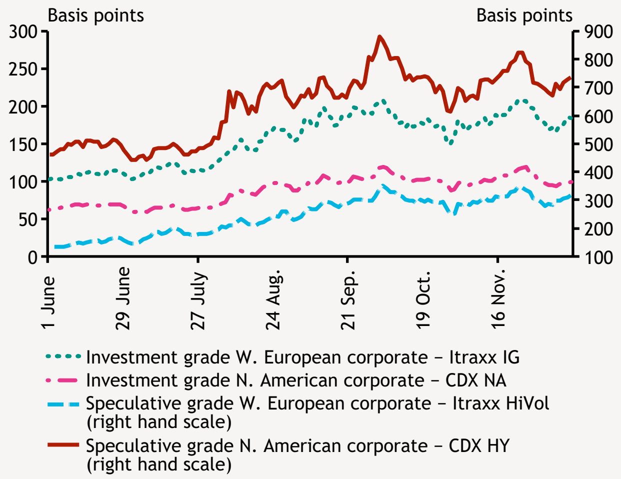
4.1.1 DEVELOPMENTS IN THE GLOBAL ECONOMY

Developments in global economic activity are characterised by the dual nature of the increasingly serious challenges resulting from the high indebtedness of developed economies and the dynamic expansion of developing countries, mainly in the Asian region. In parallel with this, financial markets were mainly dominated by the expectations related to the fiscal prospects of euro area peripheral countries and to the future of the euro area (Chart 4-1).

Compared to the second quarter of the year, the debt problems in the developed economies, and the euro area peripheral countries in particular, continued to worsen. In addition to the deepening of the crisis, contagion has strengthened, and risks have spread to an increasing number of countries. Global growth prospects have deteriorated considerably since the summer (recession in developed countries and the possibility of a slowdown of the Chinese economy), contributing to rising risk aversion. Various groups of indicators were affected differently by the fluctuations in investor sentiment. Leading stock exchange indices increased by 1-2 per cent compared to the end-September values, whereas the main indicators of stock market volatility declined (Chart 4-2). At the same time, the general fall in oil and other commodity prices, as well as the increase in the EMBI Global index underlined the growing risks to future prospects.

The sovereign debt crisis forced governments in numerous countries to withdraw earlier economic stimulus measures and to announce consolidation programmes lasting for

Chart 4-3
Changes in corporate CDS composite indices



Source: Bloomberg.

Chart 4-4
Industrial production in the USA

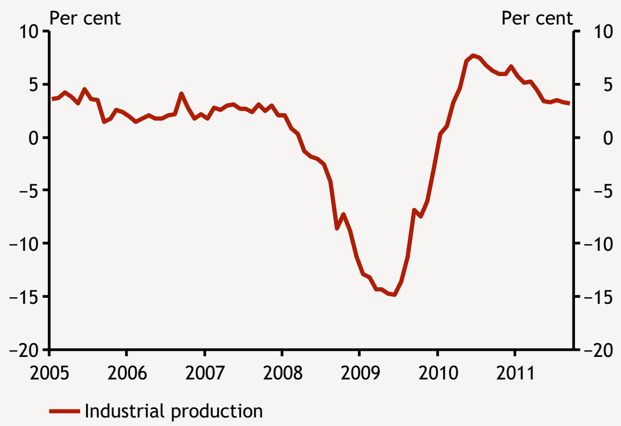
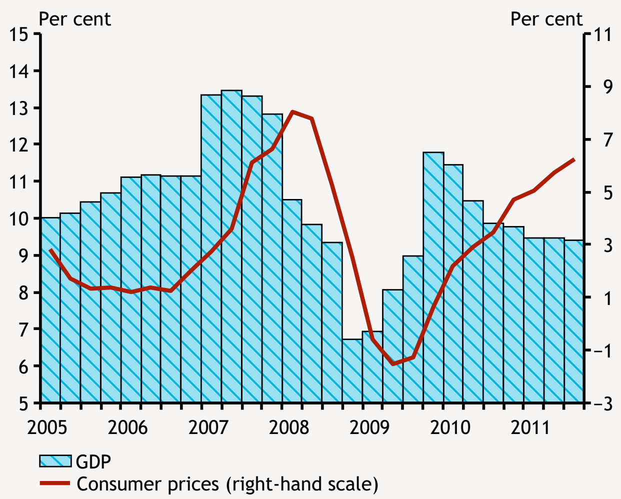


Chart 4-5
Growth and inflation in China

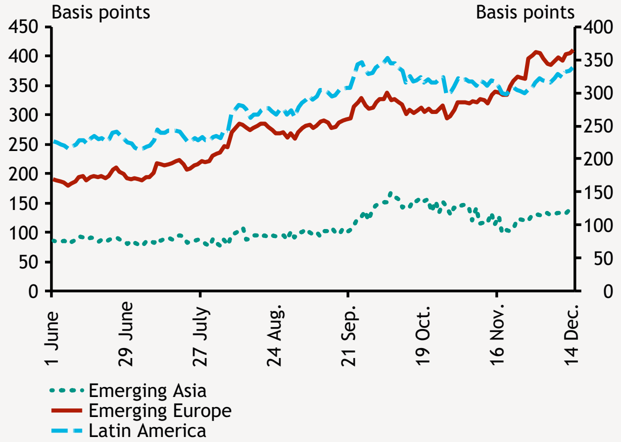


several years. Meanwhile, monetary policy also has limited manoeuvring room to stimulate the economy. In most developed countries, key policy rates already approached the zero lower bound in the earlier stage of the crisis. Therefore, central banks are attempting to promote bank lending through liquidity-providing facilities and other unorthodox means. Major central banks reacted differently to the escalation of the crisis in the summer. The Fed increased its long-term government securities purchases (financed by sales of short-term government securities) aiming to reduce the long-term yields, which are relevant for the real economy. In October, the Bank of England and the Bank of Japan expanded their asset purchase programmes by GBP 75 billion to GBP 275 billion and by JPY 5 trillion to JPY 55 trillion, respectively. In the euro area, the ECB reduced the base rate by a total of 50 basis points delivering it to 1.00 per cent at the end of the period under review. Additionally, in order to prevent financial market turbulence, it increased its – sterilised – government securities purchases in the peripheral bond market, introduced long-term liquidity-providing instruments, and eased collateral eligibility criteria. In early December, major central banks reduced the cost of their US dollar liquidity-providing swap facilities by 50 basis points.

At the same time, the US economy continues to be characterised by restrained growth. The negative effects of temporary factors, such as the impact of the catastrophe in Japan through the production chain and high oil prices, are beginning to ease. However, in the medium term public and private sector balance-sheet adjustment necessary as a result of the financial crisis will also have an unfavourable effect on economic growth. It remains to be seen what solutions the US will find to the contradicting problems of stimulating the economy, which is on the agenda due to fears of recession, and the increasing government deficit and public debt (Chart 4-4).

Asian developing economies have continued to expand strongly. Although the exceptional growth rate of the Chinese economy has declined slightly in recent months, the expansion of the economy continues to be dynamic. The weaker performance of the real economy in the third quarter is mainly the result of the worsening global demand and the tightening of domestic economic policy. The latter took place because – in parallel with rising inflation – the unfavourable effects of economic overheating were also reflected in real estate prices and in the bubble that evolved in lending. In order to mitigate the effect of the tightening on credit supply, the central bank reduced the minimum reserve ratio (Chart 4-5).

Chart 4-6
Developments of emerging market FX bond (EMBI Global) spreads



Source: Bloomberg.

Chart 4-7
Developments of global commodity prices

(in euros)

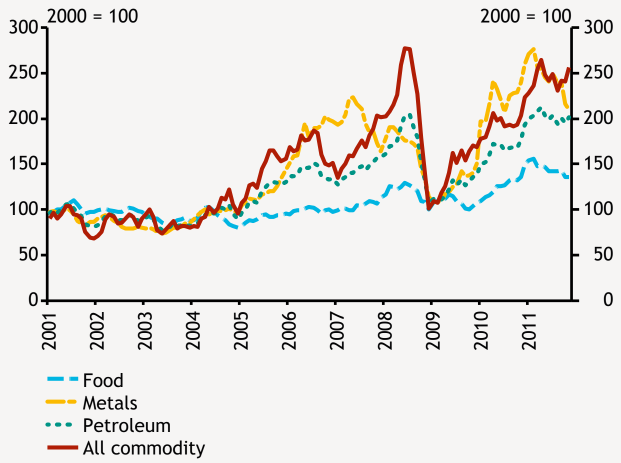
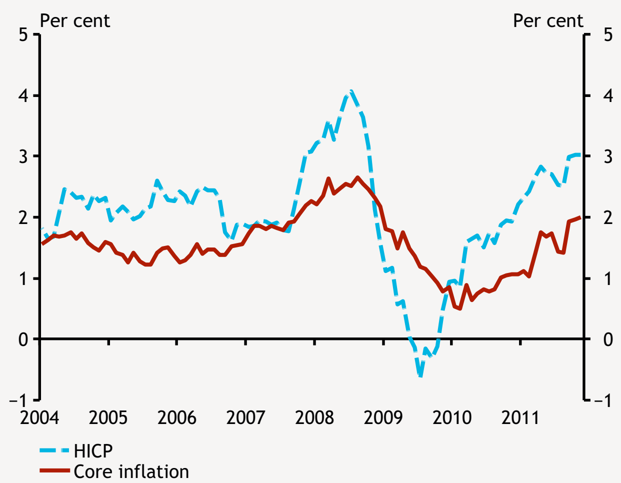


Chart 4-8
Developments in euro-area inflation



Along with the closure of the positive output gap, the Chinese economy is expected to remain on a robust growth path, although with declining dynamics. However, its growth prospects are fundamentally determined by the fiscal and growth challenges facing the US economy and by the mounting debt problems of the euro-area countries. The effect of the expected slowdown in the developed economies will probably be only partly offset by strengthening domestic demand.

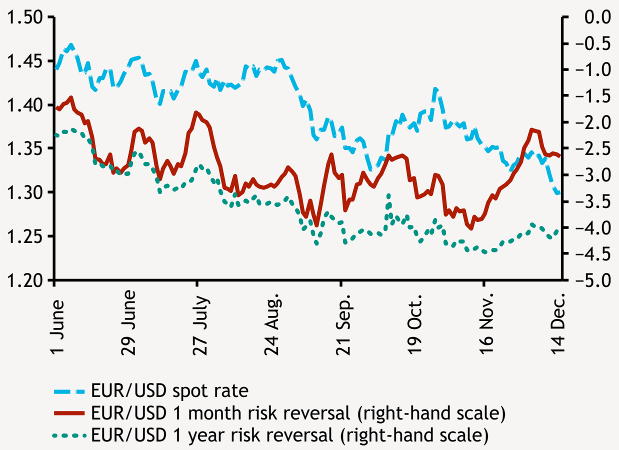
Emerging market indicators largely followed trends in developed markets. Emerging stock market indices fluctuated within a band of ±5–10 per cent compared to the level at the beginning of the period with dynamics similar to those experienced in developed markets.

Until early 2011, developments in global inflation were determined by inflationary pressure from commodity and oil prices, which was fuelled by the growing demand in developing economies (Chart 4-7). Although commodity prices, which peaked in April 2011, started to decline as the outlook grew more uncertain, their level remains historically high. On the supply side, the decline is attributable to the easing of the political tensions in the Arabic countries which took place early in the year and the good global harvest results, whereas on the demand side it is attributable to the gloomy growth prospects of developed countries. Based on futures prices, the downtrend in oil prices is expected to continue, which points to a decline in global inflation. In terms of global inflation as a whole, it is also of the utmost importance what degree of deceleration will take place in developed countries and at what pace the currently positive output gap will close in the Asian countries.

4.1.2 DEVELOPMENTS IN THE EURO AREA

In the euro area, the economic and financial market developments are dominated by tensions related to the sovereign debts of peripheral countries. Following a strong first quarter, euro-area growth decelerated sharply, and – despite the better-than-expected Q3 GDP figure – only moderate expansion is expected for the second half of the year as well. The sudden slowdown is attributable to the combined effect of several factors. A negative effect on both investment and consumption is being exerted by the further decline in lending activity resulting from banks' rising costs of funds and risk aversion, the drastic decline in business confidence due to mounting financial market uncertainties, and the looming prospects of fiscal adjustment, which is becoming necessary in the majority of countries. Looking ahead, export-oriented growth may be restrained by the anticipated decline in global demand. In addition, significant

Chart 4-9
Changes in the EUR/USD spot exchange rate and risk reversal quotations



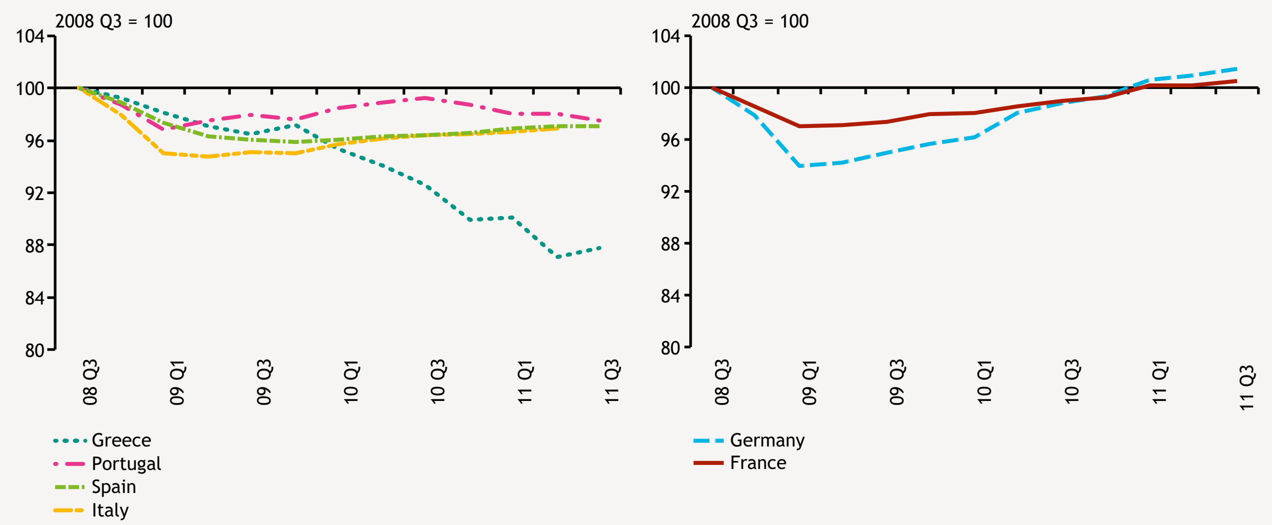
Source: Bloomberg.

fiscal adjustment packages have been adopted in several euro-area member countries, and their effects may be perceived both in consumption and investment.

Since the end of last year, euro-area inflation has continuously exceeded the inflation target, which is determined to be around 2 per cent (Chart 4-8). The index remains at a high level due to changes in energy and commodity prices. According to the expectations of market analysts and international institutions, the rate of price increase is expected to be higher than the target in the coming months, after which it may start to decline to a level around the target. The risks surrounding the medium-term inflation path are basically symmetrical. The weaker-than-expected growth prospects can be mentioned as a downside risk. By contrast, the indirect tax and regulated price increases that are becoming necessary, due to fiscal consolidation and are planned in several euro-area member states, point to the evolution of a higher inflation path.

Overall, there was no substantial change in the exchange rate of the euro against major currencies in the period under review. Against the US dollar, the euro stayed at significantly stronger levels than in the summer of 2010, and EUR/USD implied volatility is also low compared to the values observed during the crisis. At the same time, the so-called risk reversal quotes, which show the asymmetry of risks, declined from close to record levels at the end of the review period. Nevertheless, these instruments still indicate that the risk of a major euro depreciation is extremely high (insurance via options against such an event is expensive), which may reflect the concerns related to the future of the euro area (Chart 4-9).

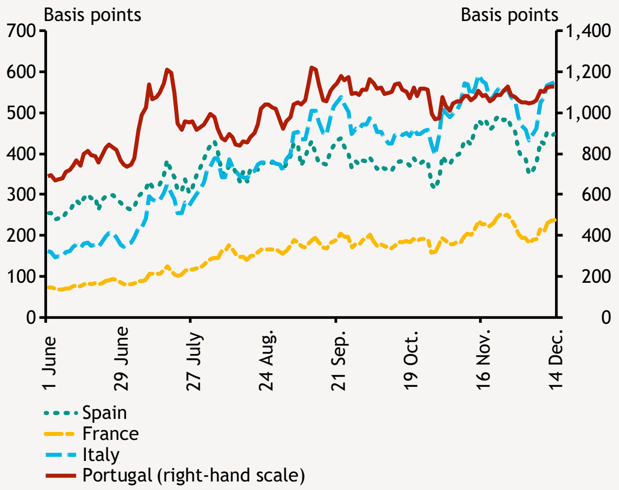
Chart 4-10
Development of GDP in the euro area
(2008 Q3 = 100)



Analysing the processes in more detail reveals that there is a sharp difference between the conditions of the euro area core and peripheral countries. Although compared to the previous quarter their economic indicators suggest more restrained dynamics, the German and French economies continue to be the driving forces behind growth. Growth in both countries is primarily based on the export demand of Asian countries, although domestic demand is supported by the relatively favourable labour market situation as well (Chart 4-10).

The problems of the peripheral countries continue to pose the greatest challenge for the euro area. The concerns related to sovereign debt and to the stability of the financial systems of individual countries continued to increase, leading at the same time to a dramatic deterioration in growth prospects. Technocrat governments aiming to put the fiscal path back on a sustainable trajectory were formed both in Greece and Italy. However, the measures that improve fiscal equilibrium negatively affect growth. For the next year, recession is expected in the countries that can be considered as the focal points of the crisis.

