

QUARTERLY REPORT ON INFLATION

June 2012



MAGYAR NEMZETI BANK

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Act CCVIII of 2011 on the Magyar Nemzeti Bank, 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 per cent 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, Financial Analysis and Financial Stability 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 department. From chapters 1 to 4 and 6 and 7 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.

Primary contributors to this *Report* include: Judit Antal, Dániel Baksa, Gergely Baksay, Péter Bauer, Tamás Berki, Iván Csaba, Gergely Fábrián, Csaba Fehér, Dániel Felcser, Péter Gábor, Győző Gyöngyösi, Mihály Hoffmann, Ágnes Horváth, Dániel Horváth, Emese Hudák, Johanna Jeney, Éva Kaponya, Zsuzsa Kékesi, Gábor P. Kiss, Norbert Kiss M., Regina Kiss, Péter Koroknai, Csaba Köber, Henrik Kucsera, Kristóf Lehmann, Rita Lénárt-Odorán, Zsolt Lovas, Miklós Lukács, Ádám Martonosi, Zsolt Oláh, Gábor Pellényi, Olivér Rácz, István Schindler, Gábor D. Soós, Sándor Sóvágó, Lajos Tamás Szabó, Katalin Szilágyi, Béla Szörfi, Péter Szűcs, Bálint Tamási, Bernadetta Tóth, Lóránt Varga, Judit Várhegyi, Viktor Várpalotai, Balázs Vonnák.

Other contributors to the analyses and forecasts in this *Report* include various staff members of the Monetary Strategy and Economic Analysis, the Financial Analysis and the Financial Stability 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, the Financial Analysis and the Financial Stability 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 20 June 2012.

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Summary

In the weak demand environment, Core inflation will remain low over the entire forecast horizon, allowing for a reduction of the base rate in the event of a permanent improvement in the risk assessment of Hungary and a decline in inflation as assumed in the baseline scenario

According to the baseline scenario of our June forecast, the output of the Hungarian economy will decline this year and may expand only very slightly next year. Growth continues to be supported by exports only. Domestic demand remains subdued over the entire forecast horizon, and consequently, with the fading out of the effect of the indirect tax increases, inflation may be close to the target by the end of 2013. Real economy considerations and the developments of underlying inflation point to monetary easing. At the same time, the risk assessment of Hungary continues to be fragile, and over the monetary policy horizon the economy will be exposed to further shocks increasing the price level. In the near term, the factors calling for interest rate increases and cuts more or less offset one another. An interest rate reduction will be possible in the event of a permanent and substantial decline in the risk premium and a decline in inflation as projected in the baseline scenario.

Decline in the performance of the domestic economy early in the year partly reflects permanent weaknesses

Real economy data from the beginning of the year indicate a downturn in the performance of the Hungarian economy. Along with one-off effects, the much worse-than-expected Q1 GDP data and especially the major fall in investment reflect deterioration in the underlying macroeconomic developments. Decreasing the substantial debt accumulated before the crisis diminish persistently the demand of both the private and the public sector. The investment rate has been steadily declining since the onset of the crisis, and net company foundation has been negative for years. This shows that the years of weak demand may have resulted in a permanent decline in production capacities. The production potential of the Hungarian economy expands very slowly in the forecast as well.

With deteriorating prospects for business activity in Europe, the contribution of the export sector to growth will be lower

Owing to the protracted sovereign debt crisis in the euro area, the related fiscal austerity and the European banking sector's declining ability to lend, demand in Hungary's export markets may only expand slightly. External demand is only expected to pick up starting from the end of the year. Next year, however, new capacities in the automotive industry will also improve the performance of the export sector.

Tight credit conditions and declining credit supply are expected

Credit conditions became tighter and credit supply continued to narrow in the past period. The uncertain macroeconomic environment, continued withdrawal of funds by parent banks and poor bank portfolio quality continue to hampers the banking sector's credit supply. Planned introduction of a transaction duty could result in a further decline in the profitability of the financial intermediary system. In our forecast, the declining credit supply of the banking system significantly restrains domestic demand and the sustained shortage of credit through its negative effect on investment impairs the long-term growth prospects of the economy as well.

Domestic demand is very subdued; disinflationary effect of the real economy continues to strengthen

High unemployment, falling real incomes and tight credit conditions are restraining household consumption. Uncertain prospects, the constrained and expensive external funding and government measures with a negative impact on corporate profitability suggest a further decline in investment activity. With tight credit conditions, the deficit reducing steps of the government also undermine domestic demand, which could affect adversely the economy. In the weak demand environment, the output gap will continue to widen in the near term, and output will fall significantly short of its potential level over the entire forecast horizon.

In the slack labour market, wages may only increase at a subdued rate

Although the government's measures to increase the activity rate result in higher labour supply, labour demand will remain steadily low in the coming years as a result of unfavourable economic prospects. With the rising unemployment and the fading effect of the minimum wage increase, wage growth will remain very restrained in the labour market. The forecast assumes that due to the compensation granted by the government the minimum wage increase will not reduce employment in the near term, but it will impair the chances of job creation over the longer term.

Underlying inflation developments will remain moderate; as the effects of indirect tax increases fade, inflation will approach the target

Inflationary pressure from the real economy continues to be weak on the basis of previous months' data, and with the slowdown in global economic activity international commodity prices are also declining considerably. This year, despite the subdued underlying developments, the VAT and excise tax increases from the beginning of the year keep inflation above the target, and next year the new tax measures announced within the framework of the Structural Reform Programme (also known as the Széll Kálmán Plan) will add to the price index. Some of the new measures directly affect consumer prices and are expected to result in an immediate surge in inflation and subsequent rapid correction. At the same time, the measures also result in a permanent increase in corporate production costs and thus may affect pricing decisions and the inflation environment over the longer term as well. The effect of the price level increasing government measures will be offset by the narrowing domestic demand and the permanently loose labour market; therefore, as the effects of the VAT and excise tax increases fade, inflation will fall to a level close to the target.

Hungary's risk premium indicators remain high; an agreement with the international organisations would help reduce the risk premium

The risk assessment of the domestic money and capital market assets continues to be unfavourable. Since the March issue of the Quarterly Report on Inflation the risk premium indicators of Hungary have been very volatile. Investor sentiment became increasingly gloomy in the assessment of the sovereign and banking system problems of the euro area periphery, which also led to deterioration in the risk indicators of Hungary. At the same time, the country moved closer to starting the EU-IMF negotiations, which improved the risk perception of domestic financial assets. The risk assessment of Hungary is expected to improve gradually over the forecast horizon. The agreement to be concluded with the European Commission and the IMF may play an important role in this.

In the next two years, fiscal policy will significantly constrain demand; despite the weak growth environment the deficit to remain below the 3% threshold

This year and next year, significant fiscal austerity will follow last year's considerable stimulus. Due to the measures announced since March we anticipate a large negative effect on demand. The austerity continues in 2013, although to a smaller extent because of the measures in the Széll Kálmán Plan to increase budget revenues. Despite the weak growth

environment, according to our forecast, the general government deficit might remain below its 3% threshold.

Financing capacity of the economy may continue to increase

Domestic absorption remains low and is thus keeping the surplus on the external balance high, which may also be increased next year by an upswing in export performance. The increase in the financing capacity of the economy is partly attributable to the fiscal adjustment. At the same time, due to the behaviour aiming at the smoothing of consumption, household savings may decline somewhat. The external financing capacity is also increased by the rising net savings of companies, which is mainly attributable to the further decline in investment activity. External debt may continue to decline in line with the rise in external financing capacity.

In relation to the changes in risk assumption and the potential output of the Hungarian economy the Monetary Council formulated alternative scenarios that may have a significant effect on the room for manoeuvre of monetary policy in the future

There are significant uncertainties in the baseline scenario of the forecast and thus the future room for manoeuvre of monetary policy. The interest rate path consistent with the baseline scenario of the forecast allows for a substantial easing of monetary conditions, if risk perception improves permanently and inflation moderates as price-increasing shocks fade. Therefore, the timing of an interest rate cut strongly depends on the assumed changes in risk perception and the underlying inflation developments. In connection with these factors, the Monetary Council can also conceive of various other scenarios that are much different from the baseline scenario.

If a sustained improvement in risk assessment takes place earlier than assumed in the baseline scenario, a reduction of the interest rate may start earlier

In connection with developments in risk perception, the Council also sees the chance that a situation more favourable than the current one will evolve. For example, this could occur if the government, the European Commission and the IMF come to an agreement before the end of the summer, and thus the financing risks of government debt permanently decline in the short run already. Firstly, a lower risk premium contributes to economic growth; secondly, it results in a decline in inflation through the strengthening of the exchange rate of the forint. A rapid decline in the country risk premium allows the reduction of the policy rate to start as early as this year.

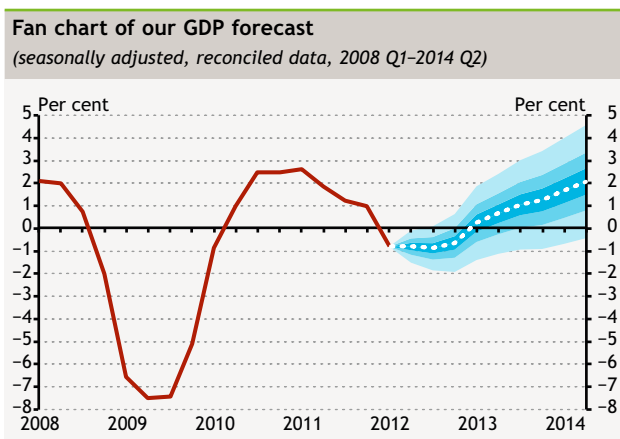
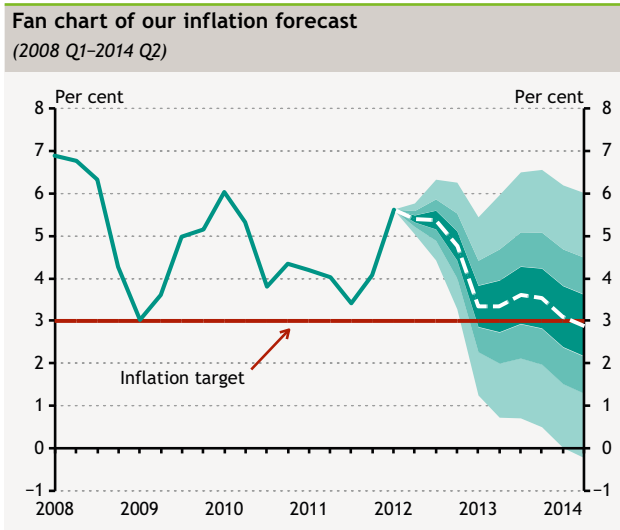
If the euro area crisis deepens, a firm increase in the policy rate may be necessary

Of the possible scenarios, further deepening of the European debt crisis represents important risks, in the opinion of the Monetary Council. This scenario, through partly our decreasing external demand and partly declining global risk tolerance affects the Hungarian economy. In this situation, monetary policy is able to stabilise the economy with a strong increase in the interest rate. The increase in risk premiums must be tracked closely, in order to avoid a rapid weakening of the exchange rate, which would strengthen the compulsion for economic agents to adjust their balance sheets and would impair the banking sector's ability to lend. Moreover, a drastic depreciation would also jeopardise the easing of underlying inflation developments.

If the supply capacities of the economy have declined to a greater extent than assumed in the baseline scenario, inflation may be permanently high, which could delay the launching of interest rate cuts

The Council considers the uncertainty related to measuring potential output as an important risk factor. Data received since the outbreak of the financial crisis indicate that the permanent fall in demand may have significantly reduced the production capacities of the economy. The rapid sectoral transformation of the economy, mounting financial constraints and the increasing bankruptcy rate all point to lower potential output. If the losses in supply capacities have been greater than is assumed in the baseline scenario, the disinflationary effect of weak real economic performance may also be smaller. If inflation declines to a lesser extent, monetary policy will

be compelled to keep the central bank base rate at the current level, in order to achieve the inflation target in the medium term.



Summary table of baseline scenario <i>(our forecast is based on endogenous monetary policy)</i>			
	2011	2012	2013
	Fact	Projection	
Inflation (annual average)			
Core inflation ¹	2.7	4.9	3.0
Core inflation without indirect tax effects	2.5	2.4	2.4
Consumer price index	3.9	5.3	3.5
Economic growth			
External demand (GDP based) ²	2.7	0.4	1.5
Household consumption expenditure	0.0	-1.0	-0.5
Gross fixed capital formation	-5.4	-4.1	0.0
Domestic absorption	-0.5	-2.4	-0.7
Export	8.4	4.4	8.4
Import	6.3	3.1	7.5
GDP*	1.7	-0.8	0.8
External balance			
Current account balance	1.4	2.8	4.0
External financing capacity	3.6	5.4	7.3
Government balance³			
ESA balance	4.2	-3.6 (-2.7)	-2.8 (-2.4)
Labour market			
Whole-economy gross average earnings ⁴	4.9	3.8	3.6
Whole-economy employment ⁵	0.8	0.9	0.2
Private sector gross average earnings ⁶	5.3	6.3	4.1
Private sector employment ⁵	1.4	-0.3	0.0
Unit labour costs in the private sector ^{5, 7}	5.0	5.8	5.3
Household real income ⁸	2.2	-3.2	-0.9

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. Data in parenthesis include cancellation of free central reserves.
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

In the first half of the year, concerns mounted in relation to the European debt crisis and the effect of fiscal adjustment measures on growth. This resulted in a worsening global risk assessment and a considerable increase in financial market volatility. The global economic outlook deteriorated considerably in recent months, strongly affecting the export prospects of the Hungarian economy as well.

The deleveraging process of the private sector, which aims at reducing the debt accumulated in previous years, continued in Hungary. The banking sector is characterised by tight credit conditions and a continued withdrawal of foreign funds; as a result, financing costs continue to be high. The government is also struggling with high debt levels, and its measures aimed at cutting the budget deficit also reduce demand. Uncertainties in relation to the macroeconomic outlook point to cautious behaviour by the private sector. Household consumption is also reduced by the deteriorating income position and the worsening labour market outlook, while companies react to the weakening economic outlook and the regulatory environment that impairs their profitability position by further restraining their investment. Overall, both external and domestic demand conditions point to a short-term decline in output. The persistently low investment rate and the decrease in production capacities weaken Hungary's long-term growth prospects as well. Output falls short of its potential level over the entire forecast period. An upturn in output may commence in the second half of the year with an upswing in exports, but the magnitude of the expected growth is surrounded by significant risks emanating from both external and domestic conditions. At the same time, domestic demand is expected to fall in 2013 as well.

In the past quarters, global cost shocks, the indirect tax increase and the weakening exchange rate pointed to an increase in inflation, but the weak external and domestic demand conditions mitigated these effects considerably. As cost shocks faded, the price-reducing effect of declining demand was also observed in the developments in inflation in recent months. The disinflationary effect of the steadily weak demand prevails in the entire forecast period, also supported from the cost side by the adjustment of commodity prices. All of this entails a decline in the underlying inflation developments. However, starting from 2012 H2 the latest fiscal adjustment measures directly add to consumer prices and indirectly increase the production costs of companies. According to our forecast, against the background of fragile demand conditions, companies will be able to include only a part of their costs in the consumer prices. Accordingly, deteriorating profitability may force them to revise their investment and staff expansion decisions. The inflationary effect of the tax measures is assumed to be included in prices only gradually. Accordingly, inflation may remain above the 3% target in 2013 as well. Among the weak demand conditions, we do not expect second-round effects to prevail, thus the 3% inflation target might be achieved by early 2014.

As a result of the economic downturn in the first quarter and the deteriorating prospects for business activity, the labour demand of the competitive sector sank to a historically low level, and the number of employed started to decline. Against the background of expanding labour supply as a result of the structural reforms, low labour demand is leading to an increase in the unemployment rate, which is somewhat offset by the public work programmes. As a result of the minimum wage increase at the beginning of the year, the wage index of the competitive sector accelerated, although on account of the permanently loose labour market conditions and the deteriorating business activity, underlying wage developments already showed a decline in recent months. Although the government offsets the wage cost increasing effect of the minimum wage increase over the short run, the raised cost level reduces the chances of those with low education to find jobs.

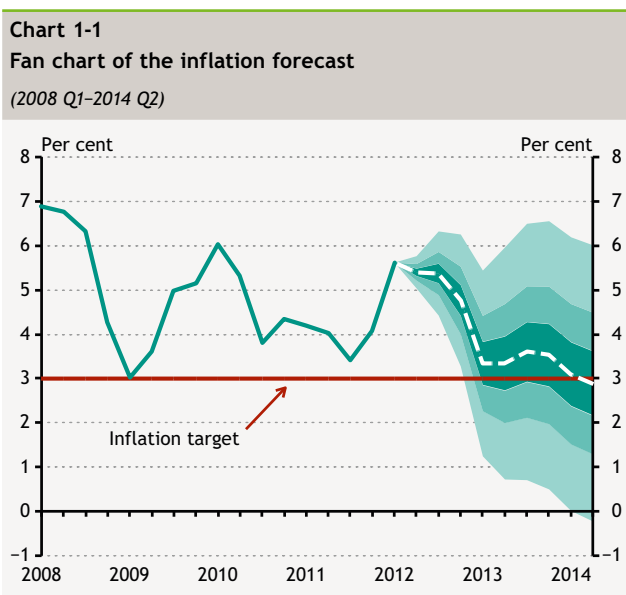
The interest rate path consistent with our forecast is influenced by contrasting effects. In the short run, unfavourable risk perception and inflation, which is permanently above the target due to administrative measures, offset the impact of the

less favourable economic activity that points to a lower base rate. With the expected improvement in risk assessment and the fading of administrative cost shocks, the base rate may gradually decline.

(The time horizon of our forecast is 8 quarters long. In this Report the forecast horizon spans from the second quarter of 2012 to the second quarter of 2014.)

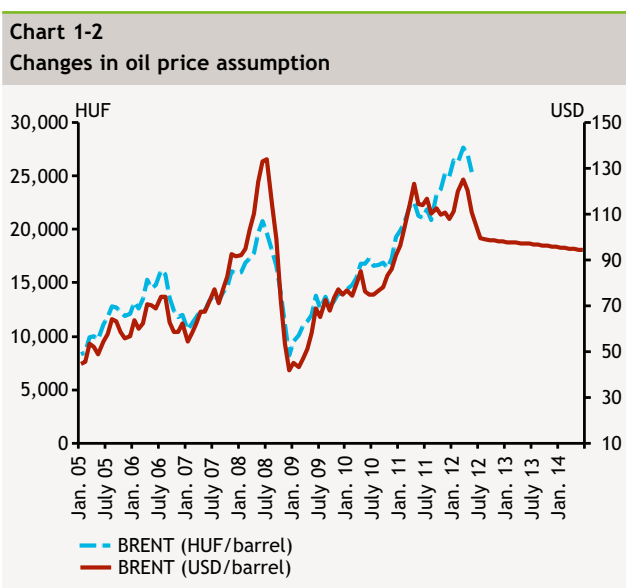
1.1 Inflation forecast

In the past quarters, weak external and domestic demand conditions had an disinflationary effect, whereas global cost shocks added to the rate of price increases. Over our forecast horizon, the fall in international commodity prices eases cost side price pressures, while persistently weak demand will contain inflation in the coming quarters as well. However, the government measures announced within the framework of the Széll Kálmán Plan 2.0 add to the price index directly through consumer prices and indirectly through the increase in production costs as well. In the remaining part of the year, the price index is expected to exceed 5 per cent, and inflation is expected to remain above 3 per cent in 2013 as well. The inflation target may be achieved in early 2014.



In the past months, the slowdown in the global economy and deteriorating prospects for business activity resulted in a faster-than-expected fading of cost shocks. As a result of slack global demand, commodity prices are expected to continue falling during the forecast period. Processed food price inflation will remain subdued in the coming months, but the expected weak domestic agricultural harvest may result in food price increases at the end of the year. In parallel with falling international oil prices, domestic fuel prices may also decline (Chart 1-2).

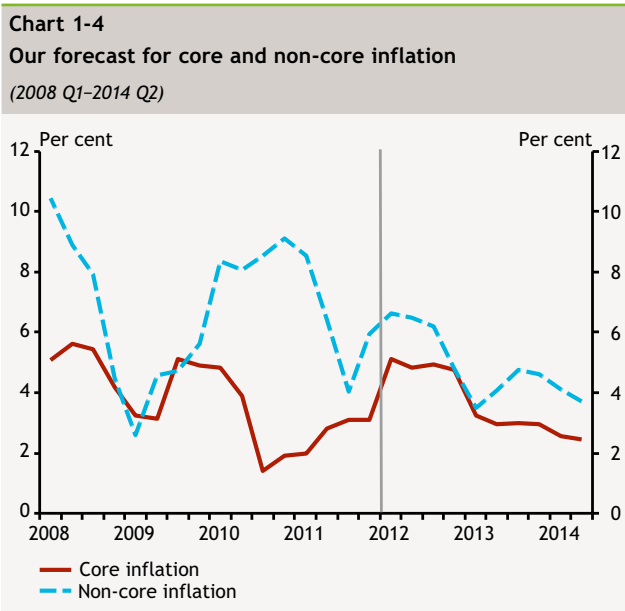
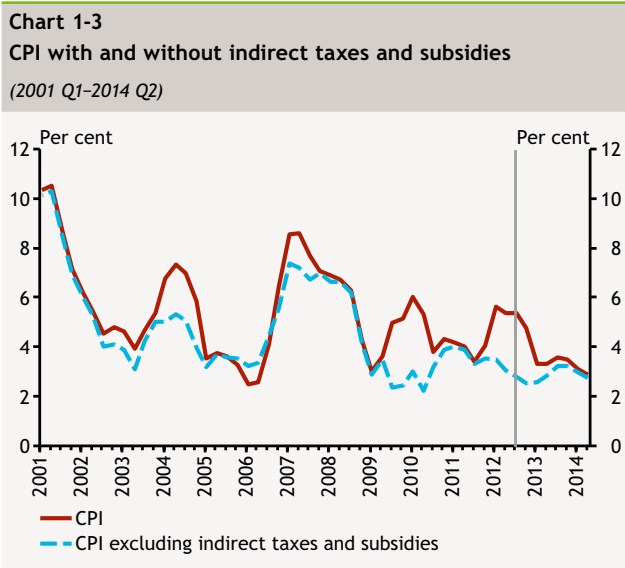
On account of the weak international economic activity and the restrictive government measures, the output gap may continue to widen this year and remain negative over the entire forecast horizon. Against the background of persistently weak demand conditions, the capacity utilisation of the economy will remain low, which will have a price-reducing effect.



As a result of weak economic activity, the labour demand of companies may remain low, with unemployment remaining at a permanently high level. The slack labour market environment will continue to result in subdued wage growth. Net real wages will decline this year due to changes in the personal income tax system and high inflation, which eases inflationary pressures from the demand side. With the partial termination of the compensation of the minimum wage hike, wage costs will increase in 2013, although in the slack labour market environment no major cost side price pressure is expected, due to the subdued growth in gross wages.

Over the longer term, subdued external and domestic demand point towards lower inflation. However, as of the second half of the year, this will be offset by the package of government measures included in the Széll Kálmán Plan

		2011	2012	2013
Core inflation		2.7	4.9	3.0
Non-core inflation	Unprocessed food	4.3	2.9	4.0
	Gasoline and market energy	13.8	10.3	1.4
	Regulated prices	4.0	5.2	5.7
	Total	6.4	6.0	4.2
Consumer price index		3.9	5.3	3.5

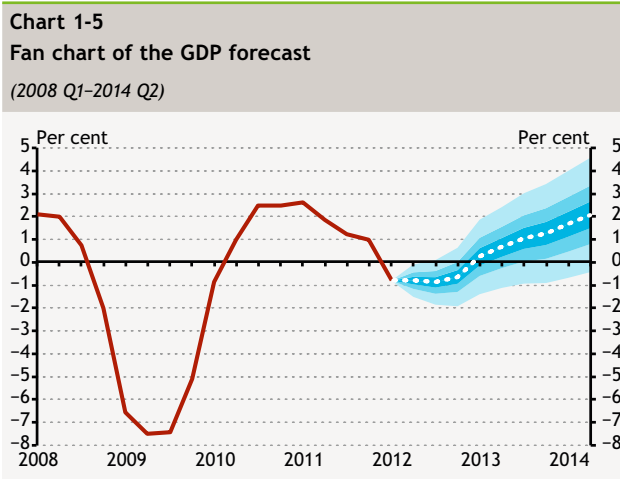


2.0. Some of the measures directly affect consumer prices (reduction in pharmaceutical subsidies) or apply to services provided for households (telephone tax, single insurance tax, financial transaction tax). These items have a one-off impact on price levels and thus add to inflation only temporarily. However, a considerable portion of the taxes and fees increase the production costs of companies, which they may pass on in consumer prices. In our projection, this process is presumably slow, gradual and incomplete, as companies may react to rising costs not only by price increases but also by reducing their investment and labour demand as well as by a deterioration in their profitability.