Chart 4-11
Euro area 5-year sovereign CDS spreads

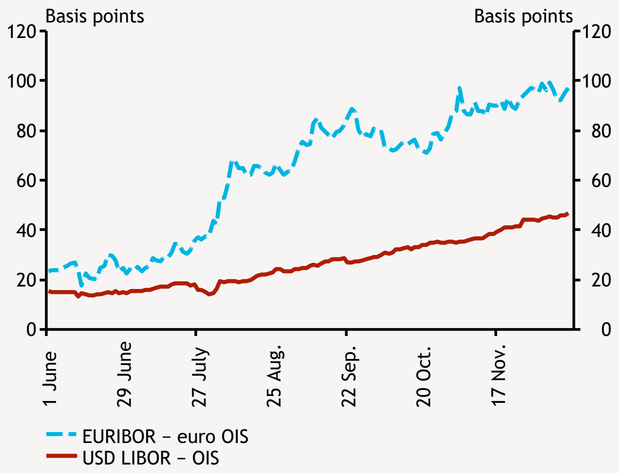


Source: Bloomberg.

Of the channels of financial contagion, in the period under review investors concentrated on the possibility of the spread of the crisis to larger euro-area sovereigns, and to Italy in particular. In mid-November, Italian government securities yields approached the critical mark of 7 per cent, and a general significant increase in yields and CDS spreads was also seen in the euro area (Chart 4-11). The ECB reacted to the further deterioration in investor sentiment by increasing its secondary market bond purchases. In December, the leaders of the majority of EU Member States agreed on a package of economic policy measures that increases the crisis management funds, brings forward the establishment of the ESM (European Stability Mechanism), and delivers regulations strengthening fiscal discipline. As the exact legal background of the measures and their efficiency in crisis management are uncertain for the time being, initial market reactions were muted. The package did not have a material effect on credit rating agencies' assessments, and thus the risk of rating downgrades for several euro-area countries remains significant.

Another relevant channel of contagion, the spread of the crisis in the direction of the European banking system, received less attention in this period compared to the peripheral sovereign bond markets, but the deterioration in the situation can be traced in the increase of bank CDS spreads, LIBOR-OIS and TED spreads. In order to strengthen interbank confidence, the European Banking Association obliged European banks to reach the 9 per cent capital

Chart 4-12
Changes of LIBOR-OIS spread



Source: Thomson Reuters.

adequacy ratio by 30 June 2012. Although this requirement may reduce the tensions in the banking system, it also entails the risk of further drag on bank lending – and thus investment activity (Chart 4-12).

The prospects for developments in the euro area depend on the bloc's approach to crisis management and its reception by the market and credit rating agencies. The effectiveness of the current measures are cast into doubt due to the fact that market players continue to consider the crisis contagion to larger euro-area sovereigns and/or to the European banking sector to be a realistic possibility.

4.2 Aggregate demand

There was an upturn in economic growth again in the third quarter. External demand continues to be the driving force of the economy, while the developments in domestic absorption items have been restrained. At the same time, the impetus of international economic activity is declining from quarter to quarter, and thus domestic growth possibilities will also narrow at end-2011.

Chart 4-13
Structure of annual change in domestic GDP

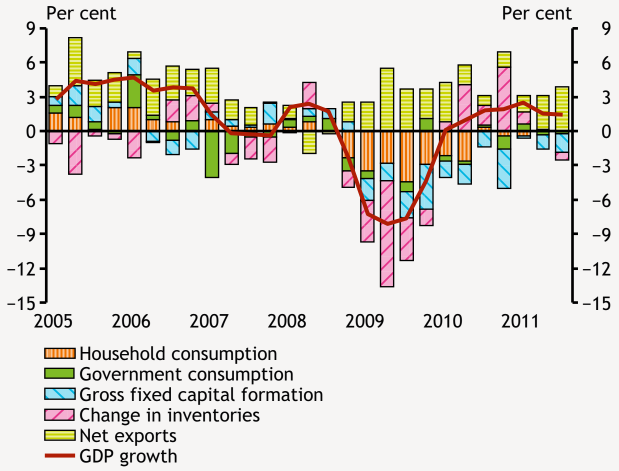
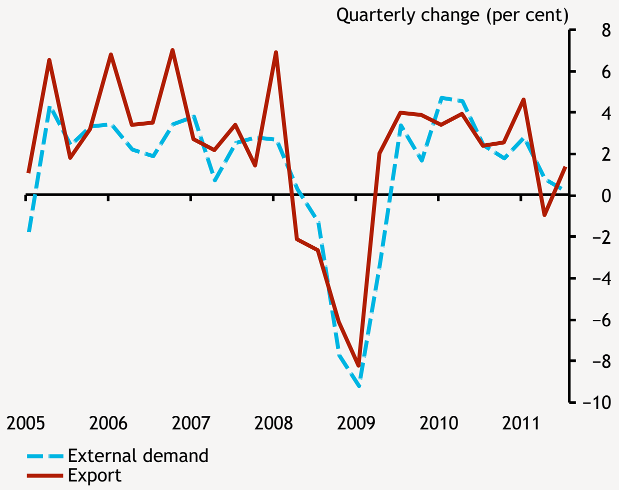


Chart 4-14
External demand and exports*



** 2011 Q3 nowcast.*

Following stagnation in Q2, economic growth picked up again in 2011 Q3. The acceleration measured on a quarterly basis was mainly attributable to exports. By contrast, domestic demand continued to fall. Consumption did not increase, in spite of the tax measures taken at the beginning of the year and the disbursement of private pension fund real yields during the summer. Apart from some major manufacturing projects, investment activity remained weak. However, at the end of 2011 momentum in exports, which have been the main pillar of growth, may also begin to decline (Chart 4-13).

4.2.1 FOREIGN TRADE

Demand has been on a downward path in Hungary's export markets for several quarters, although there was a temporary upturn in Q3. The underlying reason is that supply chain disruptions caused by the March earthquake in Japan have eased. The temporary improvement in external demand stimulated Hungarian exports as well. In addition, the significant depreciation of the forint and the favourable agricultural harvest may also have facilitated exports (Chart 4-14).

At the same time, imports stagnated in Q3. Although export companies' demand for intermediate products increased, imports for consumption and investment were restrained due to meagre domestic demand. Accordingly, net exports continued to provide support to economic growth. In the final months of the year, exports are expected to weaken, but net exports should continue to contribute positively to growth due to the weakness of domestic demand.

The terms of trade continued to worsen in Q3. The world market price of energy increased compared to the previous year, with an unfavourable impact on the Hungarian economy, which is a net importer of energy. Moreover, the

Chart 4-15
Annual change in terms of trade

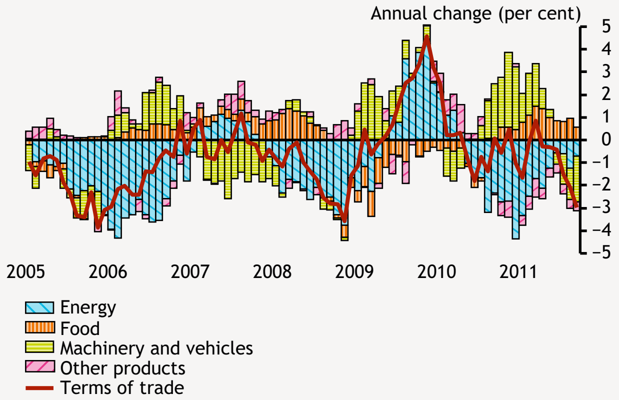


Chart 4-16
Changes in retail sales, earnings and the consumer confidence index

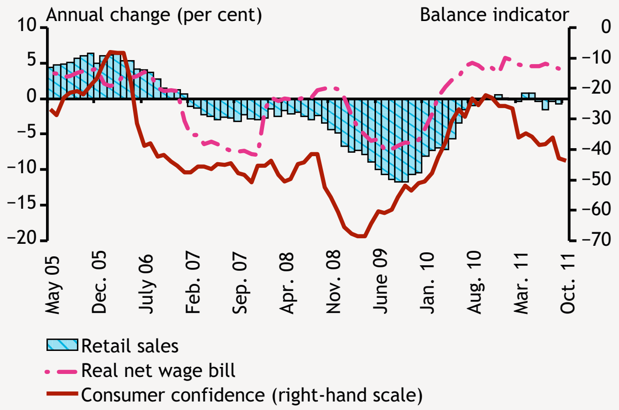
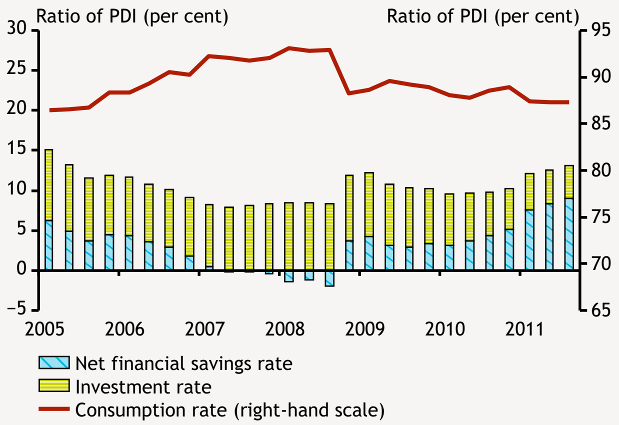


Chart 4-17
Trends in the use of household income



MNB estimate. The balancesheet identity holds for annual averages.

terms of trade of the machinery industry products also deteriorated, which may be related to the weakening prospects for economic activity. These negative impacts were attenuated by the improvement in the terms of trade of food, which was attributable to the fact that agricultural prices were higher than last year (Chart 4-15).

4.2.2 HOUSEHOLD CONSUMPTION

Retail trade stagnated in Q3. Following the tax measures taken at the beginning of the year, even the disbursement of the private pension fund real yields in August did not result in a pick-up in household consumption. The underlying reason is that, as a result of the worsening and increasingly uncertain macroeconomic prospects, precautionary motives may have strengthened in the behaviour of households. The depreciating currency slows down the balance sheet adjustment of indebted households, further depressing consumption demand (Chart 4-16).

Disbursed private pension fund real yields may have materialised mostly as savings and loan repayments. However, some of these funds may still be spent before the anticipated VAT hike in January. This effect may be dampened by the fixed-rate early repayment of FX loans, which could motivate households to postpone purchases over the near term. On the whole, we expect only moderate household spending in the final months of the year.

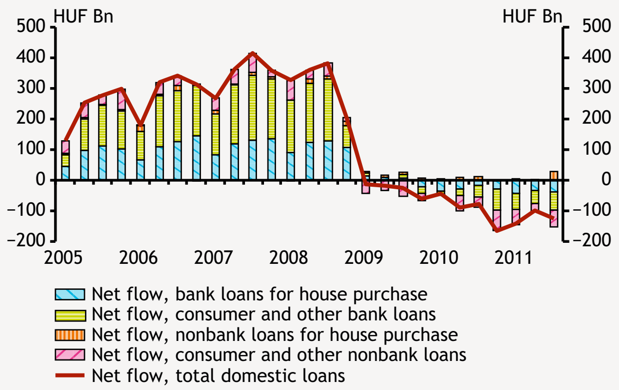
One of the sources of the risks surrounding household incomes is the worsening growth outlook. Employment stagnated in the summer months, whereas wage dynamics have slowed since the beginning of the year. In turn, prospects for the future have become gloomier in parallel with the deterioration in international economic activity. Macroeconomic risks are reflected in the household confidence indicator as well, which has deteriorated considerably again in recent months (Chart 4-17).

Developments in lending remain unsupportive of household consumption and housing investment. Outstanding household loans declined further in Q3.[6]

In addition to the worsening outlook, households' demand for loans continues to be restrained also by the depreciation of the forint against the Swiss franc. Firstly, the strengthening of the Swiss franc adds to the debt service burdens of foreign exchange loans. Secondly, it substantially slows the balance-sheet adjustment of households, which may be offset by households by the postponement of new

[6] The increase in financial enterprises' net lending for housing purposes is solely related to the loans taken over from banks' loan portfolio for debt management, and not to new lending.

Chart 4-18
Net quarterly changes in domestic loans to households



Loans granted by banks, foreign branches, cooperative credit institutions and other financial intermediaries. Seasonally unadjusted change in outstanding amounts, with rolling exchange rate adjustment.
Source: MNB.

Chart 4-19
Changes in investment in machinery

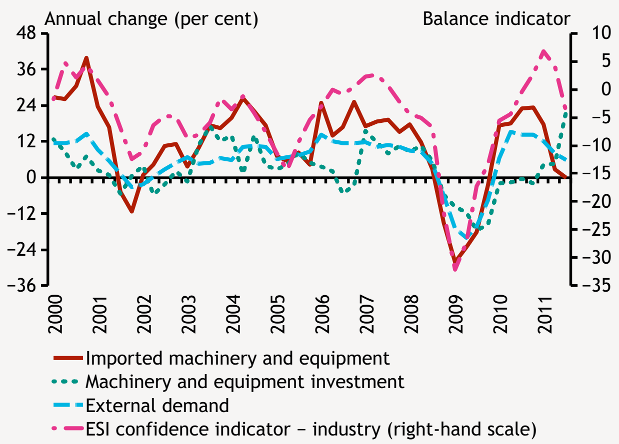
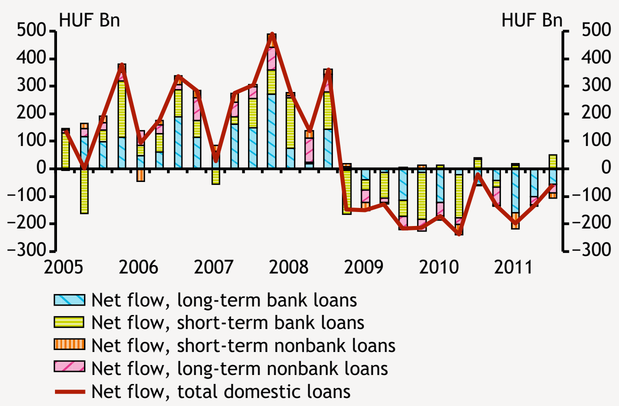


Chart 4-20
Net quarterly changes in domestic loans to corporations by maturity



Loans granted by banks, foreign branches, cooperative credit institutions and other financial intermediaries. Seasonally unadjusted change in outstanding amounts, with rolling exchange rate adjustment.
Source: MNB.

borrowings. In addition to weak demand, banks' declining willingness to take risks also limits lending to households as a supply-side factor; this materialised in tight lending rates and tight non-price credit conditions (Chart 4-18).

4.2.3 PRIVATE INVESTMENT

Investment was probably very restrained in 2011 H2 as well. Apart from some large manufacturing projects, the corporate sector was characterised by weak investment activity. Slackening demand conditions and the mounting uncertainties related to next year's macroeconomic and regulatory environment (expected labour costs, in particular) may also motivate companies to restrain or postpone investment, in addition to the tight lending conditions (Chart 4-19).

Although proceeding at a slower pace, outstanding corporate loans continued to decline in Q3, with the overall decrease exceeding HUF 50 billion. Only short-term bank loans increased, mainly as a result of the working capital financing requirement of the manufacturing industry. Meanwhile, long-term loans continued to decline in accordance with the weak investment activity. Due to the deteriorating economic prospects and the weakening capital position of banks, the signs of restrained lending are becoming increasingly visible. Primarily the SME sector, which produces for the domestic market, faces strong supply constraints (they run into difficulties even with short-term financing). By contrast, there is strong competition among banks in lending to large companies that produce for export (Chart 4-20).

Household investment continued to decline in 2011 H2. Housing market developments typically follow the fluctuations in economic activity with significant delays. Since the beginning of the crisis, the number of completions and building permits has been falling. With poor growth prospects and tighter lending conditions, we do not expect a revival in housing demand. The real estate market is already characterised by excess supply, and prices could be further depressed due to the early repayments of FX-denominated mortgage loans and forced sales. On the whole, there are no signs of a turnaround in the real estate market (Chart 4-21).

4.2.4 INVENTORY ACCUMULATION

Deteriorating macroeconomic prospects point to a decline in inventories. Its extent may be mitigated by the fact that, due to the uncertain nature of the recovery, companies may currently have lower inventories than before the crisis. On the whole, deteriorating business conditions may result in a

Chart 4-21
Construction of new housing and the number of building permits issued

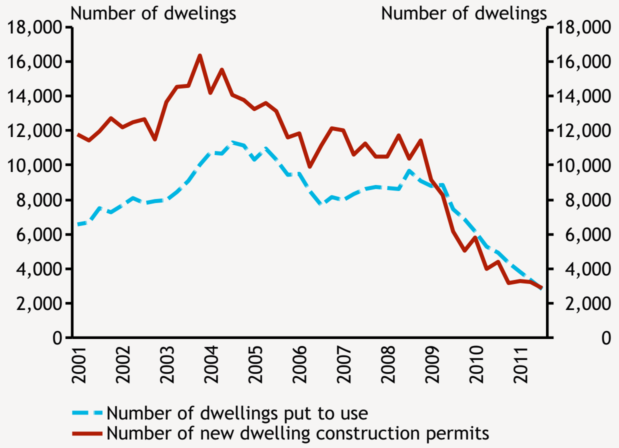
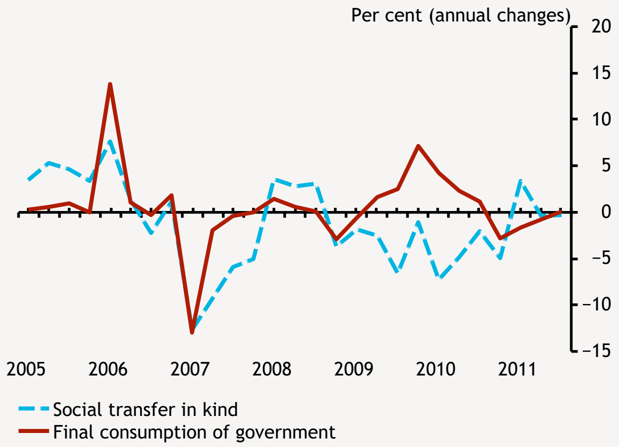


Chart 4-22
Changes in government consumption



lower reduction of inventories than what was observed in 2008 and 2009. Moreover, following the good harvest, the level of inventories may even temporarily increase (Chart 4-21).