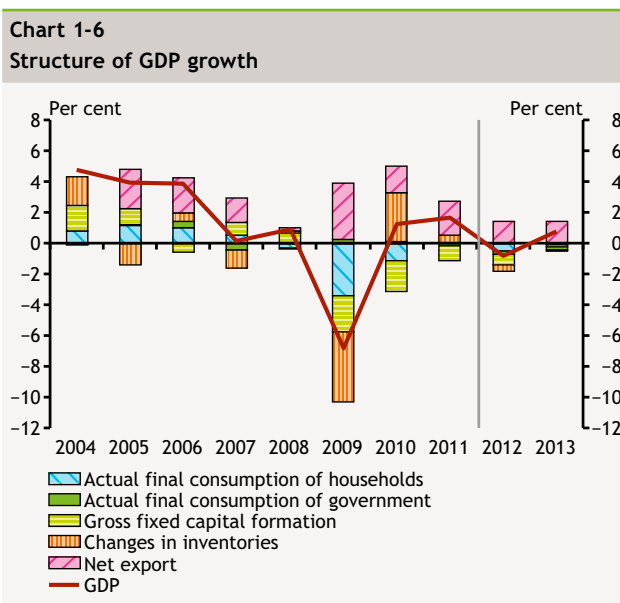
Although the increase in corporate costs in itself adds to core inflation, the price-reducing effect of the persistently weak demand environment will be perceived over the entire forecast horizon, and thus core inflation excluding tax changes will remain at its current low level (Chart 1-3, 1-4). However, the administrative measures affect several items outside core inflation excluding tax changes. As a result, the consumer price index will increase in 2013 H1 and remain above 3% for the entire year. With the persistently slack labour market and weak household consumption, we do not expect second-round effects to occur, and thus the inflation target may be achieved by early 2014 (Chart 1-3).

1.2 Economic outlook

Domestic economic output is forecasted to decline this year. Unfavourable global economic activity and the protracted European debt problems will result in a decline in the demand of Hungary's export markets and thus in export dynamics as well. Persistently tight lending conditions will result in subdued investment. The government measures improving the budget balance also decrease the rate of return on capital investments and thus diminish the propensity to invest. Households' deteriorating income position and the deleveraging of the debt accumulated in previous years will continue to hinder consumption, and government measures have a negative effect on demand as well. The output gap may continue to widen in the coming quarters and will remain negative in the entire forecast period. Accordingly, the disinflationary effect of the real economy will prevail.



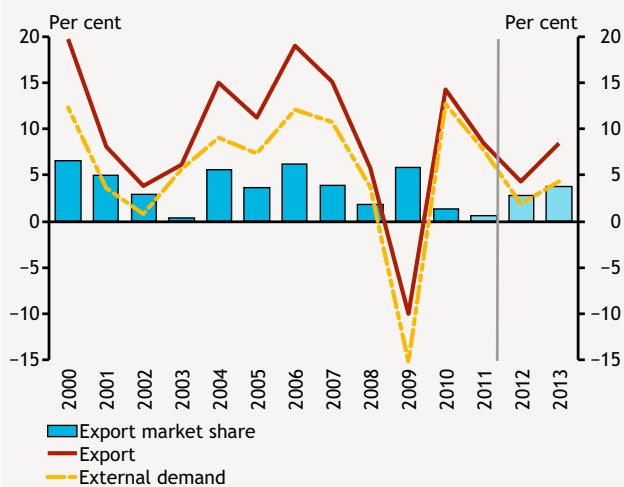
Continuing European and domestic balance sheet deleveraging, unfavourable credit conditions and the protracted nature of the European debt crisis have a lasting unfavourable effect on growth prospects. The weak economic outlook is also impaired by the fiscal adjustment measures aiming to achieve sustainable deficit levels. Against the background of weak external and domestic demand, GDP will decline this year, and subdued growth is expected for next year as well (Chart 1-5, 1-6). The low utilisation of existing capacities and persistently weak demand discourage further capacity expansions. As a result, the potential growth of Hungary can only be subdued.



On account of the fiscal deficit reducing measures of European governments, the continued deleveraging of the European banking system and the protracted European debt crisis, this year the slowdown in Hungary's external demand may be stronger than expected earlier. Available data for 2012 Q1 indicate a deceleration in the economies of Hungary's trading partners. Although Germany was able to grow, the economy of the euro area and that of the European Union as a whole stagnated. Short-term business indicators also point to a fall in external demand. Fiscal adjustment measures by developed countries entail a strong negative demand effect in the unfavourable lending environment. The resulting export-reducing effect will be mitigated in the second half of the year by the expected steady increase in the exports of the Mercedes factory, which may also be supported by demand in Asian markets. International economic activity may strengthen in 2013, although the growth rate fall short of its pre-crisis levels (Chart 1-7).

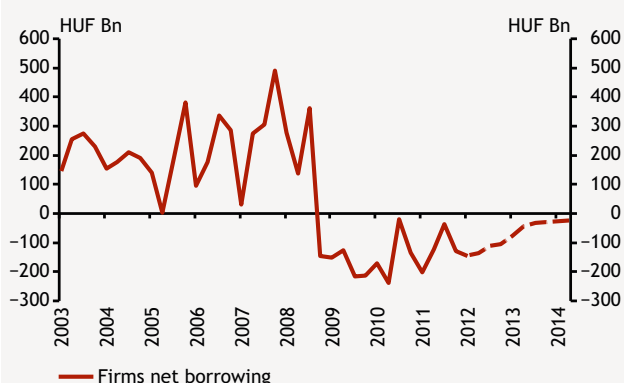
Lending conditions in the domestic banking sector continue to be unfavourable. In parallel with the tight price and non-

Chart 1-7
Changes in export market share



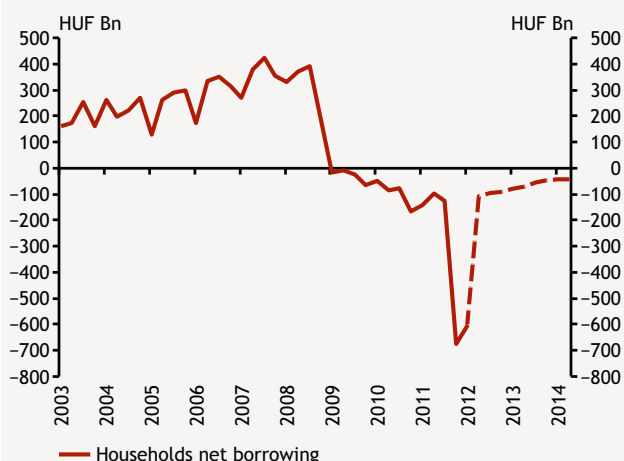
price conditions, outflows of foreign funds continued. Deleveraging by parent banks, the weak quality of the credit portfolio and the bank transaction tax may also have an unfavourable effect on developments in lending. As a result of all the above, lending in both the household and corporate segments may be persistently weak, and net credit stock is expected to decrease over the forecast horizon (Chart 1-8, 1-9).

Chart 1-8
Forecast for corporate lending
(2003 Q1–2014 Q2)



Higher inflation this year, weak business activity and historically low labour demand will result in a further worsening in households' income position over the short run. Over the forecast horizon, households' real income will be influenced by contrasting effects. Termination of the super gross tax base will increase the net income of those who earn above the average wage, whereas employees in the public sector (health, education) may expect a supplementary pay rise. In the case of households, the positive effect of the early repayment scheme and the exchange rate limit will also be perceived over the longer term. However, several measures in the Széll Kálmán Plan 2.0 result in a decline in real incomes. The taxes that appear directly in consumer prices reduce real incomes through higher inflation. Some of the increase in corporate costs also feed through into inflation, and the declining labour demand also has a negative effect on incomes.

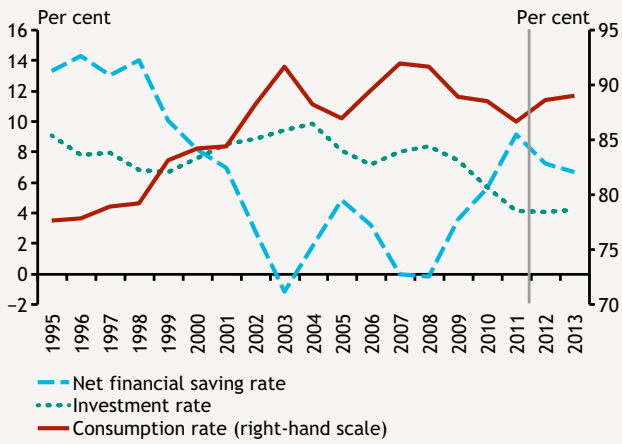
Chart 1-9
Forecast for household lending
(2003 Q1–2014 Q2)



In our projection, the overall decline in household consumption will be lower than the fall in real incomes this year. Last year, the income of households, in particular those earning above the average wage or with several children, increased substantially (as a consequence of a decrease of their personal income tax and the disbursement of real returns of private pension funds); this additional income may serve as a reserve for the short-term smoothing of these households' consumption. This year, the exchange rate limit on household's debt may lower the repayment burdens for the participating households. Precautionary motives of household may strengthen in the risky economic environment, and thus in the years ahead the savings rate is likely to remain at an even higher level than previous years, although it will probably stay below its 2011 level, which was influenced by one-off effects (Chart 1-10).

Looking ahead, investments of the total economy will be stimulated only by public investment financed from EU funds; developments in private investment are expected to be subdued. The persistently uncertain prospects, the deleveraging seen since the beginning of the crisis and especially the continuous tightening of lending conditions have had an unfavourable effect on private sector investment. In line with households' weak income position and tight credit conditions, household investment may

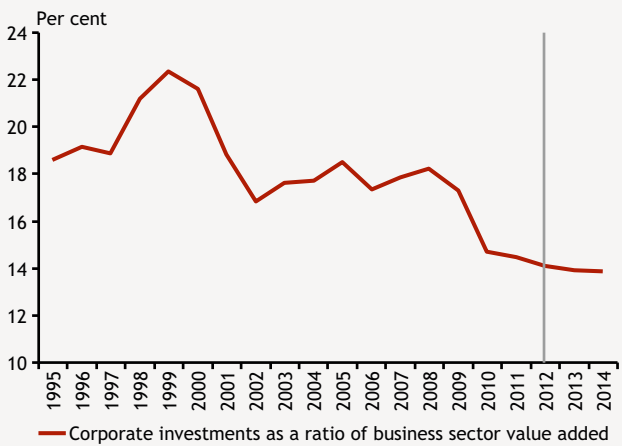
Chart 1-10
Use of household income*
(as a percentage of disposable income)



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

stabilise at the current low level. A pick-up in investment activity is being hindered by the steadily unfavourable credit conditions, uncertain macroeconomic outlook, and the rapid, frequent changes in the regulatory environment (Chart 1-11). The corporate investment rate – which is already at a low level – may fall further over our forecast horizon. Firms’ investments only reach the level of amortisation, which indicates a halt in capital accumulation. In spite of the improving labour market participation, the potential growth rate of Hungary can only be very subdued in the coming years, falling well short of pre-crisis dynamics.

Chart 1-11
Corporate investment rate



1.3 Labour market forecast

Labour supply continues to increase as a result of the stimulatory measures of the government. The unfavourable economic environment and the production cost-increasing effect of government measures, however, result in subdued demand for labour. Consequently, employment in the private sector may decline this year and will only stagnate in 2013 as well. Persistently high unemployment and the slack labour market environment have a strong wage-reducing effect and consequently, wage-setting may be restrained following the gradual fading of the impact of the minimum wage increase.