4.2.5 DIRECT GOVERNMENT DEMAND

As a result of government policy treating the achievement of the fiscal deficit target as a priority, government demand has been restrained in 2011. Neither wage type expenditures nor material expenditures increased, compared to last year. On the other hand, the upturn in public work programmes may have added to the volume of government consumption.

In addition, public sector investment was also restrained; following a higher value in 2010, accumulation expenditures may have returned to the average level of earlier years (Chart 4-22).

Box 4-1
Household developments in the first three quarters of 2011

This box examines the changes in household disposable income in the first three quarters of 2011 and how households used their income.

The household sector received a significant amount of additional income in the first three quarters of 2011. Nevertheless, as a result of a fall in other income (not originating from wages or government transfers), there was only a minimum increase in its real disposable income. Government measures (the tax measures as well as the disbursement of real yields) meant a regrouping of income towards households. In parallel with that, however, the financial transfer received by the population declined in real terms (as a result of, inter alia, the shortening of the eligibility period for job search allowance, the tightening of the sick pay and the freezing of the family allowance). Moreover, the real value of households' other income[7] has declined considerably in 2011 to date. Accordingly, taking

[7] Regarding other incomes, which amount to around one third of household disposable income, within short time only indirect data calculated on the basis of absorption items and wages as well as money grants are available. With a significant delay, the CSO also publishes the changes in the main factors constituting other incomes: entrepreneurs' other income, income from financial wealth and ownership of housing (for more details see Box 1 of the August 2008 issue of the *Quarterly Report on Inflation)*. These factors may have declined as a result of the crisis (with the decline in net interest income, construction and retail trade), which may have played a role in the moderation of the real value of other incomes in earlier years as well.

Table 4-1
Income and absorption side developments in the household sector
(HUF billion)

	2010 Q1–Q3	2011 Q1–Q3	Change	Real change
(1) Net wages	4,707	5,146	439	255
o/w tax easing		*300*	*300*	
(2) Financial transfer	3,340	3,391	51	–79
(3) Real yield		233	233	233
(4) Other income (A+B+C–1–2–3)	3,567	3,428	–139	–278
Generation of income (1+2+3+4)	**11,614**	**12,198**	**584**	**131**
(A) Consumption expenditure	10,281	10,661	379	–22
(B) Net financial saving	637	1,010	373	348
(C) Investment	695	527	–168	–195
Use of income (A+B+C)	**11,614**	**12,198**	**584**	**131**

The data in the table are nominal and (with the exception of investment) not seasonally adjusted values. Financial saving data exclude savings in pension funds for the sake of comparison.

everything into account, in spite of the significant one-off income allocations real household disposable income exceeded the level of the same period in 2010 only slightly, by hardly 1 per cent (Table 4-1). Therefore, the remaining of consumption expenditures at an unchanged level is eventually in line with the restrained growth in household disposable income.

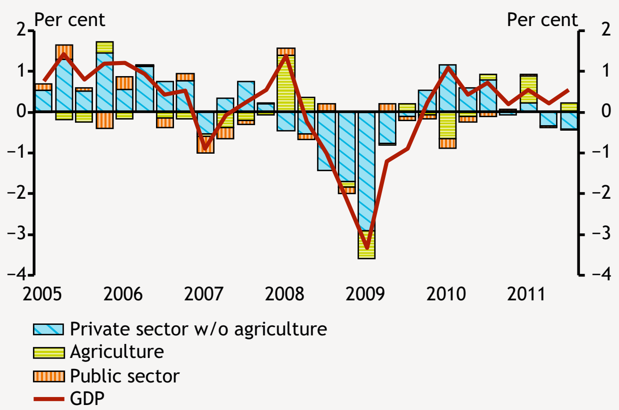
In parallel with the significant tax easing and the disbursement of the real yield, in the first three quarters of 2011 household consumption expenditures and investment expenditures in real terms declined slightly and markedly, respectively, while households' financial savings increased to a considerable extent (Table 1). For the interpretation of savings data, the changes in household investment are also worth examining in addition to developments in incomes. Namely, compared to the same period last year, in the first three quarters of 2011 households continued to reduce their investment expenditures by approximately HUF 170 billion, in line with home-building statistics. Overall, investment postponed due to unfavourable conditions of borrowing and precautionary considerations presumably added to financial savings in the first place. At the same time, not only the decline in investment but several other factors may also have contributed to the higher than earlier financial savings:

- the strengthening of the precautionary motive – in relation to the deterioration in households' expectations – may have contributed to the increase in household savings;
- households consider the additional income as a one-off source of income that does not add to their permanent income; therefore, they increased their savings from this amount to a greater extent;
- in addition to large families, it was mainly those with a higher income and a higher average savings rate who could benefit from the tax easing and the disbursement of the real yield;
- households considered the real yield as pension savings reserved earlier; therefore, they saved its amount;
- the real yield was paid only at the end of the period, and a portion of it may be consumed later, so financial savings may temporarily be higher than what is expected for the longer term;
- the announcement of the possibility of early repayment may have made households postpone their consumption expenditures in Q3, temporarily contributing to the increase in savings.

4.3 Production and potential output

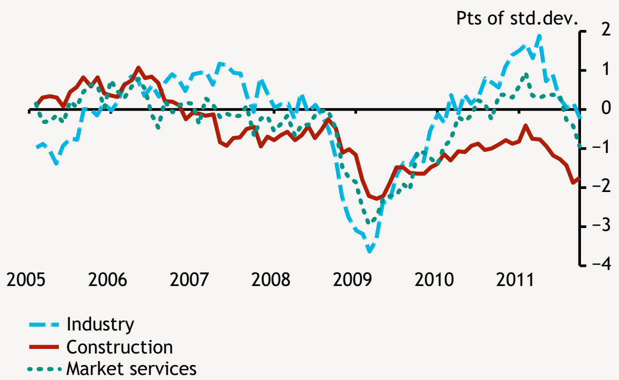
The output of the national economy increased in Q3. Agriculture played a prominent role in this development, as its performance returned to the vicinity of the historic average after a weak 2010. The dynamics of major branches of the private sector continued to slow. Industry is less and less capable of contributing to the growth of the national economy, due to fading international demand. Meanwhile, growth in services and construction is hindered by permanently weak domestic demand. Our picture of the growth potential of the economy has deteriorated since the September issue of the Quarterly Report on Inflation, owing primarily to the revision of investment data for earlier years.

Chart 4-23
Contributions of sectors to quarterly changes in GDP



Note: Contributions do not add up to the volume of GDP; the difference is attributed to taxes and subsidies on production and aggregation error.

Chart 4-24
ESI confidence indicators of the private sector*
(2005–2011)



** The time series have been normalised. The time series of market services is the average of confidence indices for trade and other services weighted with added value ratios.*

The output of the national economy increased in the third quarter. The agricultural harvest, which was better than last year, played a prominent role in this growth. In addition, manufacturing exports also contributed to economic growth. However, basic growth processes have been pointing to a gradual slowdown since the beginning of the year (Chart 4-23).

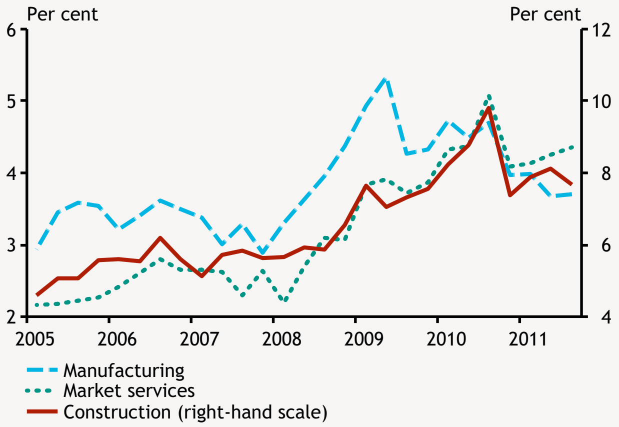
The performance of the private sector continued to be determined by the two different trends in external and domestic demand. Demand in Hungary's main export markets is gradually decelerating, but in Q3 this demand still contributed substantially to growth in the export-oriented sectors. At the same time, sectors that produce for the domestic market are facing stagnating consumption demand and falling investment demand.

Industrial output was supported by export sales in Q3 as well. By contrast, weak domestic demand resulted in a further decline in domestic sales. However, the sector may be less and less able to contribute to the growth of the national economy, due to weakening external demand (Chart 4-24).

Within the services sectors only the ones that are more closely related to industry (e.g. transportation) showed any growth. Weak consumption demand restrained performance in the trading sector. The downtrend in lending activity and the ailing real estate market resulted in a strong decline in the added value of financial and real estate services.

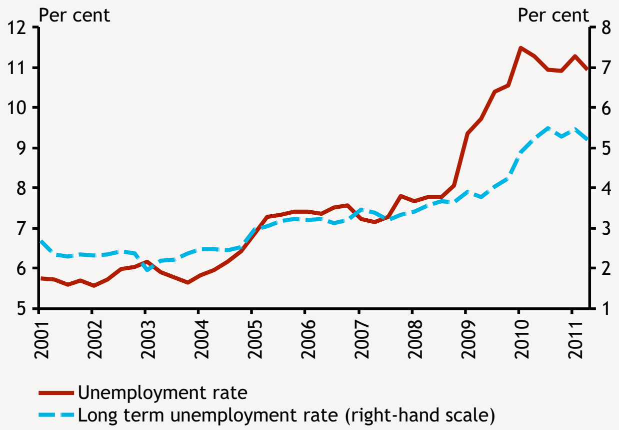
Construction output continued to fall in 2011 H2. Government investment in infrastructure declined this year, and the downturn in the housing market continued.

Chart 4-25
Corporate bankruptcy rates*



* *Ratio of bankrupt enterprises in the given quarter to the number of companies that were operating four quarters before.*

Chart 4-26
Changes in long-term unemployment



Based on preliminary harvest results, agriculture closed an average year in 2011, but compared to the weak year of 2010 it achieved double-digit growth. Accordingly, the contribution of this sector to added value was significant. As most of the agricultural crops are harvested in Q2 and Q3, the positive growth effect of agriculture may decline at end-2011.

Our picture of the potential level of output has worsened since the September issue of the Quarterly Report on Inflation. This was mostly due to revisions carried out in the national accounts. The revised data reflect a much lower investment activity since the crisis, compared to what was known earlier. In addition, the steadily high corporate bankruptcy rates indicate a further decline in capital stock (Chart 4-25). Accordingly, the contribution of capital accumulation to the expansion of production capacities may have been lower than assumed earlier (see Box 4-2 for further details).

Labour supply may contribute to the increase in production potential only to a modest extent. Although labour market activity has increased since the crisis, the ratio of permanently unemployed has stabilised at a high level. The skills of those who remain out of work for a long time decline over time, which makes finding a job more difficult for them (Chart 4-26).

Box 4-2
The revision of national accounts and on the change in our assessment of potential growth

The CSO published the preliminary "National Accounts 2010" at the end of September. In addition to the usual data corrections, several methodological innovations were introduced, which affect time series retrospectively to 1995. In addition to the usual data modifications, the most significant methodological change affected the inventory and statistical error items. The most important changes are:

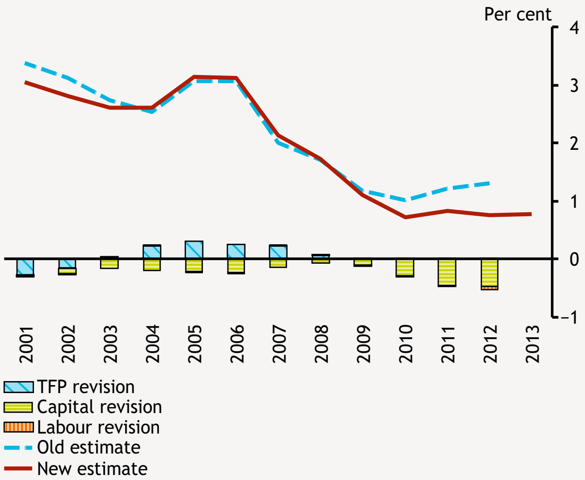
- estimating the gross added value of private entrepreneurs using a new model;
- correction of the accounting of illegal activities;
- revision of household expenditures on gambling;
- accounts of VAT residents;
- termination of statistical error item.

As a result of the amendments, the main absorption items and the level of GDP also changed. This modification reduced the average GDP growth in the period between 1996 and 2010 by 0.2 percentage points, while it also considerably changed the developments in growth over time. The average growth in the period between 1996 and 2001, which had been considered "golden years" earlier,

Table 4-2
Main changes in demand side of GDP

	1996–2001		2002–2010	
	Former	Revised	Former	Revised
Household's consumption	3.1	3.1	2.0	1.6
Social transfers in kind	0.5	0.5	1.0	0.7
Government consumption	0.2	0.1	1.2	1.4
Gross fixed capital formation	6.6	6.6	1.6	0.4
Domestic use	3.9	3.3	0.7	0.9
Exports	14.6	14.6	9.0	8.9
Imports	15.0	15.0	7.6	7.6
Gross domestic product	3.7	3.1	1.7	1.8

Chart 4-27
Changes in our potential output estimate



Note: The columns indicate the revision carried out in the contribution of the factors of production to growth.

became lower by 0.6 percentage points. A higher acceleration was seen in the pre-crisis years (between 2004 and 2006) than what had been perceived earlier, while for 2007 a downward revision of approximately 0.7 per cent was made in the annual index. Regarding domestic items, the greatest changes took place in household consumption and gross fixed capital formation in connection with the termination of the statistical error item. As a result of the revision, the level of nominal GDP declined by HUF 372 billion (1.4 per cent).

The revision of GDP data has impaired our assessment of the potential level of output since the September issue of the Quarterly Report on Inflation. The revisions carried out in the national accounts played an important role in it. The revised data reflect a much lower investment activity since the crisis compared to what was known earlier. Accordingly, the contribution of capital accumulation to the expansion of production capacities may have been lower than assumed earlier. In addition, the invariably high corporate bankruptcy rates forecast a further decline in the capital stock.

Lower potential growth indicates that fundamental economic developments that determine fiscal revenues may also be less favourable. Consequently, the cyclical position of the fiscal balance may also be more closed than it was thought earlier.

4.4 Employment and labour market

In parallel with the renewed deterioration in growth prospects, the slow expansion of total-economy employment observed in previous quarters came to a stop in mid-2011. The number of employed in the public sector was stagnant, while declining demand for labour was already perceived in the private sector. As a result of stronger risks to economic growth, the application of more flexible forms of employment came to the fore again in the labour demand of the private sector.

Chart 4-28
Distribution of annual changes in activity
(2005–2011)

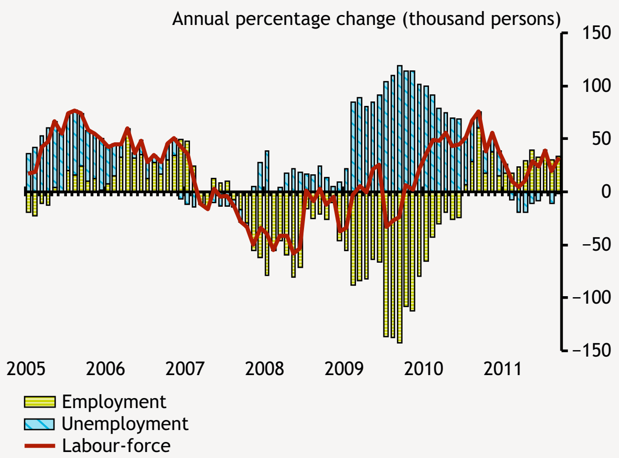
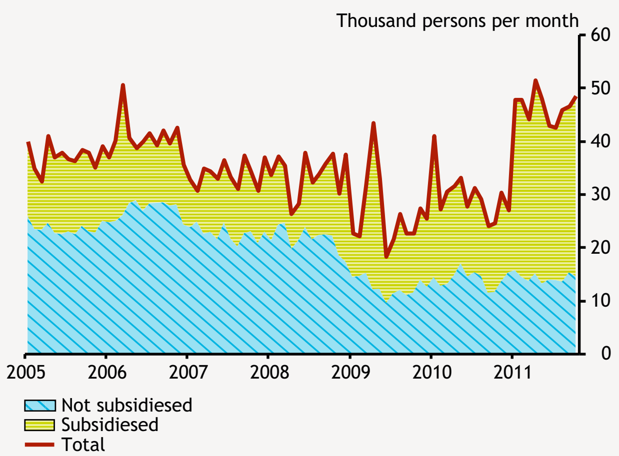


Chart 4-29
Number of new jobs posted
(2005–2011)



Source: National Employment Service.

The increase in domestic labour market activity observed since the outbreak of the crisis continued in the past quarter as well. The activity-boosting effects of government measures (e.g. raising the retirement age, tightening eligibility conditions for disability pensions) from previous years continue to prevail. These may be further strengthened from 2012 on by the latest measures announced within the framework of the Széll Kálmán Plan and the convergence programme (e.g. overhauling the job search assistance scheme, changing the rules on sick-pay and reviewing the eligibility of persons receiving disability pensions) (Chart 4-28).

During the first half of the year, the rising labour supply was mostly absorbed by the government's newly announced public work programmes, while private sector labour demand slowed again as prospects for business activity grew uncertain. This year, the number of non-subsidised new vacancies was below the pre-crisis level; significant numbers of new jobs were only created within the framework of public work programmes announced by the government (Chart 4-29). In the second half of the year, the number of participants in public work programmes did not increase. Apart from the public work programme, the number of employees in the public sector declined gradually. In 2012, public employment may increase with the further expansion of public employment programmes.