Chart 1-12
Employment and unemployment in the national economy
(2002 Q1–2014 Q2)

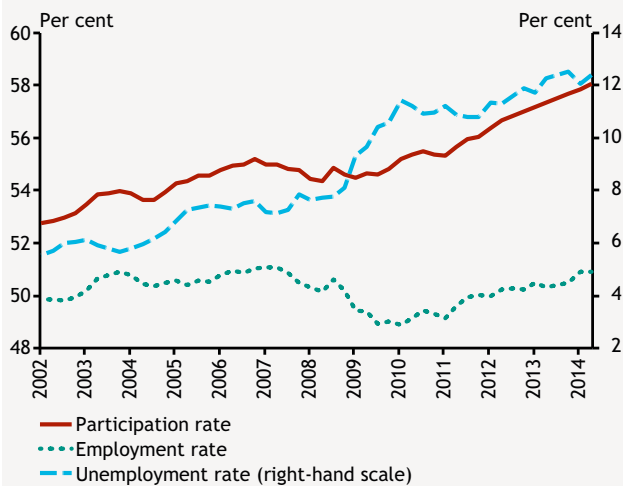
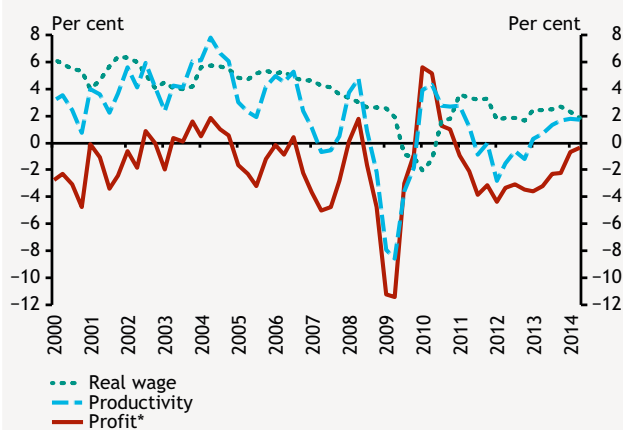


Chart 1-13
Productivity, real labour costs and profit situation in the competitive sector
(annual change, 2000 Q1–2014 Q2)



* Profits are calculated with production taxes taking into account.

The government measures taken earlier and the stimulatory measures of the Széll Kálmán Plan result in a further increase in labour supply. However, on account of the weak prospects for economic activity, demand for labour may remain at the current historically low level for a longer period of time. As the labour cost increase caused by the minimum wage increase and the expected pay rise is compensated for by the government over the short run, direct lay-offs are less likely. However, in the weak economic environment administrative wage measures have a negative effect on labour demand over the longer term, especially in the case of lower productivity employees. In addition, companies also adapt themselves to the corporate cost-increasing measures of the Széll Kálmán Plan by restraining their labour demand. As a result, the number of employees in the private sector will decline this year, and will only stagnate in 2013. With private-sector labour demand weak, the public work programmes are helping to absorb the expanding labour supply. Overall, unemployment may remain persistently high, and the number of long-term unemployed persons is expected to keep rising. In line with this, labour market conditions are expected to remain loose (Chart 1-12).

This year, the mandatory minimum wage increase is keeping the wage index high. Pay raises were more typical at the beginning of the year; in the second half of the year, the unfavourable economic activity will reduce short-term wage dynamics as well. From 2013 on, the slack labour market will push down wage dynamics and the weak economic environment will prevail; therefore, developments in wages are expected to be subdued.

As a result of subdued wage increases and improving labour productivity, firms' profitability would improve mildly over the forecast horizon. However, the rising production costs caused by government measures have a negative effect on profitability in 2013. Profit losses might be more significant

in market services which are more affected by the weak domestic demand; additionally, the taxes to be introduced (transaction tax and the telecommunication tax in particular) mainly affect service sector industries. The rise in labour productivity may be stronger in manufacturing, and thus the profitability of industrial firms is expected to drop to a lesser extent (Chart 1-13).

Table 1-2
Changes in our projections compared to the previous Inflation Report

	2011	2012		2013	
	Fact	Projection			
		March	Current	March	Current
Inflation (annual average)					
Core inflation ¹	2.7	5.3	4.9	2.9	3.0
Core inflation without indirect tax effects	2.5	3.0	2.4	2.7	2.4
Consumer price index	3.9	5.6	5.3	3.0	3.5
Economic growth					
External demand (GDP-based) ²	2.7	0.9	0.4	1.8	1.5
Household consumer expenditure	0.0	-0.9	-1.0	0.2	-0.5
Government final consumption expenditure	-0.5	-3.6	-3.4	-0.6	-2.9
Fixed capital formation	-5.4	-1.4	-4.1	1.8	0.0
Domestic absorption	-0.5	-1.5	-2.4	0.3	-0.7
Export	8.4	5.8	4.4	8.7	8.4
Import	6.3	4.6	3.1	8.2	7.5
GDP	1.7	0.1	-0.8	1.5	0.8
External balance					
Current account balance	1.4	3.1	2.8	3.7	4.0
External financing capacity	3.6	5.7	5.4	7.0	7.3
Government balance³					
ESA balance	4.2	-4.0 (-3.1)	-3.6 (-2.7)	-4.3 (-3.4)	-2.8 (-2.4)
Labour market					
Whole-economy gross average earnings ⁴	4.9	3.1	3.8	3.1	3.6
Whole-economy employment ⁵	0.8	1.8	0.9	0.7	0.2
Private sector gross average earnings ⁶	5.3	6.5	6.3	4.1	4.1
Private sector employment ⁵	1.4	-0.1	-0.3	0.5	0.0
Private sector unit labour cost ^{5, 7}	5.0	3.8	5.8	3.5	5.3
Household real income ⁸	2.2	-2.2	-3.2	-0.1	-0.9

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. Data in parenthesis include cancellation of free central reserves.

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 1-3			
MNB basic forecast compared to other forecasts			
	2012	2013	2014
Consumer Price Index (annual average growth rate, %)			
MNB (June 2012)	5.3	3.5	-
Consensus Economics (June 2012) ¹	5.0 – 5.6 – 6.6	2.5 – 3.8 – 4.6	3.2
European Commission (May 2012)	5.5	3.9	-
IMF (April 2012)	5.2	3.5	3.0
OECD (May 2012)	5.7	3.6	-
Reuters survey (June 2012) ¹	5.1 – 5.5 – 6.6	2.5 – 3.7 – 4.8	3.0 – 3.8 – 4.8
GDP (annual growth rate, %)			
MNB (June 2012)	-0.8	0.8	-
Consensus Economics (June 2012) ¹	(-1.5) – (-0.9) – (-0.4)	0.4 – 1.1 – 1.8	2.2
European Commission (May 2012)	-0.3	1.0	-
IMF (April 2012)	0.0	1.8	2.0
OECD (May 2012)	-1.5	1.1	-
Reuters survey (June 2012) ¹	(-1.5) – (-0.8) – (-0.2)	0.4 – 1.0 – 1.5	-
Current account balance (percent of GDP)			
MNB (June 2012)	2.8	4.0	-
European Commission (May 2012)	2.2	3.7	-
IMF (April 2012)	3.3	1.8	-1.1
OECD (May 2012)	2.7	3.8	-
Budget Balance (ESA-95 method, percent of GDP)			
MNB (June 2012) ⁴	-3.6 (-2.7)	-2.8 (-2.4)	-
Consensus Economics (June 2012) ¹	(-2.5) – (-2.9) – (-3.6)	(-2.2) – (-2.8) – (-3.5)	-
European Commission (May 2012)	-2.5	-2.9	-
IMF (April 2012)	-3.0	-3.4	-3.2
OECD (May 2012)	-3.0	-2.9	-
Reuters survey (June 2012) ¹	(-2.5) – (-2.7) – (-3.6)	(-2.2) – (-2.7) – (-3.5)	-
Forecasts on the size of Hungary's export markets (annual growth rate, %)			
MNB (June 2012)	1.9	4.4	-
European Commission (May 2012) ²	2.1	4.8	-
IMF (April 2012) ²	2.2	4.1	-
OECD (May 2012) ²	2.5	5.0	-
Forecasts on the GDP growth rate of Hungary's trade partners (annual growth rate, %)			
MNB (June 2012)	0.4	1.5	-
Consensus Economics (June 2012) ³	0.7	1.5	-
European Commission (May 2012) ²	0.8	1.9	-
IMF (April 2012) ²	0.9	1.9	-
OECD (May 2012) ²	1.1	1.9	-
Forecasts on the GDP growth rate of euro area (annual growth rate, %)			
Consensus Economics (June 2012) ³	0.2	1.0	-
European Commission (May 2012)	0.2	1.3	-
IMF (April 2012)	0.9	1.9	-
OECD (May 2012)	0.4	1.3	-

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. Data in parenthesis include cancellation of free central reserves.

Sources: Eastern Europe Consensus Forecasts (Consensus Economics Inc. [London], June 2012); European Commission Economic Forecasts (May 2012); IMF World Economic Outlook Database (April 2012); Reuters survey (June 2012); OECD Economic Outlook, No. 91 (May 2012).

2 Effects of alternative scenarios on our forecast

In the followings three alternative scenarios – considered as relevant by the Monetary Council – are presented to illustrate the risks surrounding the baseline scenario. The first one presents the consequences of output gap that is smaller than the forecast, whereas the other two depict the two-way risks that surround the risk assessment of Hungary. Due to further declined production capacity, the output gap is narrower, thus the inflation restraining effect of the weak demand is weaker, which necessitates the maintenance of the current monetary conditions for a longer period of time. A faster easing in Hungary's risk assessment than the assumption in the baseline scenario allows the starting of a gradual reduction of the policy rate earlier than the baseline scenario. In contrast, the risk premium that is less favourable in the case of an exacerbation of the European debt crisis results in a deterioration of the inflation outlook, and calls for an increasing of the base rate.

Starting from the middle of last year, the Hungarian economy was characterised by underlying inflation gradually increasing from the earlier lower level. In early 2012, in spite of the much weaker economic activity than assumed earlier, the pass-through of the VAT increase was greater than expected. This raises the possibility that the inflation reducing effect of demand may be weaker than the assumption in the baseline scenario. This could take place if capacities declined to a greater extent in the protracted weak demand environment than the assumption in the baseline scenario. This can be indicated by the weak investment activity of the private sector and the high number of corporate bankruptcies. Looking ahead as well, the uncertain external and domestic economic environment as well as the lack of credit may result in an investment activity that is permanently lower than the baseline scenario. The output gap is narrower due to the assumed lower potential growth; as a result, the disciplinary force of the weak business activity on prices is smaller. Offsetting this requires the maintenance of current monetary conditions for a longer period of time.