Macroeconomic events in recent months and the latest real economy data point to a worsening growth environment, not only at the domestic level, but at international level as well. As a first step, companies adjusted to the uncertain economic environment by using more flexible forms of employment (e.g. part-time employment, temporary placement) in an increasingly wide range of applications. The effect of this was observed in manufacturing in particular, where the ratio of full-time employees to part-

Chart 4-30
Changes in overtime and the number of part-time employees and rented labour in manufacturing

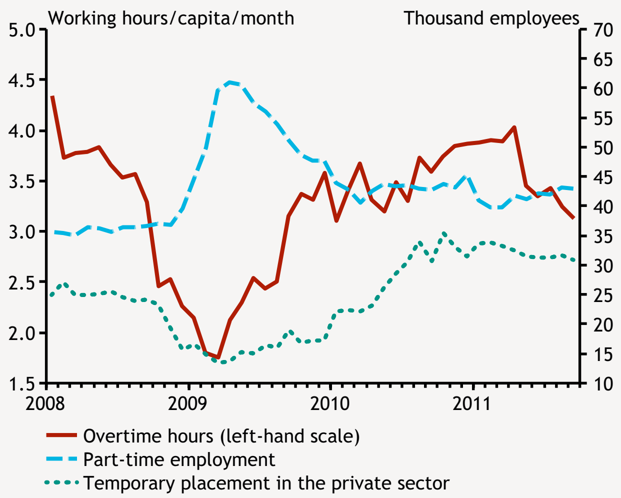
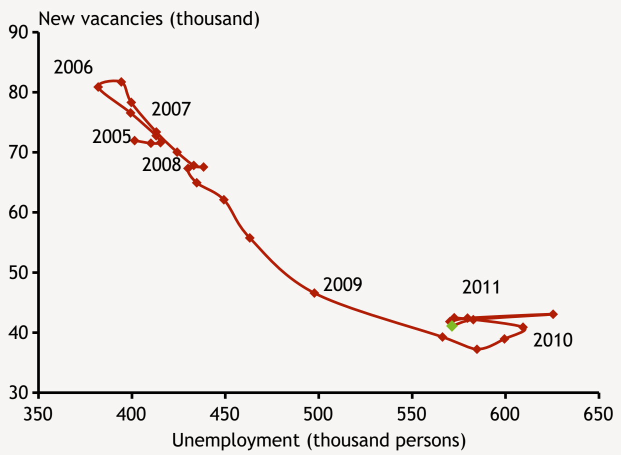


Chart 4-31
The Beveridge curve*
(2005–2011)



** The Beveridge curve shows the number of new vacancies (not subsidised by the state) relative to (registered) unemployment.*

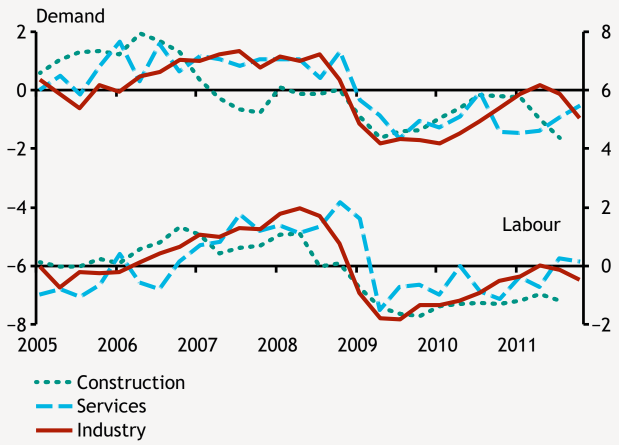
time employees declined in recent months. The increase in the number of employed in the services sector was attributable to the spread of temporary placement. This form of employment is especially sensitive to business conditions; therefore, in the case of a further deterioration in real economy developments the decline in employment may mainly affect these jobs.

As a result of the increase in the number of active jobseekers and the fall in labour demand, unemployment has remained at historically high levels. In line with that, the unemployed per vacancy ratio continues to be high. Labour market conditions continue to be slack (Chart 4-31); no shift was observed in the Beveridge curve in recent quarters.

4.5 Cyclical position of the economy

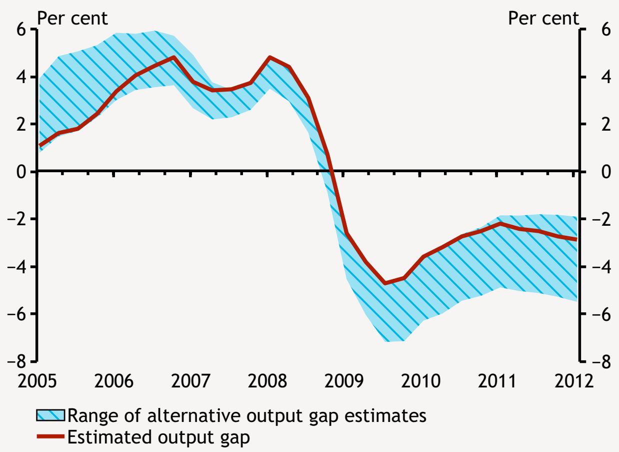
Output may have lagged behind the potential level to an increasing extent in recent quarters. The capacity utilisation indicators of the main productive sectors show a decline in 2011 H2. The cyclical position of exports is worsening as a result of the slowdown in Hungary's export markets. In addition, domestic demand items are permanently below their equilibrium level. Incoming data suggest that demand-side inflationary pressure is weak.

Chart 4-32
Capacity utilisation in the private sector*



** Demand (upper axis) and labour (lower axis) as production limiting factors, standardised.*

Chart 4-33
Changes in the output gap*



** The band of the output gap is derived from estimates prepared with various methods.*

Capacity utilisation deteriorated in the main branches of the private sector. The number of overtime hours worked fell considerably, and a growing share of companies perceives that demand is increasingly lagging behind capacities (Chart 4-32).

In earlier quarters, developments in capacity utilisation were different in industry and in the services sector, which was explained by the dual factors of strong external and weak domestic demand. This combination has changed in recent months: as a result of the slowdown in external economic activity, capacity utilisation has declined in manufacturing as well.

According to our current estimate, national economy output may be nearly 3 per cent lower than its potential level (Chart 4-33). The output gap may have widened slightly in recent quarters, in line with the worsening cyclical position of Hungary's main trading partners. In early 2011, exports may have been around their potential level, but may have lagged behind that since then.

At the same time, domestic demand consistently remains below its equilibrium level. Inflation figures received in recent months confirm that demand-side inflationary pressure has remained restrained in 2011 H2 as well, which reflects the weak cyclical position of consumption.

Investment is persistently below the medium-term equilibrium level. In parallel with declining capacity utilisation in manufacturing, corporate investment is expected to fall. Moreover, housing market investment may remain below the longer-term trend for a considerable period of time, due to households' income situation and tight lending conditions.

4.6 Costs and inflation

Following the summer months, inflation increased markedly. In terms of the developments in consumer prices, the unfavourable demand environment was only able to slightly mitigate the price-increasing effect of high commodity prices and the weak exchange rate. The impact of the latter appeared as a significant increase in fuel prices. The effect of the high commodity prices during earlier quarters can be perceived in a widening range of consumer goods. Wage outflows in the private sector slowed in the past quarter. The underlying reason may be that the decline in the growth rate of Hungary's export markets impairs prospects for the domestic manufacturing industry as well. In recent months, the accommodation of companies producing for thedomestic market (the services sector) to the weak demand environment was reflected in a decline in the dynamics of regular wags.

Chart 4-34
Changes in regular wages in the national economy
(annual index)

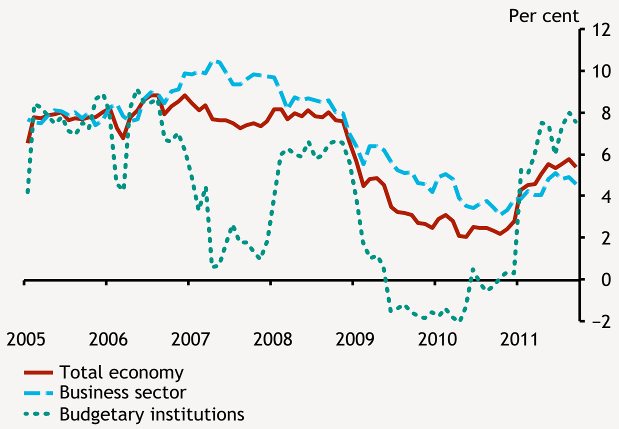
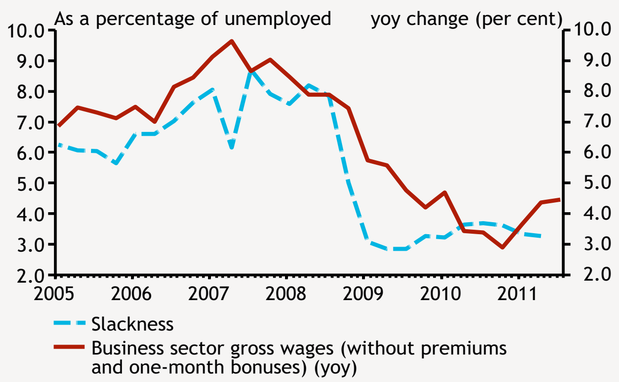


Chart 4-35
Changes in the tightness indicator and regular wages in the competitive sector
(annual index)



4.6.1 WAGES

The acceleration of wages did not continue in the national economy in H2. This is due to the deteriorating domestic and external demand faced by the private sector and to moderately increasing regular wages in the public sector (Chart 4-34). High unemployment, slack labour market conditions and the worsening prospects for economic activity keep the wage dynamics of the competitive sector at a steadily low level (Chart 4-35), while the acceleration in public wage dynamics is mainly a result of a composition effect.

Significant differences can be observed among the branches within the private sector. Although with the deterioration in global – and thus in domestic – business activity, the rate of wage outflows in manufacturing declined in the recent months, regular wages continued to increase to a greater extent, as compared to sectors producing for domestic markets., (Chart 4-36). Wage acceleration observed early in the year broke in both sectors.

Because of stagnating labour costs and decreasing productivity, the unit labour costs increased in Q3. Nevertheless, the increase in unit labour costs is far below the historic average. The decline in wage dynamics and the adjustment in employment observed in recent months continued, which may ease cost-side pressure from the labour market (Chart 4-37).

The wage increase in the public sector may still be explained with the composition effect related to public employment; excluding that, gross average wages at

Chart 4-36
Changes in regular wages in the competitive sector
(annual index)

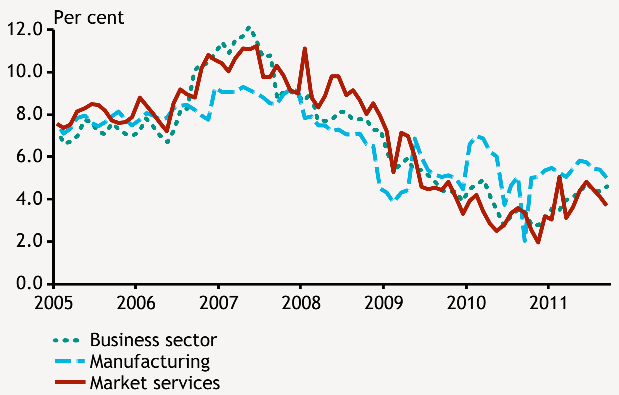


Chart 4-37
Labour cost, productivity and ULC (unit labour cost) in the private sector

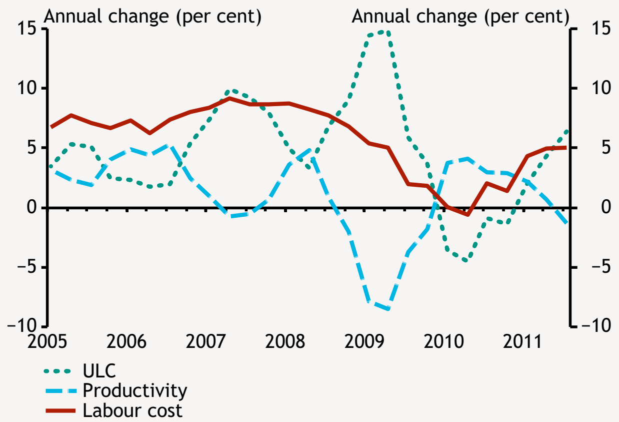
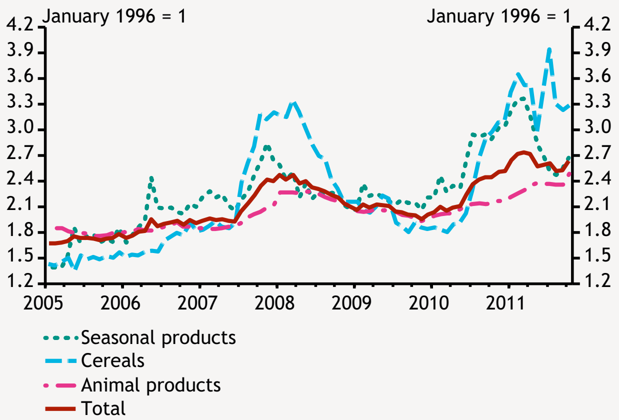


Chart 4-38
Agricultural producer prices
(price level compared to January 1996)



Seasonal products: fruits, vegetables, potatoes; cereals: wheat, oil-seeds; products of animal origin: pork, poultry meat, eggs, and milk. Weighting was based on the estimated size of the effect on the consumer price index.

budgetary institutions increased by the magnitude of inflation, compared to September of last year.

Overall, the slack labour market conditions still do not justify an increase in wages, and therefore, inflationary pressure from the labour market may be considered moderate.

4.6.2 PRODUCER PRICES

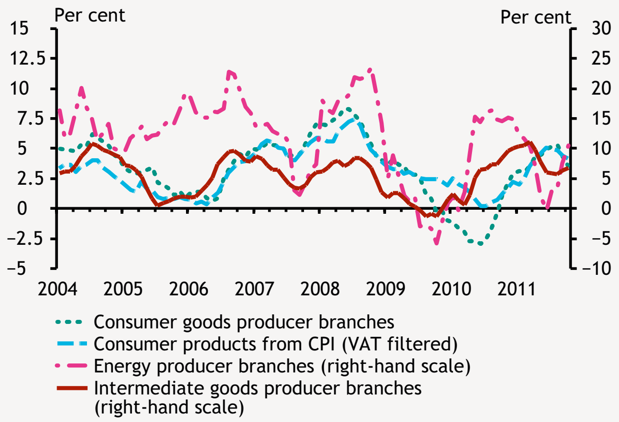
Although this year's crop was much better than last year's, it still cannot be considered historically outstanding. Nonetheless, it contributed to a considerable decline in producer prices. A notable correction took place in the prices of seasonal food. Cereals prices did not continue to increase, but did not decline significantly either. Of the products of animal origin, only the developments in the prices of dairy products followed the changes in commodity prices. Raw material prices that were high in H1 are not yet reflected in the prices of meat products, in spite of the fact that fodder prices may still be considered high (Chart 4-38).

The effect of last year's high commodity prices can be perceived in an increasingly wide range of the industrial production chain. Starting from 2010 H2, growing costs contributed to the rise in inflation to an increasing extent. Although a decline was observed in recent months in line with the moderation in global commodity prices, an increase in producer prices in energy production sector and sectors producing for further use may result in an additional rise in inflation. The weakening of the national currency since the summer months points to further strengthening of price pressures (Chart 4-39).

4.6.3 CONSUMER PRICES

On average, inflation was around 5 per cent in 2010, but this year it dropped to below 4 per cent. After a low of 3.1 per cent in July, a steady rise in inflation has been observed in recent months. In November, the inflation rate accelerated to 4.3 per cent (Chart 4-40). Fuel price increases, base effects and the indirect-tax changes contributed to higher inflation. Similar to the developments in Europe, in recent quarters inflation in Hungary was also kept above the inflation target mainly by the first-round effects of high commodity prices. The effect of strong cost shocks was reflected in the acceleration of core inflation as well. Until now, this was almost entirely caused by the considerable increase in processed food prices. In the fourth quarter, however, inflation in industrial products also increased markedly. Annual core inflation remained close to 3 per cent in November. Excluding processed food, low inflation has been observed in the main core inflation items (Chart 4-41).

Chart 4-39
Industrial producer prices and consumer prices
(annual change)



Note: Consumer prices refer only to products produced by industry.

Chart 4-40
Consumer price index and core inflation
(annual change)

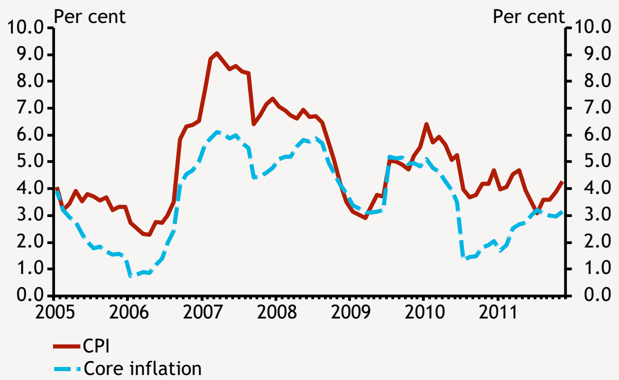
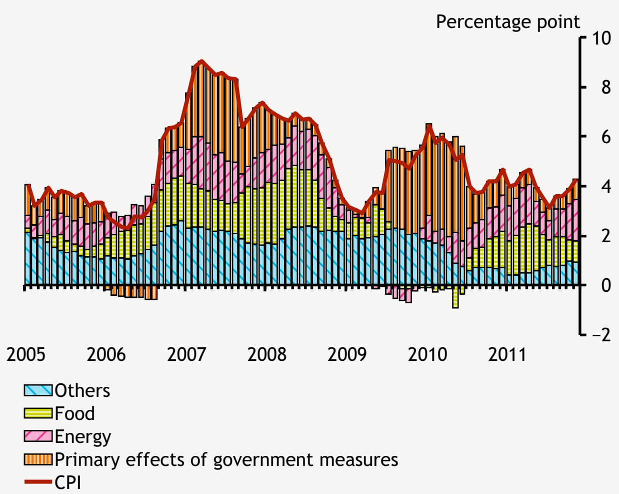


Chart 4-41
Decomposition of the consumer price index



In accordance with the weak demand environment, market services inflation continues to be low this year. In this range of products, it is mainly the first months of the year that play a determining role from the aspect of repricing. In 2012, this repricing will occur at the same time as the change in the VAT rates and the increase in the minimum wage, and this may result in rising inflation in this group of products.

The pricing of traded goods was characterised by strong heterogeneity throughout the year. Prices of non-durable goods increased steadily starting from January, which may indicate that the cost shocks during the past half year may have offset the inflation-reducing effects of the weak demand and the exchange rate, which had been stable until Q3. By contrast, until October the cost shocks did not have any perceptible effect on prices of consumer durables, which are more sensitive to demand. The strong price increases seen in October were much lower in November, but the increase may mean that the higher production costs offset the price-reducing effect of the weak demand environment. However, considering the extent and global nature of cost shocks, it is likely that the resulting price pressure may appear in a wider and wider range of industrial products in the coming months. This effect may be strengthened by the exchange rate depreciation in recent months as well.

As a result of price competition in the tobacco market, the inflation of tobacco products, which are included in core inflation, can be considered historically low. Due to fierce competition, the price-increasing effect of the excise tax, which was raised in January, is hardly seen in the data. Tobacco industry companies have less and less room to reduce net prices, and consequently, the change in the excise tax in November cause price increases. Further increases can be expected.

The inflation of items outside core inflation increased considerably. This is mainly attributable to fuel prices, which are rising because of the depreciating forint. The declining agricultural producer prices somewhat mitigated the increase in the inflation of this product group. In line with the government's effort (to keep people's cost of living unchanged), in contrast to earlier years, regulated energy prices did not follow the increase in the world market prices of energy. Mainly as a result of this, inflation in regulated-price products can be considered historically low. At the same time, depreciation of the forint has added to price pressure, and therefore, further measures may become necessary.

Overall, the developments in inflation in recent months were determined by cost shocks, also amplified by the

Chart 4-42
Range of underlying inflation indicators

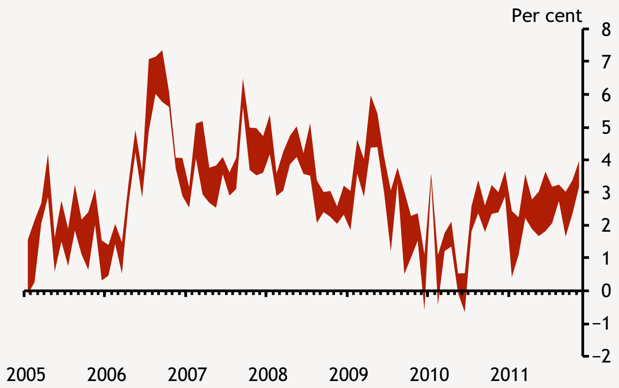
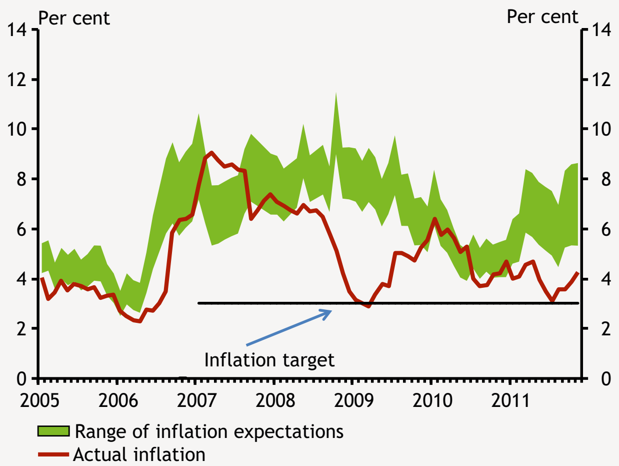
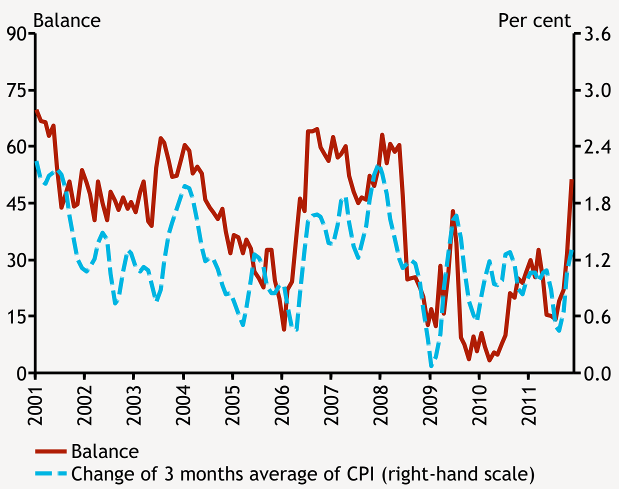


Chart 4-43
Household inflation expectations



Source: MNB calculations based on data from the European Commission.

Chart 4-44
Expected changes in retail sales prices in the next 3 months* and actual inflation



** The balance is the difference between the proportions of those who expect a price increase and those who expect a price decrease.*

exchange rate changes in recent months, while domestic demand pressure may be considered steadily low. Our underlying inflation indicators increased notably in November, which may signal that the weak demand conditions cannot offset the cost increases (Chart 4-42). Although demand side inflationary effects continue to be very weak in the economy, we expect a further increase in annual inflation. Acceleration in the annual rate will be caused by the depreciated exchange rate and the indirect tax increases. As a result of these factors, the consumer price index may remain well above the 3 per cent target – closer to 5 per – cent in the coming months as well.

4.6.4 INFLATION EXPECTATIONS

Households' expectations react to food and energy price increases in a sensitive manner. As the 2010–2011 cost shocks faded, expectations moderated steadily until August. Presumably due to the high fuel prices and the announced tax measures as well as the weak exchange rate, the downward trend broke in September, and the indicators measuring expectations started to rise again (Chart 4-43).

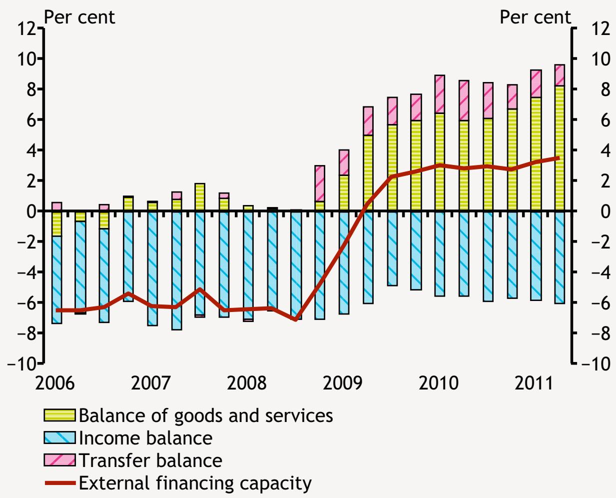
From the perspective of final consumer prices, the price hike expectations of the trading sector, which may carry information on the possibilities of raising the prices in the sector, might also play a crucial role. In parallel with slack demand, retailers' price hike expectations from the beginning of 2010 have remained at a historically low level. In H2, the index rose at a moderate pace, but in November it jumped to pre-crisis levels. This can be attributed to the permanently high commodity prices, the weak exchange rate, the rise of the minimum wage, and the increase and the expansion of consumption taxes (Chart 4-44).

5 The external position of the hungarian economy

5.1 External balance and financing

Hungary's external position continued to improve in 2011 H1. The structure of the balance improvement was in line with earlier trends. While net exports remained robust as external economic activity decelerated, the slight increase in the deficit on the income balance somewhat restrained the improvement in the external position. External financing developments also pointed to a further improvement in external equilibrium. However, the external surplus calculated from financing data was lower than the value stemming from developments in the real economy. The decline in external liabilities, which is in line with the surplus on the external balance, mainly took place with net outflows of non-debt type liabilities. Meanwhile, Hungary's external debt indicators continued to decline compared to end-2010, which were favourably influenced in H1 by the foreign exchange rates that are important from the aspect of the debt.

Chart 5-1
Changes in external financing capacity, seasonally adjusted values
(as a proportion of GDP)

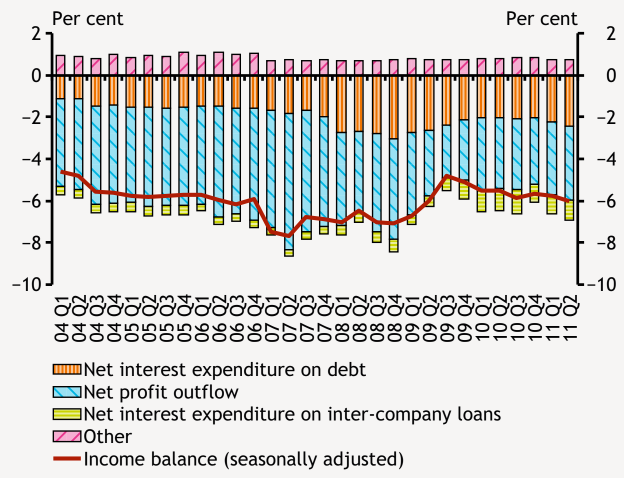


5.1.1 CHANGES IN THE EXTERNAL EQUILIBRIUM POSITION OF HUNGARY

Based on the information for H1, the external position of Hungary continued to improve in 2011 as well (Chart 5-1). The surplus on the external balance amounted to 3.5 per cent of GDP in Q2. (This value is below the level indicated by earlier data releases, because in parallel with the data release for Q2 significant data revisions were carried out. For details, see the box below.) The increase in external financing capacity continued to reflect foreign trade developments. At the same time, the structure of the goods and services balance, which increased to above 8 per cent of GDP, was different than before. Starting from Q2, the effect of the slowing external economic activity could already be perceived in the developments in the trade of goods. This resulted in some adjustment in the balance of goods, whose level can still be considered significant. At the same time, in the case of certain services, such as transportation and business services, unusually high revenues were realised, which contributed considerably to the current account surplus. The balance of goods and services reflected a considerable surplus in Q3 as well. In the case of the balance of goods, the tendencies which were mentioned above (slowing exports and stagnating imports) continued. The strong surplus of the balance of services may be partly attributed to seasonal effects and partly to the weakening of the domestic currency.

The improvement in the external balance, which is driven by net exports, was only restrained to a very minor degree

Chart 5-2
Components of the income balance
(values as a proportion of GDP)



by incomes transferred abroad. In line with our expectations, the deficit on the income balance continued to grow in Q2 (Chart 5-2). As a result of the improvement in exports at the beginning of the year, the increase in incomes of foreign-owned companies may have continued in 2011.[8] Additionally, interest expenditures transferred abroad started to increase again. This is attributable to the surge in non-residents' government securities holdings and the gradual repricing of government debt, in line with the higher risk premium. At the same time, no similar increase was observed in the interest paid by corporations and banks to non-residents. The maturity structure of banks' external funds shifted towards short-term liabilities following the crisis. In addition, earlier analyses[9] reported that at shorter maturities, parent bank risk premiums and sovereign risk premiums, which were increasing to a higher level, were less able to prevail in the pricing of foreign (parent bank) liabilities. Accordingly, compared to the pre-crisis expenditure levels, the relatively low level of bank interest expenditures coincides with the maturity structure of liabilities and the pricing attributes.

The amount of EU funds received by Hungary was below our expectations. Following the dynamic absorption of EU funds in 2009 and 2010, the drawdown of funds clearly slowed. While in the first half of last year Hungary used net EU funds corresponding to EUR 1.7 billion on an accrual basis (funds received less payments to the EU), this year the amount of utilised funds came to EUR 1.3 billion. The recently announced decision of the European Commission that would, in the case of some Member States (including Hungary), reduce the amount of own funds necessary for projects might indicate that the lack of own funds may also have played a role in the halt of projects. In addition, the depressed investment activity also does not facilitate the utilisation of EU funds.

Box 5-1
Revisions in the balance of payments

In its balance of payments data release of 30 September 2011 – within the framework of regular and extraordinary revisions – the MNB amended the balance of payments data retroactively to 2005. As a result of revisions carried out by the CSO, the balance of goods declined (as a consequence of the revision of the correction related to so-called VAT registrations), while the tourism balance increased. In addition, both profit revenues and expenditures were lower than the data released earlier. At the same time, their effect on the income balance was not significant (Table 5-1).[10]

[8] FDI-related 2011 incomes are based on estimates, which will be replaced by actual data originating from corporate reports with a delay of one year, in September 2012.

[9] For more details on the developments in the costs of external funds of domestic banks see: Judit Páles – Dániel Homolya: Developments in the costs of external funds of the domestic banking sector (MNB Bulletin, October 2011).

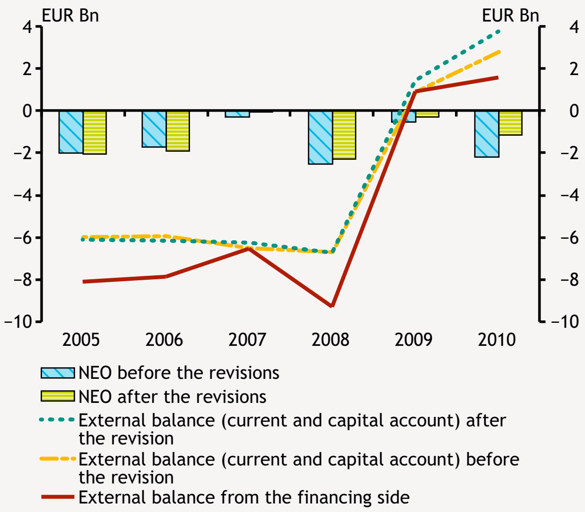
[10] For a detailed description of the revisions, see the statistical release on the Q2 data: http://www.mnb.hu/Statisztika/statisztikai-adatok-informaciok/sajtokozlemenyek STA/mnbhu_fizetesi_merleg/mnbhu_fizm_2011_Q2.

Table 5-1
Effects of the revisions on components of external financing capacity, as a percentage of GDP

	2005	2006	2007	2008	2009	2010	2011 Q1
I. Net financing capacity (1.+…+4.)	0.1	0.2	−0.3	0.0	−0.6	−1.0	−1.6
1. Balance of goods	0.0	0.0	−0.6	−0.6	−1.1	−1.5	−1.8
2. Balance of services	0.1	0.2	0.3	0.5	0.7	0.5	0.3
3. Income balance	0.0	0.0	0.0	0.1	−0.2	0.0	−0.1
4. Transfer balance	0.0	0.0	0.0	0.0	0.0	0.0	−0.1
II. Net errors and omissions	−0.1	−0.2	0.3	0.2	0.2	1.1	1.9
III. Net financing capacity (from financing side) (I.+II.)	0.0	0.0	0.0	0.3	−0.3	0.1	0.3

** In the case of the error of the balance of payments, the positive (negative) values mean a decline (increase) in the error.*

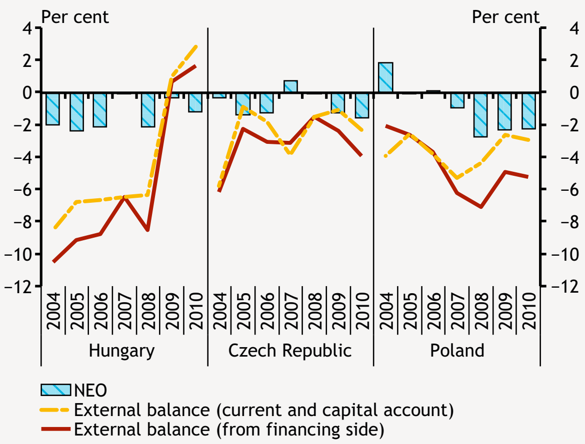
Chart 5-3
Impact of the revisions on external financing capacity



Source: MNB.

Chart 5-4
Changes in the external equilibrium position and the error of the balance of payments (NEO) in a regional comparison

(values as a proportion of GDP)



Sources: MNB, national central banks.

The joint effect of the revisions on the external balance was significant starting from 2009. The current account and the external financing capacity (the sum of the current and capital account) shifted downwards by 0.6–1 per cent of GDP at an annual level. According to the latest data, the external financing capacity amounted to 1 per cent of GDP in 2009 (1.6 per cent was the earlier figure) and 2.9 per cent in 2010 (3.8 per cent was the earlier figure). Data on the financing side did not change to this extent, and thus the debt path has also remained unchanged. The error of the balance of payments became lower by 0.2-0.3 per cent of GDP in 2007–2009 and by 1 per cent of GDP in 2010 (i.e. the quality of the statistics improved). Our earlier picture of Hungary's external equilibrium position changed in terms of measures, but there is no material change in the developments in the external path (Chart 5-3). The external adjustment following the outbreak of the crisis can still be considered significant in international comparison (Chart 5-4).