Due to the high financing cost of the general government, the high foreign exchange exposure of the state and the private sector, as well as the risks in the financial intermediary system, Hungary's risk premium has been permanently high since the outset of the financial crisis. Our forecast assumes that the balance sheet adjustment of domestic economic agents will continue. The decline in debt levels and in the vulnerability stemming from them is a protracted process, although the risks surrounding the financing of government debt may be considerably mitigated

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

(2000 Q1–2014 Q2)

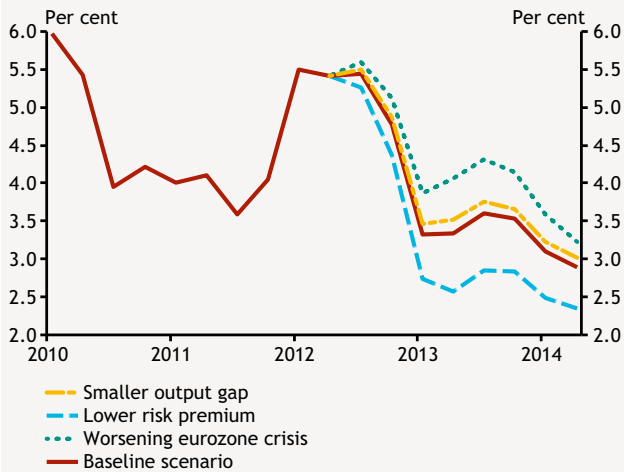
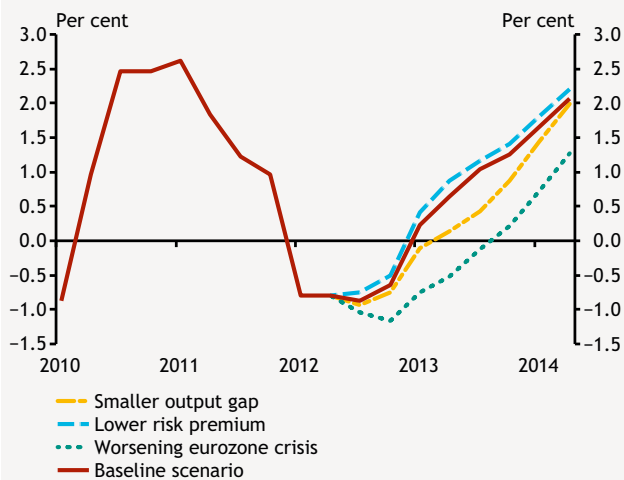


Chart 2-2
The impact of alternative scenarios on the GDP forecast

(2000 Q1–2014 Q2)



by the agreement to be concluded with the European Commission and the IMF. Risk premiums decline only gradually in the baseline scenario. The developments in risk assumption continue to be surrounded by marked uncertainty, which may, over the forecast horizon, result in lower as well as higher risk premiums than the assumption in the baseline scenario.

The first path related to Hungary's risk assumption assumes a faster improvement in the risk premium than the assumption in the baseline scenario. The probability that this scenario will take place is increased if the government, the European Commission and the IMF come to an agreement before the end of the summer, and thus the financing risks of government debt decline already in the near term. The assessment of domestic financial market assets may also be perceptibly more favourable than the forecast if market participants primarily focus on fiscal deficit in the evaluation of fiscal sustainability and are less sensitive to low growth entailed by the consolidation. Firstly, a lower risk premium may attenuate economic slowdown; secondly, it would result in a decline in inflationary pressure through the strengthening of the exchange rate of the forint. A rapid decline in country risk premiums allows the starting of a gradual reduction of the policy rate earlier than the baseline scenario.

However, in the current volatile financial environment there is also a non-negligible probability that the developments in risk premiums will be less favourable than the assumption in the baseline scenario. Deterioration in the risk assessment may be caused by an increase in tensions within the euro area, which would also have a negative effect on European growth prospects. Through the weakening of the exchange rate of the forint, the permanently high risk premium may result in higher inflation, which can only be partly contained by the deteriorating growth outlook. The deteriorating inflation outlook and increasing risk premiums necessitate an increasing of the base rate (Charts 2-1 and 2-2).

3 Macroeconomic overview

3.1 The international environment

Global economic activity continued to decelerate at the beginning of the year. The performances of individual regions varied considerably. Economic activity continues to be determined by the balance sheet adjustment of the private sector and the economic policy responses to the debt crisis. Growth in non-European developed countries accelerated slightly, but due to the deepening debt crisis, euro area economic growth came to a halt. Growth rates in emerging countries which are important in terms of global economic activity also tended to slow down. The slowdown in Hungary's external markets may also affect this year's growth prospects, and deepening of the euro area crisis may significantly exacerbate the risk assessment of Hungary.

The impact of weakening global economic activity is also perceptible in the inflation trends. Inflation rates in developed economies remained high due to oil price increases early in the year, although the resulting inflation risks eased in the second quarter, owing to falling commodity prices. The central banks of the developed countries will likely maintain their loose monetary conditions this year, in line with the weakening economic activity and the reduction in inflation risks. In the near term, global inflation and the decline in commodity prices may reduce domestic inflation as well.

3.1.1 DEVELOPMENTS IN GLOBAL ECONOMIC ACTIVITY

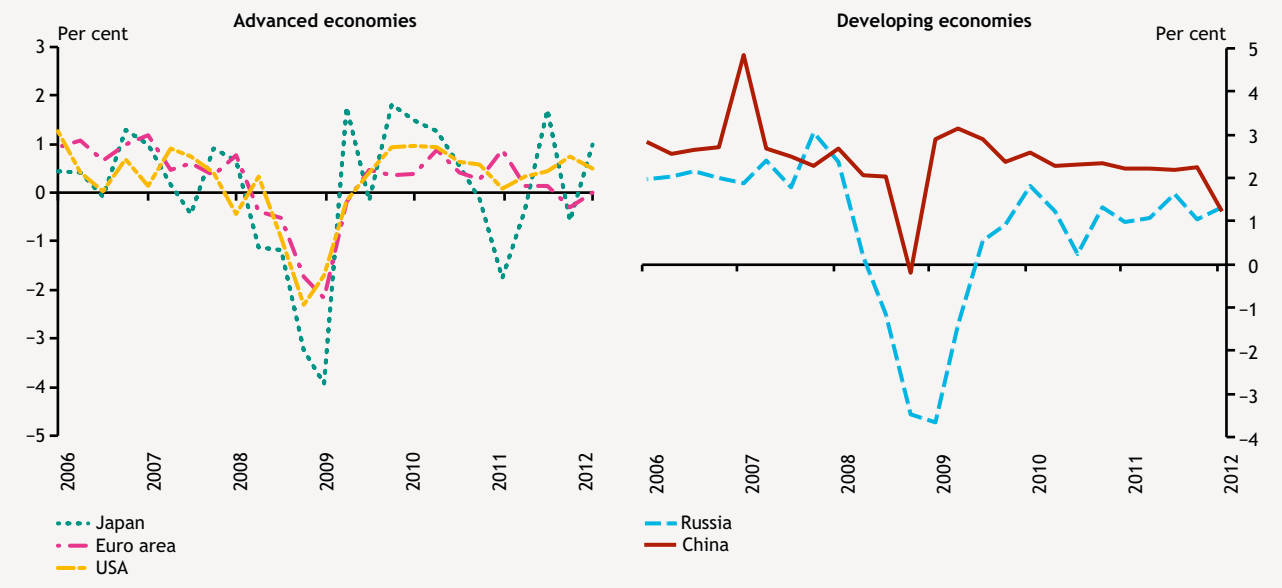
Global economic activity continues to be determined by balance sheet adjustments as well as fiscal responses to the debt crisis. Although the activity of several economies strengthened in the developed countries early in the year, escalation of the European debt problems poses significant risks to growth at the global level as well (Chart 3-1).

US economic activity improved slightly in Q1. GDP increased by 2 per cent, supported by favourable labour and housing market developments as well as strengthening consumer confidence early in the year. Looking ahead, fiscal consolidation may commence in the USA following the presidential election in November, which may restrain growth in 2013.

In the *euro area*, worries related to debt sustainability, the resulting stricter lending conditions and fiscal consolidation lower demand, leading to weaker economic activity. Economic growth in the euro area came to a halt in Q1 and industrial production indicators, which are fundamental for Hungarian exports, also indicate a decline. The German economy – Hungary's main trading partner – may grow despite the deceleration in the euro area, although consumption may have a greater weight in the structure of

Chart 3-1
GDP growth in major economies

(quarterly change in seasonally adjusted data; 2006 Q1–2012 Q1)



growth than the expansion of exports. The German export forecast foreshadows a significant deceleration and exports may decline over the short run (Chart 3-2).

Due to the effects of the debt crisis in the peripheral eurozone and its possible contagion, expectations about global economic conditions are uncertain and there are strong downside risks. In the period since the March Quarterly Report on Inflation, global willingness to take risks declined considerably, mainly due to developments related to the debt crisis in the euro area's peripheral countries. Risk indicators rose, leading developed market

3-2. ábra
Business cycle indicators in major economies

(Jan. 2006–Apr. 2012)

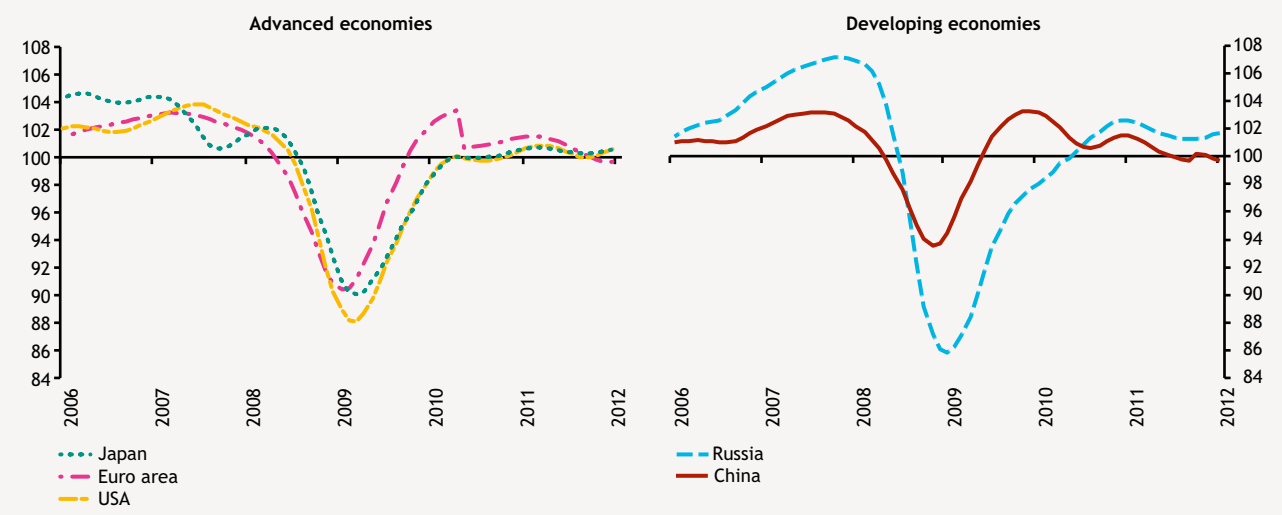
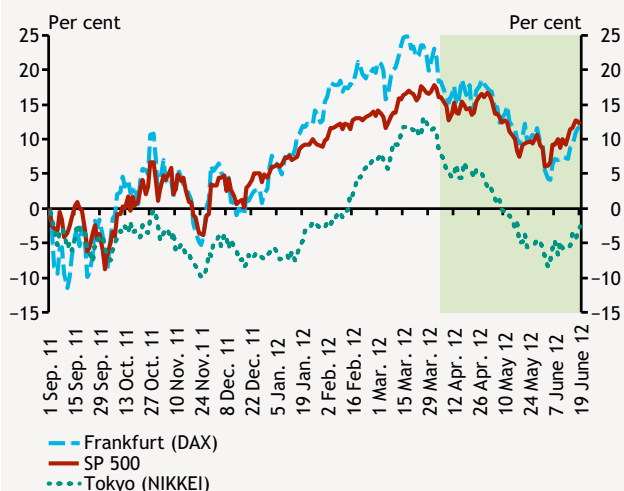


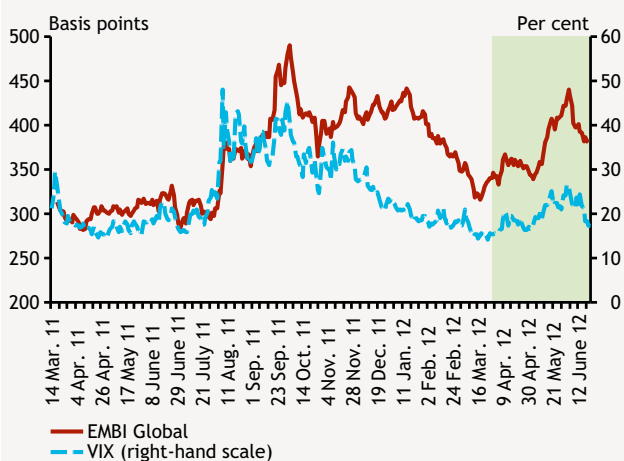
Chart 3-3
Improvements in the major stock markets



stock exchanges fell by 5-15 per cent, and the euro depreciated by 5 per cent against the US dollar (Chart 3-3, 3-4). The deterioration in the risk assessment may stem from the fact that the policy measures taken so far have not been able to break the negative feedback cycle that has developed, i.e. deepening of the crisis results in further deceleration in growth (for details, see Box 1.1). The effect of the LTROs of the ECB is becoming less and less perceptible in the bond yields of periphery countries, and Spanish and Italian long-term yields have risen significantly.

The growth of emerging economies also tended to taper off in Q1. Decelerating growth in the largest emerging economies (China, India) may have been the result of weaker export demand. While increasing domestic consumption and growing investment in manufacturing reduce the risk of a sudden deceleration of economic activity, the contribution of the large emerging countries to global economic activity is expected to be less significant this year, on the whole.

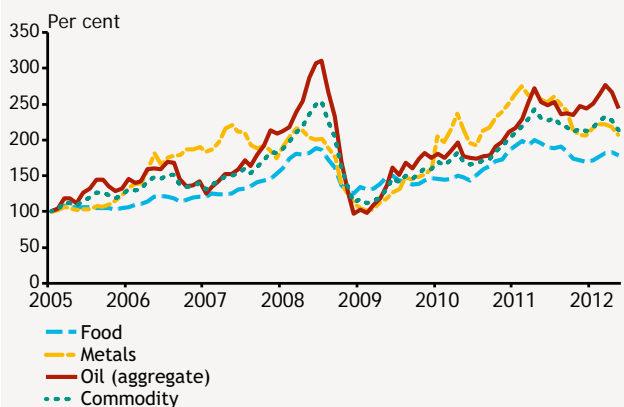
Chart 3-4
Global risk indices



In our region, the economies of Poland and Slovakia grew, while the economies of the Czech Republic and Romania contracted in Q1. Weaker export performance was unable to offset fading domestic demand, which was also constrained by fiscal consolidation in the Czech Republic and Romania. Poland is the least open economy in the region, and as a result, it has been better able to resist external shocks so far. Industrial production indicators suggest a downturn in the euro area and thus a slowdown of the economic activity of the Central East European region.

Overall, economic activity improved slightly in the developed world, but economic performance worsened in the euro area, which is the most important region for the economic activity of Hungary. As far as prospects are concerned, it is also Europe where the downside risk is the highest. Economic growth in emerging countries which are relevant for global economic activity is expected to decelerate in 2012.

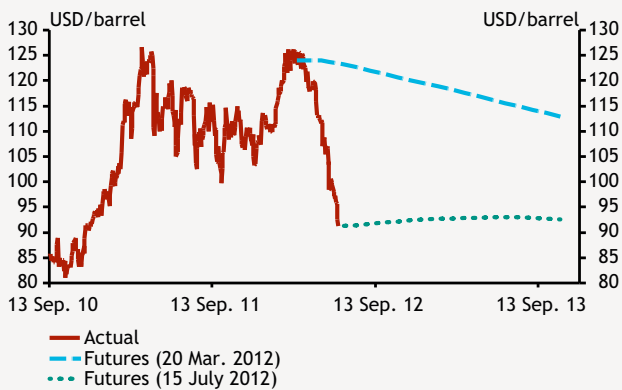
Chart 3-5
Changes in major commodity prices
(in USD, Jan. 2005–May 2012)



3.1.2 GLOBAL TRENDS IN INFLATION

Due to the deceleration of the global economic growth, the previous inflation risks moderated. With some delay, the effect of the global slowdown in growth was reflected in commodity prices as well, resulting in a slight overall decline in commodity market indices. The most significant decline in prices took place in the world market price of oil, which is sensitive to economic activity. From the high levels in the first four months, both Brent and WTI oil prices fell by 12-15 per cent in May (Chart 3-5, 3-6). The decline in

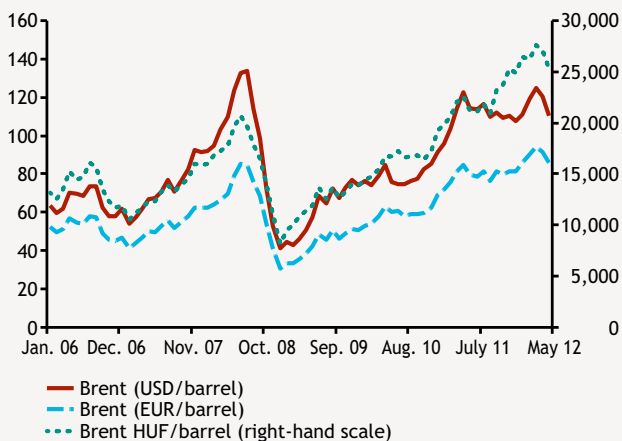
Chart 3-6
Expected changes in the Brent oil price
 (USD/barrel)



prices took place in parallel with the continuation of geopolitical tensions. The oil embargo against Iran is planned to completely enter into force from July, which may result in supply difficulties. Due to concerns related to the euro area, the euro weakened against the US dollar, which may mitigate the disinflationary effect of the decline in the mostly USD-denominated commodity prices in European economies. Food and processed product prices slightly increased, which was also attributable in some market segments to the temporary decline in supply resulting from the tightening of veterinary rules in the EU.

Inflation tends to stay close to the target in developed countries. In the first part of the year, inflation remained slightly above the target in the US and in the euro area, which was mainly caused by the inclusion of the high oil prices early in the year in fuel prices. Looking forward, inflation may ease gradually. Although in the euro area the indirect tax increases implemented in order to reduce government debt slow down disinflation, the fall in demand may result in a low inflation trend over the medium term. Overall, the inflation path in the developed region does not necessitate any monetary policy tightening.

Chart 3-7
Changes in the Brent oil price in various currencies

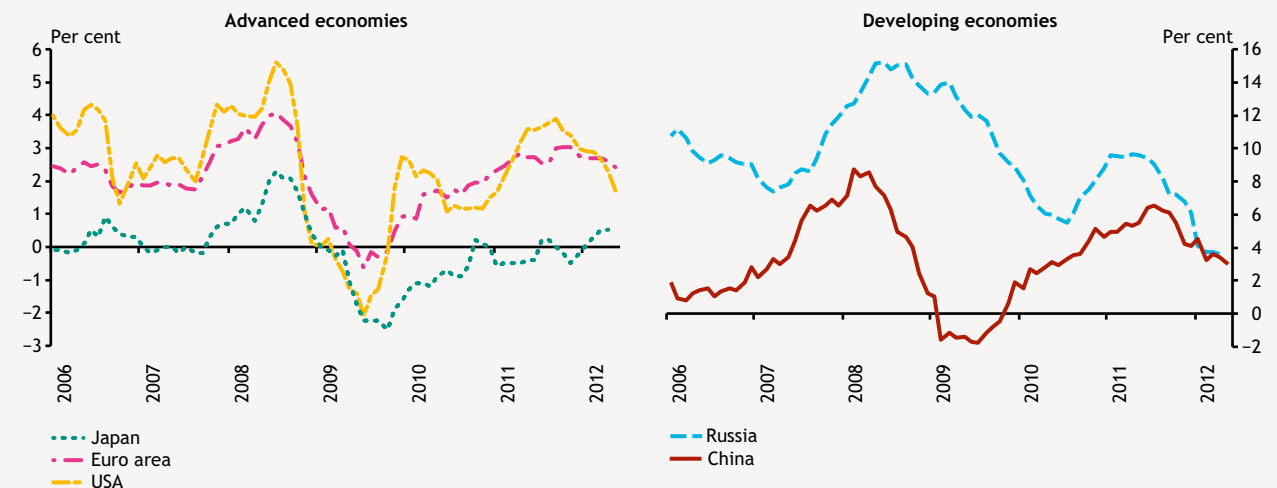


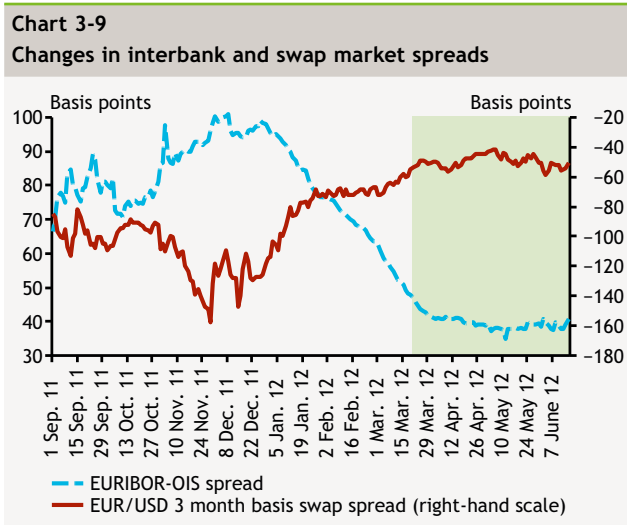
Inflation typically declined in emerging countries, supporting monetary easing in certain economies. Inflation continued to fall in the largest emerging countries (China, India) in line with declining economic activity. In Russia, inflation sank to an all-time low of 3.6 per cent in April (Chart 3-8).

Inflation remained above the target in the Central and Eastern European countries. In Poland, inflation remained steadily above 4 per cent, due to the relatively strong economic activity and high oil prices early in the year, but

Chart 3-8
Inflation in major economies

(per cent; year-on-year; Jan. 2006–May 2012)





then fell to 3.6 per cent in May. In the Czech Republic, due to a VAT increase, inflation increased close to 4 per cent, but since March it has dropped back to close to 3 per cent.

3.1.3 MONETARY POLICY

Due to the worsening economic conditions and easing inflationary pressures, the world's leading central banks may maintain steadily low interest rates. In its statements, the Fed did not openly commit itself to further quantitative easing, but due to the fragility of US economic activity the Fed did not rule it out either. In addition, it was confirmed that the earlier announced low interest rate path would be maintained. The ECB has also pursued a wait-and-see monetary policy since its second three-year credit facility (LTRO). In its statements, the ECB has so far ruled out further liquidity expansion, but the deteriorating situation in the European banking system may force the ECB to take further measures. Due to the possibility of a disorderly Greek default, the probability of extreme outcomes of the European debt crisis increased considerably. This may entail the termination of membership of Greece in the euro area and contagion to the euro area, which would further increase the risk premiums of peripheral countries (Chart 3-9).

The central banks of several emerging market countries eased their monetary conditions. As a result of the decline in inflation, the Chinese central bank reduced the minimum reserve ratio by 50 basis points in order to improve liquidity conditions, in addition to other liquidity providing steps. This reduction resulted in an improvement in lending conditions, and following the liquidity bottlenecks in January and February market interest rates also declined. Due to the slowdown in economic activity and easing inflationary risks, the Indian central bank reduced the base rate by 50 basis points in April, after having lowered the minimum reserve ratio in March.

In our region, the differences among countries in their economic conditions and their vulnerability to the European debt crisis account for the dissimilar monetary policy steps. In line with economic activity and inflationary trends, the Polish central bank increased the base rate by 25 bps to 4.75 per cent. For the time being, the Czech central bank has not changed the policy rate, but the probability of further easing of its monetary conditions this year has increased.

Going forward, monetary policy steps may be strongly affected by the evolution of the euro area debt crisis and changes in global risk tolerance.

Box 3-1**Crisis management in Europe**

The debt crisis in the euro area has continued to deepen in recent months. European responses to date were only able to temporarily alleviate the mounting tensions which have evolved since mid-2011. In parallel with the deepening of the crisis, risks related to the debt path of Italy and Spain also have come to the fore, which may already expose the euro area to systemic risk.

In the course of managing European financial tensions, a negative feedback cycle has developed between the banking system, fiscal positions and expected growth. Significant balance sheet adjustment is taking place within the European banking system, which is exacerbated by households' balance sheet adjustment. If fiscal adjustment programmes hinder euro area growth considerably, this will lead to an increase in the ratio of non-performing loans and further bank losses. Government bonds of periphery countries account for a considerable weight in the balance sheet of the euro area banking sector. Consequently, deepening of the debt crisis significantly impairs the capital position of banks. The deterioration in banks' balance sheets may also affect fiscal developments. Balance sheet adjustment may hinder growth and impair the balance of the budget, or – in a more serious case – a possible bank consolidation may result in a sharp increase in government debt.

Solving the debt crisis is made difficult by the fact that the banking system is highly integrated, and in many countries there is no adequate capacity available at the national level to manage a bank crisis, due to the size of the banking sector. At the same time, the conditions for managing a possible bank crisis at European level do not yet exist.