Chart 5-5
The structure of external financing

(values as a proportion of GDP)

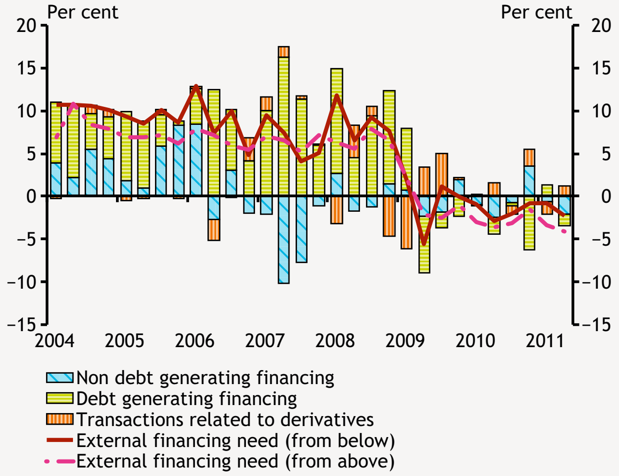
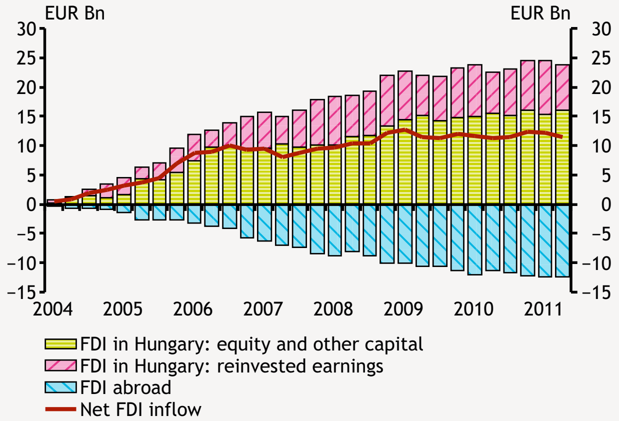


Chart 5-6
Developments in foreign direct investment

(cumulative transactions)



5.1.2 DEVELOPMENTS IN FINANCING

External financing data, which are very important from the point of view of external debt indicators, also reflected further improvement in the external position. The external balance (calculated from financing data) amounted to EUR 0.8 billion in H1. Arising from the net errors and omissions, this indicator is lower than the sum of the current and capital account (EUR 1.9 billion), while at the same time, the trend of the two indicators was identical. Regarding balance of payments revisions in the past, the indicator using financing data is deemed to be more stable.

The decline in external debt, which is in line with the surplus of the external balance, essentially took place through outflows of non-debt type liabilities in the first two quarters of 2011. At the same time, there were no net outflows of debt-type liabilities (Chart 5-5). In the case of non-debt type liabilities, while foreign investors purchased small amounts of domestic shares and mutual fund shares, foreign direct investments did not increase. In addition to the stagnation in equity and other capital, negative reinvested earnings also contributed to this (Chart 5-6).[11]

The expected effect of the previously announced, major automotive investment projects (Mercedes, Opel and Audi) was not yet reflected in the developments in foreign direct investment. These companies have foreign owners, so it is justified to assume that they receive funds for their investment in Hungary from within the group of companies (which would add to direct investment). It is also possible, however, that they use credit from domestic or foreign banks (loans originating from banks already mean debt-type liabilities). However, unofficial sources have reported delays in the Opel and Audi projects. Accordingly, they are expected to affect FDI inflows to Hungary only from the second half of the year on.

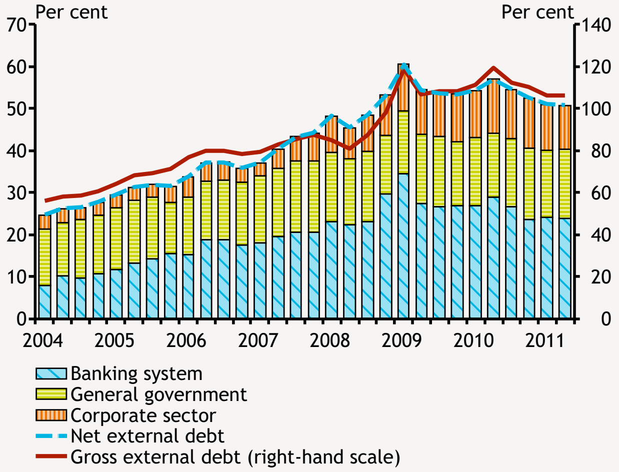
In Q3, for which complete data are not yet available, FDI inflows were negatively affected by the purchase of non-residents' MOL shares by the government (nearly EUR 2 billion), which represents a non-debt type outflow. However, this transaction did not reduce the total (net) amount of foreign funds of the economy, as the foreign exchange reserves of the central bank – as assets vis-à-vis the rest of the world – also declined to a similar extent.

Within the scope of debt-type liabilities, outflows of funds of banks and the increase in the external debt of the

[11] As reinvested earnings constitute the result of the total profit and appropriated dividends, negative reinvested earnings are accounted for as a consequence of dividend appropriations for the second quarter of the year. Therefore, it is sensible to evaluate reinvested earnings at an annual level.

Chart 5-7
External debt indicators

(values as a proportion of GDP)



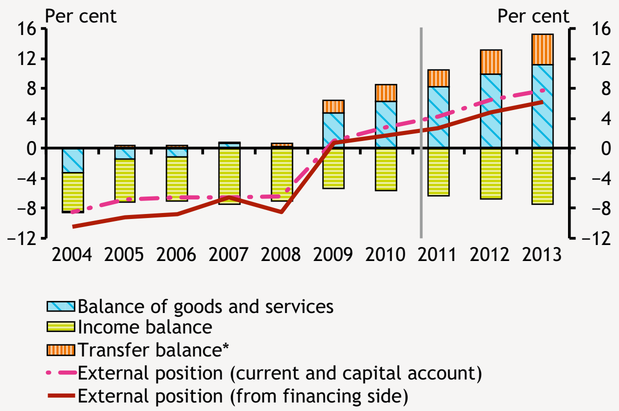
general government continued from 2011 Q2 on. (Developments in financing in Q1 were still determined by the correction of the end-2010 money market events, which temporarily broke the previously typical debt dynamics of banks and the government.) Until end-September, foreign investors' demand for government securities seemed to be very strong; therefore, mainly the effect of this was reflected in the external debt of the government, which continued to increase.

Net external debt was around 51 per cent of GDP in 2011 H1 (Chart 5-7). Overall, the developments in financing resulted in net external debt remaining at an unchanged level in H1, because, as a result of the opposite debt dynamics of banks and the state, debt-type liabilities were stable in net terms. Foreign-exchange rates – which are important from the aspect of external debt (mainly the forint/euro exchange rate) – had a favourable effect on debt indicators in Q1. Starting from Q2, however, the significant strengthening of the Swiss franc and the weakening exchange rate of the forint resulted in a considerable revaluation of external debt, which may have significantly restrained the adjustment of debt ratios.

5.2 Forecast for Hungary's external balance position

In the coming two years, the external balance may continue to improve robustly, possibly supported by developments in foreign trade in the future as well, as growth in exports may exceed the increase in imports over the entire forecast period. Additionally, the use of EU transfers may also accelerate, adding to the disposable income of the economy. At the same time, due to the higher risk premium and the weaker forint exchange rate, interest expenditures may increase faster than previously expected. In 2012, the external surplus may increase by more than 2 per cent of GDP, which may occur in parallel with an improvement in the financial position of the general government and corporations, and with households' fundamental net savings remaining at an unchanged level.

Chart 5-8
Changes in external financing capacity
(as a proportion of GDP)



** The sum of unrequited current transfers and the capital account balance.*

Improvement in the external balance position may accelerate in 2012. The combined current and capital account balance may amount to around 4 per cent of GDP, considering 2011 as a whole, and may even exceed 6 per cent in 2012. At the same time, the financing capacity calculated from the financing side – projecting the difference experienced in the past – may fall short of the aggregate balance of the current and capital account by 1.5–2 per cent of GDP, while this indicator also reflects a further increase (Chart 5-8).

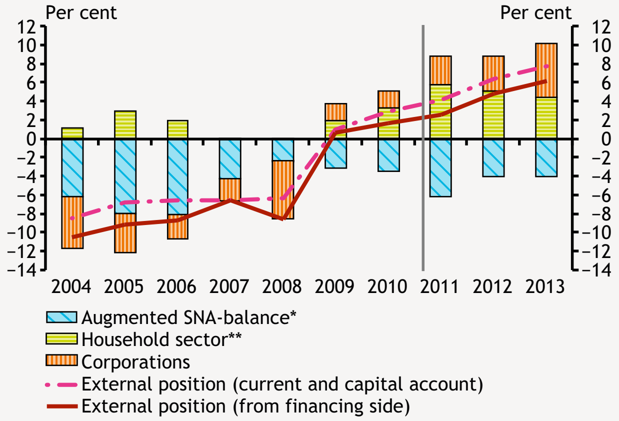
Considering the developments in foreign trade and transfers, further strong balance-improving effects are expected in the coming years. Deteriorating external and domestic developments in economic activity may decelerate growth in both exports and imports. However, exports may continue to expand faster than imports, which may result in an overall increase in the external surplus of the economy of almost 2 per cent of GDP in 2012. A significant export-stimulating impact of the automotive sector may only be effective at the end of the forecast period, after completion of the large projects expected in 2012. Import demand may also pick up by then, and the two effects may result in a smaller, but still positive rise in net exports. Despite the slightly decelerating use of EU transfers in 2011, the drawdown of funds may be strong again in the coming years. As a result of the reduction of own funds required for projects, we expect accelerated use of EU funds and an external balance-improving effect. Net exports and the balance of transfers may contribute to the external surplus by more than 10 per cent of GDP in 2012 and 2013.

In addition to lower increases in exports and imports, the stalling of economic growth next year will affect the

Table 5-2
Expected developments in the various savings indicators of households

	2009	2010	2011	2012	2013
I. Net financial saving consistent with augmented SNA deficit	**2.0**	**3.4**	**5.8**	**5.1**	**4.4**
a) Impact of the early repayment on net savings			0.8	0.4	
b) Savings attributed to the disbursement of real yields			0.6		
II. Net lending capturing basic trends (I.–a–b)	**2.0**	**3.4**	**4.5**	**4.7**	**4.4**
c) Accrual basis accounting of the second pillar	1.7	1.3			
d) Impact of the early repayment on net savings			0.8	0.4	
e) Wealth effect due to leaving the second pillar			−9.6		
f) Consumption attributed to the disbursement of real yields			−0.3		
III. Net financial saving in the financial accounts (II.+c+d+e)	**3.7**	**4.6**	**−4.6**	**5.1**	**4.4**

Chart 5-9
Changes in financing capacities of sectors
(as a proportion of GDP)



** 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 augmented SNA deficit takes into account private pension savings.*
*** Net financing capacity of households consistent with the SNA deficit does not contain the pension savings of those who return to the public pension system. The official financing capacity (shown in the financial account) is different from the data in the chart.*

external balance through the profits of foreign-owned companies as well. Sales opportunities, which are becoming less favourable, may slow down the increase in profit flows to foreign owners and thus the deterioration in the income balance. Beyond the underlying developments, profit outflows are affected by the agreement between the government and the banking association (details of the agreement are elaborated in the 6th chapter). On the one hand, partial relief for borrowers, who are already in default, on the other hand, the burden-sharing between the government and the banking system influences the post-tax profit of the banks. All in all, net profit outflow may increase after 2012, in line with the recovering economic growth as well as the abolition of the sector-specific taxes and the halving of the bank tax burden.

Interest incomes transferred abroad are moderating the significant balance improvement projected from the side of foreign trade and transfers. The worsening of the (net) interest balance to be paid on external debt may be more significant than previously expected, as external financing costs have increased markedly in recent months. Both the increased risk premium and the weaker forint exchange rate add to the interest expenditures related to external debt. The income balance deficit in 2011 may be in line with earlier expectations, equalling some 6 per cent of GDP is expected for 2011. The deficit may increase to nearly 7 per cent in 2012 and above 7 per cent in 2013.

From the income side, developments in the savings of domestic sectors in 2011 are determined by the general government easing; from the absorption side, they are determined by the continued balance sheet adjustment and the strengthening of precautionary motives. Accordingly, this year the external balance will improve in spite of the significant deterioration in the position of the general government. (For more details on the developments i n households' income and absorption in 2011, see Box 4-1).

Households' savings and their structure are affected by the early repayment programme as well. If the loans repaid early are taken into account at the preferential exchange rate, the repayment of the loans, on the whole, does not affect the level of net savings. Because in parallel with the decline in foreign exchange loans, either forint borrowing or the reduction of some financial assets takes place. At the same time, the difference between the values of foreign exchange loans calculated at the market and preferential exchange rates appears as an increase in households' net savings (0.8 per cent of GDP in 2011).[12] Taking this into account, households' financial position may be around 6 per cent of GDP in 2011 (for net savings consistent with the SNA deficit, see Table 5-2).

The external balance improvement continuing from 2012 on may take place in parallel with an improvement in the financial position of the general government and corporations, and in parallel with a broadly stable fundamental net savings of households. In 2012, the private sector will be exposed to a fiscal impulse that will be of nearly the same size as this year's easing, but its direction will be opposite. This will partly be the consequence of the discontinuance of the 2011 one-off effects (e.g. the disbursement of real yields and VAT refunds) and partly the result of further government measures (e.g. termination of the tax credit, tightening of disability benefits and the reduction of certain social expenditure items). As the fall in real incomes is expected to exceed the magnitude of the decline in consumption, household savings – according to the indicator consistent with the SNA deficit – may decline from 2012 on. However, with the exclusion of one-off effects (early repayment, real yields), on the forecast horizon the fundamental saving path is becoming generally stable (financing capacity that shows the underlying developments). Precautionary motives, which are strengthening along with the weak forint exchange rate, and the declining risk tolerance of the banking sector suggest that the upturn in households' demand for loans will be even slower than previously assumed.

Financial savings of the corporate sector may continue to contribute significantly to the external financing capacity of the economy in the coming years as well. A part of the relevant sources may be EU transfers, which may accelerate again and replace other incomes in the financing of investment. In addition, economic prospects, which will already become somewhat more favourable in 2013, may be coupled with an improvement in corporate profitability.

[12] For more details on the possible savings effects of the early repayment see the publication entitled Report on Financial Stability, published in November 2011.

5.3 Fiscal developments

In 2011, fiscal developments led to a considerable increase in demand, reaching 2.7 per cent of GDP, primarily as a result of the reduction of income taxes. In 2012, the budget appropriation bill and the series of measures underpinning the budget are expected to result in a 2.4 percentage point tightening of fiscal demand. Fiscal policy will have a tightening effect mainly on households next year. The government will carry out the strongest adjustment through the restraining of social transfers. In contrast, in connection with the early repayment programme of foreign exchange loans, a considerable income transfer will be implemented from the corporate sector (credit institutions) to households. The expected impact of the agreement between the Hungarian Banking Association and the Government is incorporated into our forecast, resulting in higher transfers to households which, according to the agreement, are partly borne by the state. As a result of the measures specified to date, a further 0.3 percentage point demand reduction is expected for 2013.

5.3.1 FISCAL POSITION AND OUTLOOK

In 2011, as a result of recording the portfolios taken over from the private pension funds as revenue, the ESA balance of the general government is expected to show a 4.2 per cent surplus as a percent of GDP. The exclusion of the effect of the capital revenue originating from the takeover of private pension fund assets results in a balance of −5.4 percentage points.

In 2012, no significant one-off items will improve the general government balance; therefore, the government intends to ensure the achievement of the 2.5 percentage point deficit target in 2012 through expenditure- and revenue-side measures. Next year, the government intends to ensure the attainment of the deficit target through increasing the real value of tax and contribution revenues as well as through the reduction of the real value of the primary expenditures of the central government. According to our forecast, in the worsening macroeconomic environment, the measures taken will not by themselves allow the achievement of the deficit target in 2012. However, with the complete cancellation of centralised free reserves, i.e. if no unexpected expenditures are incurred during the year and there will be no unexpected shortfalls in revenues, next year's deficit may be kept below 3 per cent (Table 5-3). According to our projection principles, a freeze on forthcoming expenditures is not considered as a measure improving the fiscal balance. Nevertheless, if the Government takes well-specified measures in early 2012 to cancel or to reduce, in a sustainable manner, the chapter specific reserves of 52 billion, then a deficit of 2.6 percent of GDP may become attainable.

Table 5-3
General government balance indicators
(as a percentage of GDP)

	2011	2012	2013
ESA balance	4.2	−3.7	−3.9
ESA balance with cancelling free central reserves*	–	−2.8	−3.0
ESA balance with cancelling blocked appropriates**	–	−2.6	–
Augmented SNA balance	−6.2	−4.2	−4.1
Cyclical component	−0.9	−0.9	−0.8
Cyclically-adjusted augmented SNA balance	−5.3	−3.2	−3.3

** Assuming the complete cancellation of the Country Protection Fund and the interest rate risk reserves. The central reserves contain the extra revenues expected from the increase of excise duty rates and the re-allocation of private pension contributions to the budget but they exclude frozen appropriations. Thus, the Government has discretion over unallocated central reserves of 268 billion forints which may be applied towards improving the fiscal balance. For lack of a bill, for 2013 we had a technical assumption that the amount of unallocated central reserves will equal that of the previous year.*
*** Out baseline projection does not take into account the balance-improving effect of the expenditure freezes. If the frozen appropriations are cancelled, it will be reflected in the macroeconomic assumptions, too.*

Table 5-4
Components of the changes in the ESA balance indicated for 2013
(as a percentage of GDP)

	Changes
Cancelling, decreasing extra taxes	−0.4
Tax cuts, increasing tax credits	−0.4
Change in other revenue	−0.1
Decrease in compensation for wages	0.3
Change in net expenditure of budgetary institutions	0.0
Change in Social spending (full year effect)	0.1
Change in pensions	0.2
Change in health-care spending	0.1
Change in housing subsidies	0.1
Change in the balance of local goverments	0.2
Change in net interest spending	−0.1
Chenge in accrual-based corrections	−0.2
Other changes	−0.1
Total changes:	**−0.3**

Based on our earlier macroeconomic projection, a 3.2 per cent deficit forecast was given in the December 2011 *Public Finance Review* entitled 'Analysis of the 2012 Budget Bill – update'. This publication focuses on the analysis of the expected impacts of government measures, individually identifying the differences between the expected and planned effects of the measures, as well as presenting the differences and their underlying reasons in detail. The parameters of the new macroeconomic forecast prepared for the *Quarterly Report on Inflation* mean deteriorating macroeconomic conditions from a budgetary point of view and the agreement with the Hungarian Banking Association[13] is also expected to contribute to a worsening fiscal balance. Overall, the application of the new conditions increased the deficit figure projected for 2012 by 0.5 per cent of GDP.