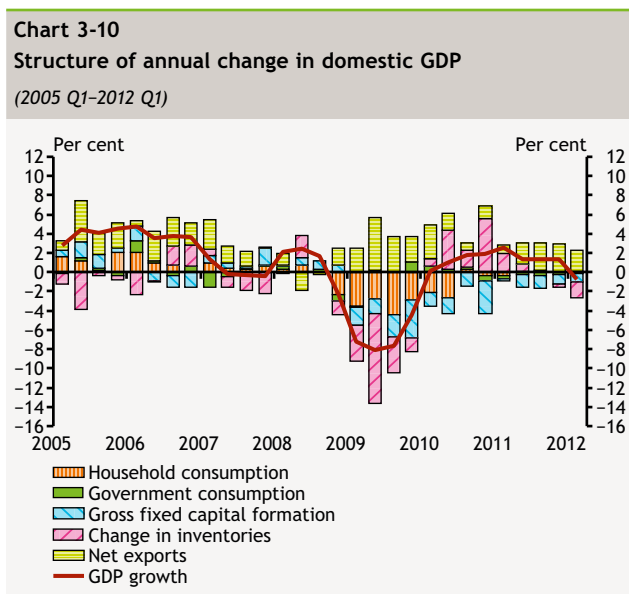
Due to the prolonged crisis, the risks related to the debt financing of several European countries has increased significantly. European decision-makers have attempted to solve the problem of mounting state debt with fiscal adjustment programmes. These measures have not been able to stabilise the debt paths of all member states yet, because economic growth was weaker than expected and, due to lower revenues, these countries could not achieve their deficit targets. Bond market premia have increased sharply in the peripheral countries, worsening debt sustainability and resulting in further bond market tensions. The European Central Bank (ECB) attempted to mitigate these tensions by purchasing peripheral government bonds through the Securities Market Programme. The ECB's liquidity supply facilities also briefly alleviated the tensions on the bond markets, but a significant decrease in the risks related to public debt sustainability can only be expected after economic growth starts. Considering that economic growth is not expected to start in the near future, the European crisis funds (EFSF, ESM) created to manage the debt crisis may play a significant role in short-term debt crisis management. These funds can provide continuous, relatively cheap funding for countries with weaker fundamentals.

Regarding the solution to the European debt crisis, along with the situation in Greece attention has turned to the sustainability of Spanish public debt and the situation of Spain's banking system. Even though the Spanish authorities passed several reforms of the financial system, the crisis in the Spanish banking system deepened further. Due to the downgrading of Spanish long-term debt and the expected recession in 2012 and 2013, financial tensions intensified, and finally Spain requested foreign financial help in the amount of EUR 100 billion to recapitalise its banking system. Immediately after the announcement, market concerns eased, but soon worries regarding the sustainability of the Spanish debt strengthened again. A permanent solution to the debt crisis will require further European-level responses.

3.2 Aggregate demand

Gross domestic product contracted significantly in early 2012. The weak growth was caused by a general deterioration in demand conditions. Demand in Hungary's export markets has slackened in recent months, while increasingly tight lending conditions and contractionary government measures strengthened one another's effects and restrained domestic demand.

Weak domestic demand continues to have a strong price-reducing effect. At the same time, the significantly decline and downward trend in investment since 2008 may also result in long-term weakening of the production capacities of the economy.



In 2012 Q1, domestic economic output was significantly weaker than expected. Compared to the end of last year, GDP fell by 1.2 per cent, which is unprecedented since the trough of the crisis (Chart 3-10). The weak domestic growth figure may partly be the result of a deterioration in general macroeconomic conditions and partly of one-off factors affecting the output of certain sectors. Among the impacts affecting demand conditions, worsening business activity in Hungary's external markets, domestic lending conditions that continued to become tighter at the beginning of the year and the effect of demand-reducing government measures may have been dominant.

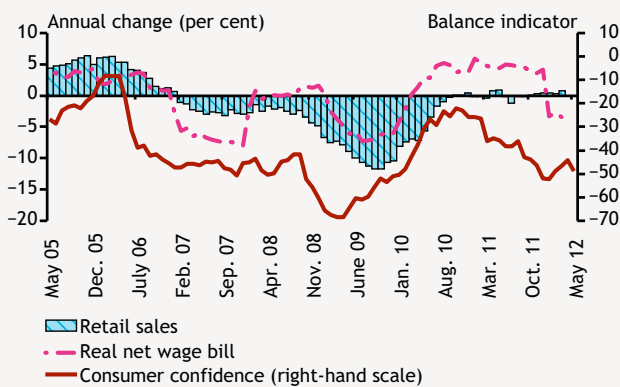
3.2.1 FOREIGN TRADE

In line with the weakening demand in Hungary's external markets, domestic goods exports generally slowed during the first months of the year. In addition to the favourable agricultural harvest results, the consistently weaker forint exchange rate may also have contributed to the favourable shift in the exports of food products. Hungary's exports of services may have been reduced not only by the slowdown in external demand, but also by the bankruptcy of the national airline Malév. Import dynamics continue to be restrained, in line with weak domestic demand and decelerating export dynamics. Overall, however, the growth contribution of net exports was still significant in the first few months of the year (Chart 3-11).

The negative effect of weaker external demand on export volumes may be mitigated by the uptake in production at the Mercedes factory. Accordingly, net exports may continue to provide significant positive contribution to domestic growth.



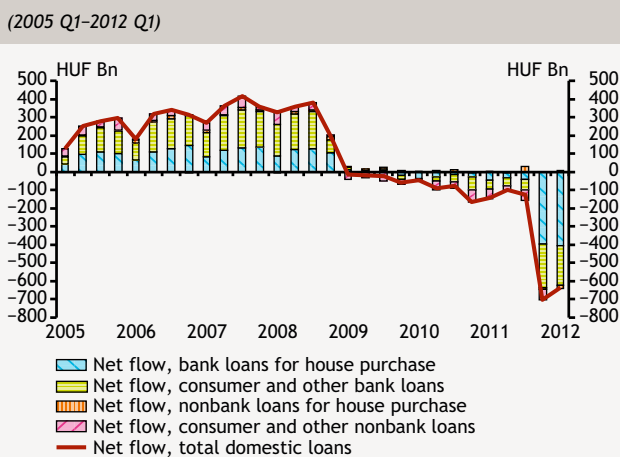
Chart 3-12
Changes in retail sales, earnings and the consumer confidence index



3.2.2 HOUSEHOLD CONSUMPTION

Household consumption continued to stagnate in early 2012. Below the average wage, the administrative pay rises may have offset the effect of the increase in the tax burden (termination of the tax credits, increase in health contribution), but the acceleration in inflation early in the year generally eroded real incomes. In parallel with a considerable fall in real income, consumption stagnated, which indicates that households may cushion income effects by reducing their savings. Household lending activity continues to be extremely weak. In parallel with the tight lending conditions, the proportion of households with liquidity constraints may have continued to grow (Chart 3-12).

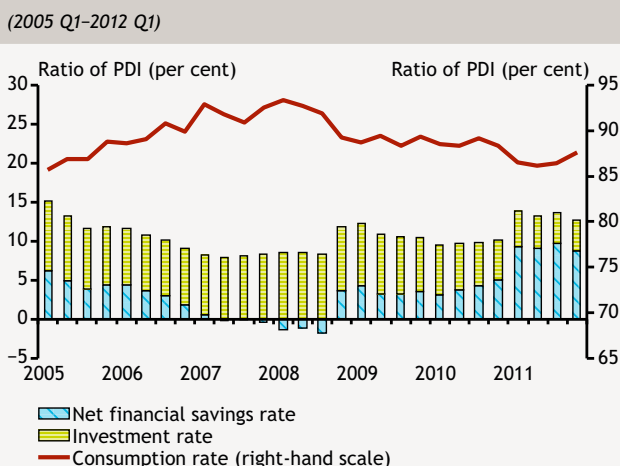
Chart 3-13
Net quarterly change in outstanding domestic loans to households, breakdown by loan purpose



Primarily as a result of early repayments, outstanding household loans fell considerably. Disregarding early repayments, the sector still remained a net repayer of loans. As a new factor, a considerable decline in banks' new disbursements also contributed to this development (Chart 3-13).

Subdued household lending is attributable to both demand and supply factors. On the demand side, deteriorating and uncertain economic prospects and declining real incomes may be the main determinants. On the supply side, in turn, banks' increasing risk aversion and the outflow of external funds, which is strong in a regional comparison as well, resulted in further tightening of the already tight price and non-price credit conditions.

Chart 3-14
Use of household income



For debtors who failed to participate in the early repayment scheme, the adverse effects, stemming from the permanently weaker exchange rate of the forint observed in recent quarters, may be mitigated by the option for exchange rate limit to be introduced this year. With gradual introduction, the programme may mainly contribute to households' income position, and thus to their consumption spending, as of Q3.

The improvement in the household confidence indicator at the beginning of the year proved to be temporary. Its current value continues to be at a low level, which indicates cautious household behaviour (Chart 3-14).

In the coming quarters, developments in consumption may be determined by the decline in real income, in addition to tight credit conditions and fiscal adjustments. The consumption rate may increase somewhat this year, as the households concerned may use the considerable additional incomes originating from the personal income tax reduction and disbursement of real yields last year to offset the effects of this year's fall in real income.

Chart 3-15
Whole-economy investment in machinery
(year-on-year; 2001 Q1–2012 Q1)

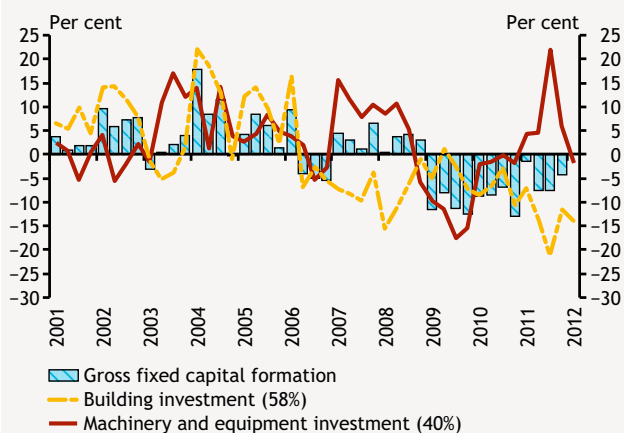


Chart 3-16
Construction of new housing and the number of building permits issued quarterly
(2001 Q1–2012 Q1)

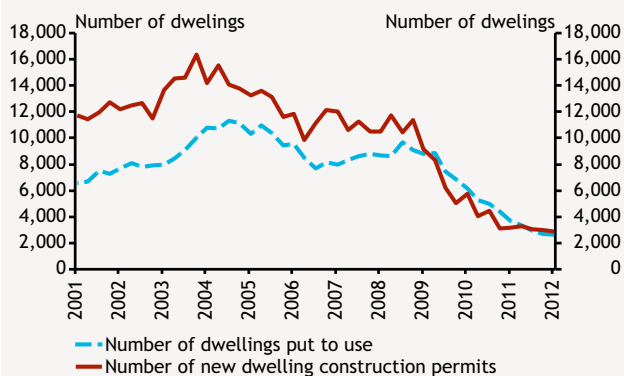
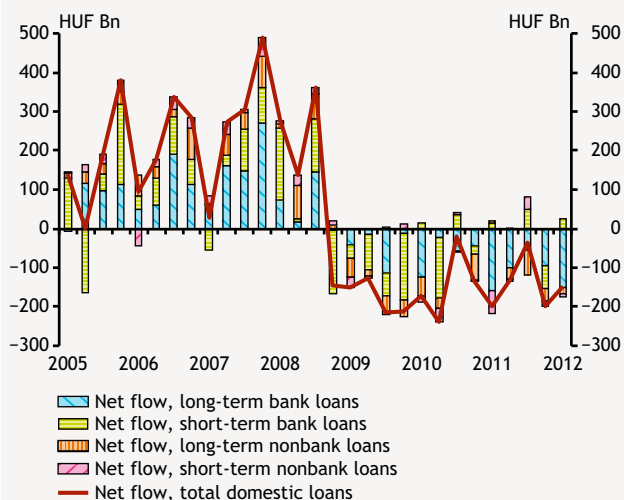


Chart 3-17
Net quarterly change in outstanding domestic loans to corporations, breakdown by maturity
(2005 Q1–2012 Q1)



3.2.3 PRIVATE INVESTMENT

At the beginning of the year, private sector investment was weaker than expected. In addition to the increasingly tight lending environment, this may be attributable to uncertainties related to demand conditions and the operating environment. The unfavourable weather in February may also have contributed to the decline in construction investment (Chart 3-15).