Firstly, according to the latest macroeconomic path the financing costs (the direct net interest expenditure of the budget) were up by 0.1 percentage points of GDP in 2012, primarily as a result of the considerable weakening of the exchange rate of the forint. This practically means that the total amount of the interest rate risk reserve included for 2012 has to be cancelled so that it can cover the expected increase in financing costs.

Secondly, the decline in tax and contribution revenues increases the deficit to a similar extent (by 0.1 percentage points of GDP). Within this, revenues from the corporate sector did not decline but slightly increased, because the shortfall in revenues stemming from lower growth was more

[13] The agreement between the Government and the Bank Association will worsen next year's deficit partly through the additional expenditures assumed by the budget and partly through the deductibility from the special tax on financial institutions of the additional expenditures assumed by the banks. The expenditures of the National Asset Manager are not yet included because of the uncertainties surrounding the applicable accounting methodology. If these outlays on real estate acquisitions are to be accounted for as real investments, then these expenditures will be included among ESA standard expenditures, worsening the balance by 0.1 percent of GDP in 2012 and 2013.

than offset by the additional revenues from the mining fee resulting from the weaker exchange rate. Moreover, higher inflation adds to the local business tax revenue as well.

Of the measures announced by the Government on December 15, the incorporation of private pension contributions into the budget and the increase of excise duties levied on tobacco products will improve budget revenues. At the same time, the additional revenues do not automatically improve the balance of the budget because the Government applies the expected marginal revenues towards the unallocated central reserves. The agreement with the Bank Association will, in our estimate, directly increase the deficit by 0.4 percent of GDP which will only partially be compensated for by higher revenues (of 0.1 percent of GDP) expected from higher household consumption generated by higher economic growth.

Cancelling the unallocated central reserves (Country Protection Fund and the interest rate risk reserve) may lower next year's deficit by 0.9 percentage point, resulting in a deficit of 2.8 percent of GDP (table 5.2). In this case, however, there will be no unallocated reserves left to cover unexpected expenditures or revenue shortfalls during the year.

Of the measures announced on December 15, we did not take into account the freeze on chapter specific expenditures (0.2 percent of GDP): a freeze on expenditures does not, in itself, improve the balance and the potential cancellation of the frozen appropriation would only be accounted for in the future if sustainable measures underpin expenditure cuts[14].

For 2013, in compliance with our forecasting rules our forecast only includes the effects of the measures that have already become known in sufficient detail. Based on them, the deficit in 2013 is expected to significantly exceed the deficit target indicated in the convergence programme. As the effects of some of the measures taken in 2010 and 2011 aiming at the improvement of the balance are not permanent, in 2013, with the phasing out of the temporary measures, our deficit projection may slightly exceed the 3 per cent threshold, which is of key importance from the aspect of the Excessive Deficit Procedure (EDP), even in the case of the cancellation of free reserves.

Our forecast for 2013 assumes that the temporarily introduced corporate surtaxes will be cancelled as of 2013,

[14] The 2011 October *„Analysis of the Budget”* already drew attention to that the substantial reduction of chapter specific net expenditures (in comparison to 2011) can only be attained if further, sustainable measures are introduced. The newly announced expenditure freezes would affect these already reduced the allocations.

Table 5-5
Changes in the fiscal impulse in the structure of the accounting of the CSO
(as a percentage of GDP)

	2011	2012	2013
1) Impulse total (2+3+4)	**2.7**	**−2.4**	**−0.1**
2) Impulse toward households	1.8	−1.5	−0.8
3) Net indirect taxes*	0.0	−0.6	1.2
4) Other (corporate and external sectors; goverment purchases)	0.9	−0.3	−0.5
o/w			
4.1 VAT refund to companies	1.0	−1.0	0.0
4.2 free central reserves	0.0	0.9	0.0
4.3 other unallocable items	0.0	−0.2	−0.5
5) Impulse with cancelling free reserves (1−4.2)	**2.7**	**−3.3**	**−0.1**

and the bank tax will be halved in nominal terms[15]. A further assumption is that the so-called half super gross system will completely cease to exist in the personal income tax system, but its effect will be offset by the reduction of the wage compensation provided by the government; in addition, we expect the complete termination of the simplified entrepreneurial tax and a reduction of the social contribution tax paid after employees whose employment does not require qualifications. The balance is improved by the expansion of measures related to those with a changed ability to work and the savings stemming from the expenditures spent on provisions for pensions (old-age and below-age-limit pensions together). Balance improvement will also result from the freezing of the purchase of goods and services and public sector wages; accordingly, a further overall decline may take place in the net expenditures of budgetary organisations as a proportion of GDP. However, we have not taken account of the additional budget revenue stemming from the introduction of the electronic road toll, as the investment has not been prepared; it represents a HUF 50 billion decline in revenues compared to our earlier projections.[16] Further adjustment is expected in the case of the local government subsector, i.e. the developments observed in 2011 will have a permanent effect. Overall, the loosening related to tax measures amounts to approximately 0.9 per cent of GDP. The balance improving effect of expenditure measures and other developments equals at least 0.6 percentage points as a percent of GDP; corresponding to approximately 0.3 percentage point deterioration in the balance is expected for 2013.

[15] The special tax on financial institutions would be halved in comparison to the 2011 levy because a portion of the banks' losses stemming from the fixed exchange rate early mortgage repayment facility will be deductible from the special tax obligation. In our estimate – assuming that 20% of foreign exchange denominated mortgages would be repaid early, at the statutory exchange rate – banks will be able to reduce their special tax obligation by losses approximating 0.4 percent of GDP.

[16] According to the earlier position of the Ministry of National Economy, the Széll Kálmán Plan expected an annual revenue of HUF 100 billion from the introduction of the electronic road toll system based on use.

Table 5-6
Factors of the fiscal impulse aiming at households
(as a percentage of GDP)

	2011	2012	2013
Total impulse (1+…+7)	**1.8**	**−1.5**	**−0.8**
1) Personal income tax	1.6	−0.4	0.1
2) Contributions	0.2	0.1	−0.3
3) Wages net of tayes	−0.5	−0.2	−0.2
4) Social transfers in cash	−0.3	−0.6	−0.5
5) Transfer of real-yields (one-off)	0.8	−0.8	0.0
6) Preferential FX-loan repayment (indirect transfer)	0.0	0.2	−0.2
7) Higher wages increase – transfer from companies	**0.0**	**0.2**	**0.3**

The estimated size of the **cyclical component** declined considerably compared to the value indicated in the September issue of the *Quarterly Report on Inflation*. The factors of the change in the component are described in Box 4-2. Based on the size of the cyclical component, in 2012 the cyclically adjusted augmented SNA deficit will decline to 3.2 per cent of GDP, and may remain at this level in 2013 (Table 5-2).[17] However, assuming the complete cancellation of the free reserves included in the budget may result in a similarly favourable scenario. The cyclically adjusted medium-term balance may decline to around 2.3 per cent next year, and may increase to 2.5 per cent in 2013. Accordingly, the cyclically adjusted balance will not reach the 1.5 per cent threshold of the MTO[18] in the coming two years.

5.3.2 FISCAL DEMAND EFFECT

The fiscal impulse indicates how the fiscal measures, developments and automatic stabilisers affect the income position of other sectors. The fiscal impulse is measured by the change in the augmented primary SNA balance, which excludes measures with insignificant economic effects.

Our forecast suggests that the significant loosening in 2011 will be replaced by a tightening of a similar size in 2012, whereas a nearly neutral fiscal effect is projected for 2013.[19] Fiscal policy will have a strong tightening effect on households in 2012 and 2013. There will be a major tightening for the corporate sector in 2012 due to the phasing out of the one-off effect of the VAT refunds in 2011.

[17] The cyclically adjusted augmented SNA balance shows the medium-term trend of the balance of the budget, i.e. the size of the balance without further measures when the negative effects of the economic downturn – realised primarily through the tax and contribution revenues – do not appear in the budget any longer, i.e. the performance of the economy catches up with its medium-term trend.

[18] The medium-term deficit objective set by the European Commission.

[19] The changes in the fiscal impulse are presented in a structure as accounted for in the national accounts by the Central Statistical Office. At the same time, our figures are different from the data published by the CSO, because upon the calculation of the so-called augmented SNA balance analytical adjustments are carried out. For the sake of simplicity, the early repayment of FX debt resulting from government intervention is not considered to be a part of the fiscal impulse; only its assumed impact on households and financial corporations is presented.

Of next year's 2.4 per cent contractionary impulse a total 1.8 per cent will be caused by the phasing out of the year 2011 temporary (one-off) factors as, in addition to the VAT refund, the capital transfer of pension fund real yields also meant an easing in the base year. The category of net indirect taxes contains all the factors that have an impact on inflation or the GDP deflator. The revenue shortfall originating from the termination of the sector-specific extra taxes has been taken into account here.

If the total amount of the free central reserves indicated in the budget appropriation bill was cancelled, next year's fiscal impulse would increase to −3.3 percentage points, because the balance would improve with this much. In principle, it has a neutral effect on the size of the 2013 impulse, as according to our forecasting principles the size of the free reserves has an effect on the 2013 deficit level through the base-year effect.

The total extent of the personal income tax cuts in 2011 is estimated to be 1.6 per cent of GDP, which is lower than the estimated impact of the change affecting the tax schedule because the effect of the tax revenue shortfall related to the wage restraining of the private sector – due to government measures – is accounted for here. CSO calculations show all taxes and contributions related to wages under households; accordingly, employer's contributions are also accounted for under households. Consequently, the withdrawal of the government from wage compensation subsidy in 2013 appears as an increase in the contribution burden of the households.[20] At the same time, the declining government wage compensation expenditures have to be offset by the corporate sector, as net wages may not decline in the future either. The relevant effect is shown in line 7 of Table 5-5. The effect of the tightening stemming from the freezing of public wages has been accounted for in the line 'net wages excluding taxes and contributions'. It is apparent that the government carries out the strongest adjustment through the restraining of social expenditures, through the reduction of the real value of these types of expenditures (e.g. family allowances) as well as through the reduction of eligibilities and provisions. However, it also has to be taken into account that as a consequence of the above, public employment expenditures (labour cost) will increase as of 2012; therefore, the tightening is weaker in net terms.

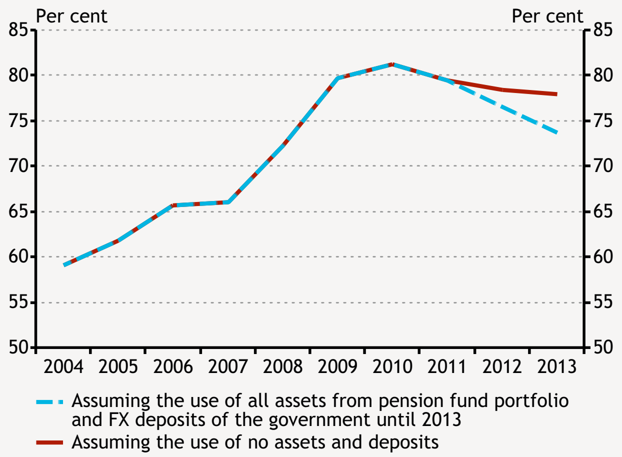
According to the current projection of the Central Bank, based on the presently known conditions, 20 per cent of foreign exchange loans outstanding may be repaid at the pre-fixed preferential exchange rates. According to our

[20] Companies may use the wage compensation subsidy through the netting of their contribution payment obligation.

estimate, this may result in a loss equalling around 1.1 per cent of GDP for the credit institutions concerned, i.e. the measure entails this magnitude of income transfer from the corporate sector to households. There are many factors of uncertainty surrounding the distribution of the transfer across years. According to our current expectations, the amount of income transfer may be around 0.6 per cent of GDP and 0.4–0.5 per cent of GDP in 2011 and 2012, respectively. According to the agreement with the Hungarian Banking Association the government will partly compensate the losses of the banks. We treat this government transfer (reduction in tax-base) as a capital transfer to households, since the ultimate goal of the measure was an improvement in the income position of the households.

5.4 Expected developments in public debt

Chart 5-10
Gross public debt
(as a percentage of GDP)



In 2011, the developments in public debt are crucially influenced by the private pension fund portfolio transferred to the Pension Reform and Debt Reduction Fund and the weakening of the exchange rate of the forint. The former results in a decline in debt as the Debt Management Agency withdrew the Hungarian government securities taken over from the Fund, and the gradual sales of the remaining assets allows the covering of regular and one-off financial needs without issuing further debt elements. The depreciation of the forint, in turn, significantly added to the public debt-to-GDP ratio through the increase in the value of the foreign exchange debt expressed in forint. The withdrawn government securities reduced the debt ratio by approximately 4.8 per cent of GDP, the use of funds received from the sales of assets reduced it by another 1.9 per cent. At the same time, according to our estimate, the depreciation of the forint may add 3.2 per cent to the debt-to-GDP ratio.

Based on all the above, public debt may be around 79.5 per cent of GDP at the end of the year, including the loans expected to be assumed from MÁV in an amount of HUF 60 billion. The debt of local governments is a part of the debt of general government as a whole; therefore, its assumption by the central government does not affect public debt, only its distribution between the central and local government subsectors. Compared to the forecast published in September, the expected debt ratio increased mainly because of the weakening of the forint.

from In 2012, based on our forecast for the public deficit and its financing and assuming an unchanged exchange rate, the debt-to-GDP ratio may decline to 78.5 per cent, which may be followed – in parallel with a slight growth in deficit – by a further, 0.5 per cent decline in debt in 2013. The private pension fund portfolio and the foreign exchange deposit provide financing reserves for the budget; their utilisation may even allow the achievement of a debt level lower by 4 per cent of GDP by the end of the period. This is not taken into account in our baseline scenario, because in our opinion a too fast utilisation of the reserves would carry risks for the medium-term financing possibilities of the budget.

6 Special topics

6.1 Possible macroeconomic effects of the agreement concluded between the Government and the Hungarian Banking Association on 15 December 2011

Our analysis provides a brief overview of the main elements and expected macroeconomic effects of the agreement concluded between the Government and the Hungarian Banking Association on 15 December 2011. The existence of the agreement will definitely have a positive impact on the growth prospects of the Hungarian economy in the coming years. However, the magnitude of this positive impact may still significantly be influenced by the outcomes of the further rounds of negotiations, scheduled by both the Government and the Hungarian Banking Association. Our current analysis presents the details that have been specified to date and their estimated macroeconomic effects.

The most important elements of the agreement

The agreement signed by the Hungarian Banking Association and the Government on 15 December 2011 contains four chapters (from A to D) of arrangements between the parties.

Chapter A) of the agreement makes the rules of the preferable early repayment scheme for FX borrowers stricter, and grants subsequent partial compensation to banks for their losses resulting from that scheme. Accordingly, credit institutions and financial enterprises may reclaim 30 per cent of their losses related to the early repayments from the 2011 bank tax. Based on our preliminary estimates, this refund will amount to approximately HUF 84 billion. The tightening of the early repayment rules includes that the borrowers who want to benefit from this opportunity will have to credibly verify until 30 January 2012 what source they will pay from. Accordingly, those who do not arrange for the necessary cover for the early repayment until this date will not have any further opportunity to do so, not even until the closure of the transaction in February. Moreover, the final date for the disbursement of grants and interest-free loans that can be provided by employers for the early repayment was fixed as

31 December 2011, and further tightening criteria were determined with regard to public employees and civil servants.

Chapter B) regulates the situation of foreign exchange mortgage loan borrowers with a default in payment exceeding 90 days. The existence of the default has to be determined for 30 September 2011 as the value date, and the default has to exceed the minimum wage. The outstanding debt of these borrowers – at the current exchange rates – amounts to some HUF 620 billion. The agreement basically applies to customers in the case of whom the value of the real estate serving as collateral did not exceed HUF 20 million upon the disbursement of the loan (the relevant amount is estimated to be 60 per cent of the loans concerned, i.e. approximately HUF 375 billion). The key element of the agreement is that banks convert the foreign exchange debt to forint at market rate, for which the foreign exchange reserves of the MNB will be used (in a value of EUR 1.2–1.3 billion according to our estimates). Then, 25 per cent of the debt of the borrowers who declare that there has been a verifiable deterioration in their solvency will be written down. Assuming that 100 per cent of the loans converted to forint meet this latter condition, the value of the debt cancelled may amount to HUF 95 billion, 30 per cent of which (HUF 28 billion) may be reclaimed by credit institutions from the 2012 bank tax. It is important to emphasise here that the cancellation of the debt does not entail any further bearing of burdens for the banks, as earlier they have already written off an average 35 per cent of non-performing mortgage loans as loan losses. In addition to the debt cancellation, those borrowers who have minor dependents may benefit from government interest rate subsidy, the extent of which in the first year is 50 per cent of the government securities reference yield; the subsidy declines gradually for five years, then it ceases to exist. The interest rate subsidy more or less offsets the higher forint interest rates, thus the monthly instalment for those who use the subsidy may decline by some 25 per cent compared to the current levels. The instalment for those who do not receive any interest rate subsidy (only debt cancellation) will decline to a lesser extent, by around 10 per cent. Finally, the number of real estates to be purchased by the National Asset Management Agency will be increased from the current 5 thousand to 25 thousand, thus offering a possible solution for approximately 20 per cent of non-performing borrowers. At the same time, the purchasing of these properties means a financing requirement of at least HUF 80 billion[21] and annual current financing costs of HUF 4–6 billion for the state.

[21] It is uncertain for the time being, as it also depends on the interpretation of the accounting rules whether this financing requirement will at the same time increase the fiscal deficit as well.

Chapter C) is the extension of the currently valid 3-year provisional exchange rate fixing programme to the still performing foreign exchange mortgage loan holdings not subject to early repayment (approximately HUF 3,800 billion). Accordingly, the exchange rates of the instalments for the participants in the programme would be fixed until end-2016 at the 180 HUF/CHF, 250 HUF/EUR and 2.5 HUF/JPY exchange rates; borrowers may apply for participation in the programme until end-2012. The difference between the fixed and real rates will be shared by the borrower, the state and the bank in a way that the principal part of the monthly instalment due will burden the borrower, whereas 50 per cent of the interest portion of the instalment will fall on the state and the bank each. In the case of a loan with a remaining maturity of 15 years, which is considered an average, it means that each party concerned will bear 1/3 of the burden, although with the decline in the remaining maturity the borrower's share will somewhat increase (as with the decline in maturity the share of the principal within the instalment increases). According to our estimates and in the case of 100 per cent participation, in the first year this burden means an expenditure of HUF 41 billion for the state and the banking sector each, declining to HUF 33 billion each by 2016. The burden falling on the borrower will be accumulated to a HUF "bridge loan account" with an interbank interest rate; the balance will have to be repaid from 2016 on, in accordance with the remaining maturity of the original loan. Another part of the agreement is that above the exchange rate levels of 270 HUF/CHF, 340 HUF/EUR and 3.3 HUF/JPY all further losses will burden the state until 2016. As a result of the measure, borrowers' instalments calculated at today's exchange rate will decline by some 28 per cent in the period of the fixing. Then, however, because of the balance accumulated on the collecting account, the repayment burden will increase by some 10 per cent compared to the current level (still calculating with the current exchange rates and interbank interest rates). A further element of the agreement is that the entry into force of the act on transparent pricing is postponed by 4 months, to April 2012.

Chapter D), the last chapter of the agreement is the 'growth pact' pursuant to which the Government undertakes to terminate the bank tax in line with the original plans in 2013 and to maintain at most a bank tax that does not exceed the average bank tax applied in the European Union or in its Member States. In addition, the parties undertook to consult regularly and inform the IMF and the European Commission as well about these consultations. It is a provision of the agreement that credit institutions may reduce the 2012 bank tax base by three elements: by the net increment in outstanding SME loans compared to a 5 per cent decline path and by the gross increment in loans with housing collateral and loans related to EU structural funds.

Financial effects on individual sectors

The direct financial effects of the agreement on individual stakeholders are presented in Table 6-1. The estimate of the effects is based on the following assumptions:

- the current exchange rate levels (CHF 1 = HUF 250; EUR 1 = HUF 305) remain unchanged;

- all eligible borrowers will enter the exchange rate fixing programme lasting until 2016 right at the beginning of 2012;

- 60 per cent of non-performing borrowers meet the criteria necessary for converting their debt to forint and cancelling 25 per cent of their debt, and all these borrowers will be eligible to the interest rate subsidy provided by the state (although probably this assumption might be not fully realistic);

- the final participation rate in the early repayment of the total CHF- and JPY-based mortgage loans outstanding on 30 September 2011 will be 20 per cent; for loans denominated in EUR, the participation rate will be 0 per cent.

Overall, the package results in the following direct financial effects on individual sectors:

- Borrowers:

  – in connection with the fixing of the exchange rate – assuming a 100 per cent participation rate – starting from 2012, performing borrowers will receive transfers amounting to some HUF 81 billion (declining steadily with the decline in the remaining maturity) from the state and banks. In addition, they may postpone the repayment of a further annual HUF 42–58 billion to after 2016. Accordingly, this is a cash-flow easing amounting to approximately HUF 120 billion for households, although this amount would be lower with a forint path stronger than the current one;

  – the cash-flow effect is not clear in the case of other points of the programme: for defaulting borrowers, converting the loans to forint means a higher interest burden, although it is offset by the government interest rate subsidy in the first years. Although the cancellation of 25 per cent of the debt would also mean a similar decline in the instalment, since many of these borrowers

Table 6-1
Direct estimated financial effects of the agreement (and of the early repayment) on individual sectors; HUF billion
(net effects of the agreement in bold type)

	2011	2012	2013	2014	2015	2016	NPV*
Total change in the cash-flow of borrowers (2+3)		123	123	123	123	123	518
out of which: net balance of borrowers (2)		***81***	***78***	***74***	***70***	***65***	***312***
out of which: change in borrowers' own debt (3)		*42*	*45*	*49*	*53*	*58*	*206*
The change in borrowers' financial wealth resulting from the repayment scheme (4)	281						281
The balance of the government as a result of the agreement (5)	**−84**	**−83**	**−52**	**−51**	**−48**	**−45**	**−324**
further financing needs of the government (6)		−28	−24	−35			−77
Total balance of banks (8+9)	−197	−11	−39	−37	−35	−33	−325
Financial balance of the banks resulting from the agreement (8)	**84**	**−11**	**−39**	**−37**	**−35**	**−33**	**−44**
Loss of the banks resulting from the repayment scheme (9)	−281						−281

** discount rate used for the NPV-calculation: 6%*
Note: The lines of the table in bold type indicating the effects of the agreement do not close to zero. The underlying reason is that certain items mean expenditures for the state or the bank, but still cannot be taken into account as clear income transfers to households. For example, the interest rate subsidy to be provided to non-performing borrowers who change over to forint is clearly an expenditure for the state. However, in the borrower's situation it does not result in a cash-flow effect, as the interest rate subsidy only offsets the higher forint interest rates (moreover, to a declining extent, which has not been taken into account). It is similarly difficult to assess the impact of the National Asset Management Agency on borrowers' income position (as, for example, the latter also depends on the rents established). The cancellation of 25 per cent of the debt was taken into account neither in the case of households nor in the case of banks, because banks had already written off this loss earlier in the form of loan losses.

have not paid their instalments in full until now either, the cash-flow effect of the cancellation on their position may even be negative (in spite of the fact that the wealth effect is, of course, clearly positive). For the time being, it is difficult to forecast the effects of the operation of the National Asset Management Agency on borrowers' income position, as it is not clear what amounts of rent the National Asset Management Agency will establish and how consequently it will collect these rents (in the case of the borrowers taken over by the National Asset Management Agency the wealth effect will depend on the actual loan-to-value (LTV) ratio of the loan).

- Credit institutions:

  – two one-off positive income effects can be identified in the case of banks: deduction of 30 per cent (approximately HUF 84 billion) of the losses stemming from the early repayment from the 2011 bank tax and deduction of 30 per cent (around HUF 28 billion) of the debt cancellation of non-performing borrowers from the 2012 bank tax. However, it is also important to call attention to the fact that (at the current exchange rate levels) credit institutions are expected to lose some HUF 280 billion on the early repayment of loans itself, of which only HUF 84 billion will be reimbursed by the state. It also needs to be mentioned here that the agreement does not include any withdrawal of banks' legal damage claims related to the final repayment of loans, i.e. the relevant legal procedures continue.

Therefore, the fate of the remaining amount of the loss stemming from the early repayment reduced by the 30 per cent refunded from the 2011 bank tax and expected to be around HUF 200 billion is pending. Thus, depending on the outcome of court decisions, this burden may even be transferred from the banking sector to the state, which may significantly modify the whole sharing of the burden;

- as it was mentioned earlier, the cancellation of the debt of non-performing borrowers cannot be considered as an additional burden for the banking sector, because credit institutions had already written off these losses earlier as loan losses. In other words: this loss had already been suffered by banks in an economic sense; in this agreement they only gave it up in a legal sense as well;

- accordingly, apart from the losses stemming from the early repayment, for the banks the only real burden originating from the agreement is the portion undertaken from the fixing of the exchange rate for performing borrowers: in the first year it amounts to HUF 41 billion, which declines to around HUF 33 billion by 2016 (due to the decline in maturities and thus in the interest portion of instalments). Of course, with lower exchange rate levels and lower than 100 per cent participation in the programme this burden may also be lighter.

• Budget:

- the bank tax reductions to be granted to banks in 2011 and 2012 (HUF 84 billion and HUF 28 billion, respectively) are expenditures for the government, and as a contingent liability there remains the damage claim related to the losses stemming from the early repayment scheme; this claim is not settled by the agreement and is expected to amount to approximately HUF 200 billion;

- until 2016, the state and the banking sector will be burdened by the same annual expenditures stemming from the exchange rate fixing programme. (In addition, the shortfall in corporate tax revenue due to banks' bearing of the burden and the resulting decline in profits can be identified as an indirect effect, but it is not taken into account in the direct effects);

- moreover, in 2012 an annual budget expenditure of some HUF 10–11 billion is expected because of the interest rate subsidy provided to non-performing borrowers (although this amount will decline to HUF 6–7 billion by 2016 with the subsidising becoming less intensive);

– the costs implications of the National Asset Management Agency are very uncertain for the time being: until 2014, the cost of obtaining the real properties may impose a total financing requirement of approximately HUF 90–100 billion on the state (however, it is still uncertain whether it is to be accounted for as a deficit increasing item). The relevant current financing cost may amount to approximately HUF 4–6 billion a year, but it would be very early to prepare estimates regarding the operating balance of the National Asset Management Agency;

– considering the loan dynamics estimated now for 2012 and the general European deleveraging process, the effect of the tax allowances granted in order to stimulate lending (the possibility to reduce the bank tax base) does not seem to be significant for the time being. Based on our calculations, the resulting shortfall in state revenues may not exceed HUF 1–2 billion.

– finally, as a consequence of a higher consumption path, higher indirect tax revenues may also evolve in the budget. Their magnitude is estimated to be HUF 20 billion.

Indirect effects on portfolio quality and banks' ability to lend

Overall, the agreement may have a positive impact on the quality of banks' household portfolios, although this impact is not even in the case of the two large borrower groups concerned:

• performing borrowers: the exchange rate fixing reduces borrowers' monthly instalments significantly (by nearly 30 per cent), and also relieves them of the fluctuations in the instalment for the next 5 years. As a result, these borrowers' shock absorbing capacity increases considerably. Due to the sharing of the burden between the fixed and the market exchange rates and the exchange rate cap determined by the state, the amounts accumulating on the collecting accounts cannot grow too high either. Consequently, after 2016, as a result of starting to repay the amount on the collecting account, instalments may only increase by around 10 per cent compared to the current levels, which is manageable (e.g. by extending the maturity). However, it needs to be emphasised here that the exchange rate exposure of households, of course, will not cease to exist, i.e. after 2016 as well the solvency of borrowers may mostly be determined by the foreign-exchange rates.

- non-performing borrowers: for non-performing borrowers, the cancellation of debt and the government interest rate subsidy reduce the instalments; however, due to the higher forint interest rates, the instalments are increased by the conversion of the loans to forint. The result of these two factors is an approximately 25 per cent decline in instalments compared to the current levels (in the case of borrowers who are not entitled to receive the interest rate subsidy this decline will be even lower, barely 10 per cent). It is questionable, whether this will be sufficient in the case of non-performing borrowers for restoring their solvency: there is a high risk that a significant number of borrowers who were made to enter the programme will become non-performing again. The increase in the number of real estates to be purchased by the National Asset Management Agency may be a solution only for the neediest 20 per cent.

In addition, the one-off (2011 and 2012) incomes of banks laid down in the agreement have a positive impact on the capital position, although these items are able to offset only a fraction of the losses stemming from the early repayment of loans.

Therefore, on the whole the favourable medium-term impact on portfolio quality and the partial compensation of losses may reduce banks' capital constraints and thus may improve banks' ability to lend. Moreover, the deductibility of the increase in SME and mortgage loans outstanding from the bank tax may entail additional incentives for lending, although this incentive is very low due to the conditions. However, all this is expected to modify the lending path only slightly, as these effects are rather eclipsed by the other factors that cause a fall in lending.

Expected macroeconomic effects

The agreement may affect the domestic economy through three main channels in the coming years.

- In the case of the performing borrowers it has a positive impact on disposable income available after the repayment, which may contribute to an increase in consumption.

- The improvement in banks' creditworthiness may slightly add to – mainly the corporate – lending activity.

- Finally, the concluding of the agreement may also have a favourable impact on the risk assessment of the economy.

Based on currently available information, on our forecast horizon out of the three effects the one stemming from the (significant, approximately 30 per cent) decline in the repayment burdens of performing borrowers may be the strongest. The slight improvement in corporate lending activity may primarily affect working capital loans, which may facilitate the current operation of companies. Considering the weak economic conditions, as a result of the agreement in itself, no upturn is expected in investment activity. The effect appearing through the general risk assessment of the economy may be perceived over the longer term, which may be influenced by the outcome of several further agreements (e.g. negotiations with the IMF and the EU, consultation with banks).

Upon quantifying the effects on households' income position and consumption, the measures concerning the performing borrowers were taken into account. In the case of borrowers who are in default for more than 90 days, the quantification of the effect of the measures is not unequivocal. The main reason, for example, is that if the solvency of these borrowers was restored permanently, the consumption of these households could even decline. The assessment of the consumption effect would be possible by a deeper examination of the changes in the propensity to repay.

In the case of the performing borrowers, the interest part of the exchange rate difference is refunded by the state and the banks; therefore, only the accumulation of the principal part constitutes a debt for households. According to our estimates we expect that households may spend 75 per cent of the gain stemming from the decline in the repayment burden on increasing their consumption expenditures. This ratio is lower than the current average consumption rate (approximately 87 per cent). There are two factors underlying its magnitude:

- On the one hand, households take into account that the principal part of the exchange rate difference is own debt, which has to be paid back after the expiry of the fixing period. The resulting precautionary saving may justify more cautious consumer behaviour.

- It may also strengthen the precautionary motive that the uncertain macroeconomic environment may continue to exist in the coming years as well.

- At the same time it is also important to mention that beside the current exchange rate levels the ratio of households with liquidity constraints may be high within the households concerned, which may result in a more active consumer behaviour than the low propensity to consume observed in the case of the additional incomes in 2011 (personal income tax easing, disbursement of the private pension fund real yields).

The estimated 75 per cent ratio falls within the range between the consumption rates observed in the case of households with average and higher incomes.

Based on our estimations carried out using the Delphi model, household consumption may grow by some HUF 90 billion at an annual level, equalling a total 0.6 percentage point increase in the volume of consumption. Approximately three quarters of this effect will be recorded in 2012, as the deadline for submitting the proposal amending the law is the end of January. The measure is not expected to have any major impact on employment and the consumer price index.

Table 6-2
Expected effects on the real economy
(per cent; deviation from the baseline scenario)

	GDP	Household consumption expenditure	Imports	Private employment	CPI
2012	0.1	0.4	0.2	0.03	0.0
2013	0.03	0.2	0.03	0.0	0.01

7 Technical annex: Decomposition of the 2012 average inflation

Table 7-1
Decomposition of the inflation to overlapping and incoming effect*

	Effect on CPI in 2011			Effect on CPI in 2012		
	overlapping effect	incoming effect	Yearly index	overlapping effect	incoming effect	Yearly index
Administered prices	0.2	0.5	0.7	0.1	0.4	0.5
Market prices	1.0	2.0	3.0	0.8	1.7	2.6
Indirect taxes and government measures	0.0	0.2	0.2	0.6	1.4	2.0
CPI	1.3	2.7	3.9	1.5	3.5	5.0

** The tables show the decomposition of the yearly average change of the consumer price index. The yearly change is the sum of the so called overlapping and incoming effects. The overlapping effect is the part of the yearly index, which can be explained by the preceding year's price changes, while the incoming effect reflects the changes in the recent year. We decomposed these indices to the sub-aggregates of the consumer price index; and we calculated inflationary effects of the changes in the indirect taxes, the administered prices, and market prices (not administered prices excluding indirect tax effects).*

Table 7-2
Detailed decomposition of our inflation forecast to overlapping and incoming effects*

	2011					2012				
	Average overlapping effect	Overlapping indirect tax effect	Average incoming effect	Incoming indirect tax effect	Yearly index	Average overlapping effect	Overlapping indirect tax effect	Average incoming effect	Incoming indirect tax effect	Yearly index
Food	2.7	0.0	4.8	0.0	7.6	0.1	0.4	5.6	0.3	6.0
non-processed	1.8	0.0	2.5	0.0	4.3	−3.0	0.0	10.6	0.9	7.8
processed	3.2	0.0	5.8	0.1	9.4	1.3	0.6	3.1	0.0	5.0
Traded goods	0.4	0.0	0.7	0.1	1.2	0.4	0.8	1.2	0.7	3.2
durables	−0.5	0.0	−0.9	0.0	−1.4	−0.9	0.8	2.2	0.8	2.9
non-durables	0.7	0.0	1.3	0.0	2.0	0.8	0.8	1.0	0.7	3.3
Market services	0.5	0.0	1.7	0.0	2.3	0.9	0.0	2.2	1.0	4.1
Market energy	4.3	0.0	5.1	0.0	9.6	2.9	0.0	1.2	0.8	4.9
Alcohol and Tobacco	−1.1	0.5	0.3	0.8	0.5	2.1	1.0	−0.9	7.0	9.3
Fuel	6.0	0.0	8.7	0.3	15.4	5.9	1.3	−1.4	1.6	7.4
Administered prices	1.0	0.0	2.8	0.3	4.1	0.6	0.8	2.2	1.2	4.8
Consumer Price Index	**1.2**	**0.0**	**2.5**	**0.2**	**3.9**	**0.9**	**0.6**	**2.1**	**1.3**	**5.0**
Core inflation	0.7	0.1	1.8	0.2	2.8	0.9	0.6	1.8	1.3	4.6

** The tables show the decomposition of the yearly average change of the consumer price index. The yearly change is the sum of the so called overlapping and incoming effects. The overlapping effect is the part of the yearly index, which can be explained by the preceding year's price changes, while the incoming effect reflects the changes in the recent year. We decomposed these indices to the sub-aggregates of the consumer price index; and we calculated inflationary effects of the changes in the indirect taxes, the administered prices, and market prices (not administered prices excluding indirect tax effects).*

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Appendix

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