In Q1, corporate investment was characterised by the duality experienced last year as well. Underlying investment developments are very weak in the majority of sectors; this is only offset by the effect of the large investments implemented in manufacturing. The Mercedes factory investment was completed at the beginning of this year, but the investment activity of the sector has remained close to the high level of last year as a result of the ongoing Audi and GM projects. Apart from the automotive industry, most sectors are at best characterised by replacing depreciation; consequently, the expansion of capital stock continues to be extremely restrained.

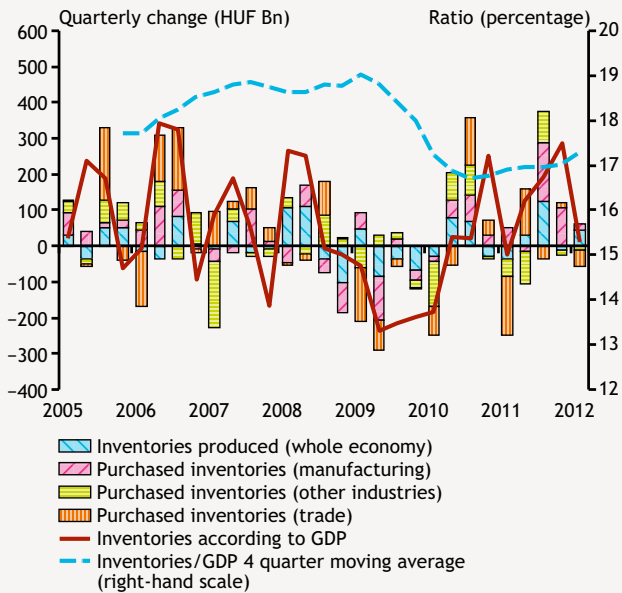
Corporate lending of domestic financial intermediaries declined markedly in the first quarter of this year as well. Most of the decline was recorded in long-term loans, that is attributed also to demand-side effects. The investment activity of the corporate sector is weaker than expected. As a result of the slowdown in global economic activity, industrial production also declined, which might reduce demand for current asset financing. Moreover, the banking sector's willingness to lend also did not improve in 2012 Q1. Credit conditions remained tight or were tightened slightly on the supply side (Chart 3-17).

Household investment continued to decline in early 2012. Based on building permit data, which stagnated in the past quarters, the construction of new housing may hit the bottom during this year and stabilise at a low level. Households may continue to be characterised by a cautious, wait-and-see investment behaviour (Chart 3-16).

3.2.4 INVENTORIES

The uncertain growth prospects and tight corporate lending conditions justify the maintenance of the tight inventory management typical since the crisis in the private sector. In Q1, changes in inventories may also have been affected by one-off effects of opposite directions. While the closing down of the Nokia factory in Komárom entailed a decline in inventories, the launching of production in the Mercedes factory in Q2 may have resulted in an accumulation of vehicle components required for production (Chart 3-18).

Chart 3-18
Changes in inventories at current prices and according to GDP, and inventory level as a proportion of nominal GDP
(2004 Q1–2011 Q4)



3.2.5 GOVERNMENT DEMAND

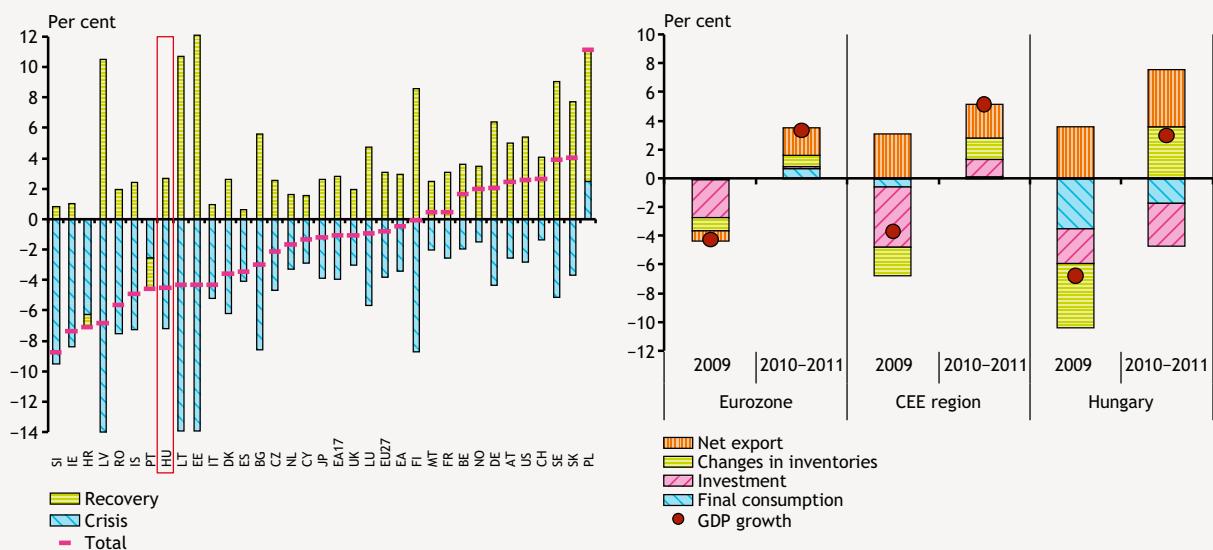
Government demand is determined by fiscal adjustment measures launched earlier and taken additionally this year. Government consumption expenditures stagnated at a low level at the beginning of the year. Government investment declined considerably early in the year, which was also attributable to the base effect stemming from the completion of some major projects last year. The funding of government investment continues to be characterised by strong duality: the weight of investment implemented from budgetary sources is declining, which is offset by an increase in the use of EU funds.

Box 3-2

Recession and recovery – growth patterns following the crisis in an international comparison

It is worth examining the developments observed in domestic growth following the crisis in an international comparison as well. With our analysis, in the growth history of Hungary we can identify the common factors observed both globally and regionally as well as the country-specific factors that result in a different growth path.

Chart 3-19
GDP change and its composition since end-2008



The global crisis from 2007 to 2009 and the fiscal adjustment that took place in Hungary in parallel with the crisis resulted in a recession in the Hungarian economy that was even deeper than the international or regional average. Following the sharp downturn, the recovery period of Hungary is close to the average. On average, at the beginning of the year the level of GDP in the EU was close to the pre-crisis level, but domestic output is still more than 4 per cent below this value.

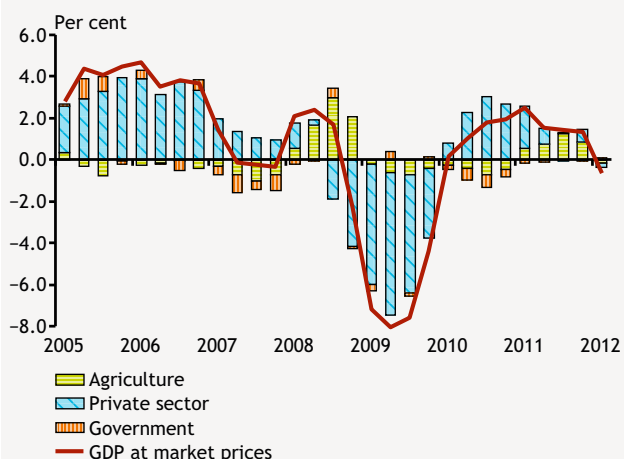
In addition to the differences observed in growth rates, there were also significant differences in the structure of GDP. Following escalation of the crisis at end-2008, the decline in GDP was generally caused by cautious consumption behaviour, postponement of investment decisions and the reduction in corporate inventories. The drying-up of parent bank funding had a particularly unfavourable impact on the Central East European region, where a considerable contraction of lending activity also exacerbated the fall in domestic – mainly investment – demand. In addition to the generally strengthening precautionary motive and the worsening income position, the revaluation of households' significant foreign exchange debt, which had accumulated in the pre-crisis years, and contractionary government measures also contributed to the sharp fall in domestic consumption in an international comparison. Against the background of a downturn in imports, net exports made a significant positive contribution in the economies of the region, despite the weak external environment.

In the majority of the euro area and regional economies, the recovery period was determined by rising exports and stockbuilding. In addition, there was an upturn in investment as well in the economies of the region in the past years. In this period, the structure of domestic growth showed the greatest differences in the domestic demand components. In the uncertain economic environment, investment activity was limited by cautious household and corporate behaviour, the continuous outflow of parent bank funds as well as an extreme tightening in banks' lending conditions. The fall in consumption demand was mainly the result of a decline in government consumption expenditures, which is attributable to the government measures that provide for the sustainability of the debt path. Overall, domestic growth has been weaker in a regional comparison in recent years mainly because of a further decline in investment activity. Investment is crucial both in terms of short-term growth and the production potential of the economy. Consequently, a permanent decline in investment may indicate growth risks over the medium term as well.

3.3 Production and potential output

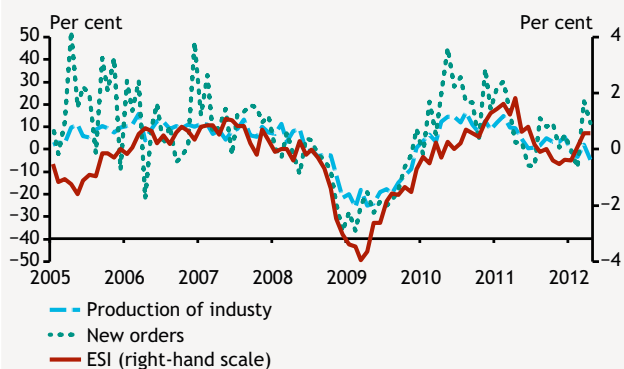
In 2012 Q1, economic output contracted. Against the background of a general deterioration in macroeconomic conditions, one-off effects affecting the output of some sectors may also have appeared in the weak Q1 GDP figure. As a result of the demand environment, which has been steadily weak since 2006, permanent losses may have occurred in production capacities as well, which may attenuate the price-reducing effects of generally weak domestic demand. Overall production data, which show a decline call attention to the slower-than-expected expansion of the expansion of the economy's production capacities. A slowdown in potential growth is indicated by the investment rate, which is declining considerably and the high proportion of the permanently unemployed.

Chart 3-20
Structure of annual change in domestic GDP
(2005 Q1–2012 Q1)



Hungary's economic output declined by 1.2 per cent compared to the end of last year and by 0.7 per cent in an annual comparison (by 1.4 per cent, after filtering for the calendar effect). With the deterioration in the general macroeconomic environment, a slowdown in production was perceived in a wide range of sectors. In addition, the output of some sectors may have been influenced by strong temporary effects as well. These may have included the short-term effects of construction production and agricultural production, which declined even more than expected as a result of the unfavourable weather at the beginning of the year, as well as of the shutting down of large firms (Malév, Nokia) affecting some sectors (Chart 3-20).

Chart 3-21
Industrial production, new orders and the ESI confidence indicator*
(Jan. 2005–Apr. 2012)



* The ESI time series has been normalised.

Last year, the results in *agricultural* production were more favourable than the average. Although the harvest estimates for major crops contain significant uncertainties, as a consequence of the unfavourable weather (long drought, frost damages) at the beginning of the year they generally indicate weaker harvests than last year. Overall, the sector's performance may fall short of last year's favourable basis.

Industrial production increased slightly in March, but the output of the sector was characterised by a decline in Q1 as a whole, in line with the deterioration in external market conditions. In the near term, no material improvement can be expected in the general conditions in Hungary's export markets, as confirmed by drop in production figures seen in April. At the same time, industrial new orders have been on a strong upward trajectory since March. This phenomenon may be related to the launching of the production of the Mercedes factory at the end of March, which may already result in a spectacular shift in production figures starting

Chart 3-22
Construction output, new orders and the ESI confidence indicator

(Jan. 2005–Apr. 2012)

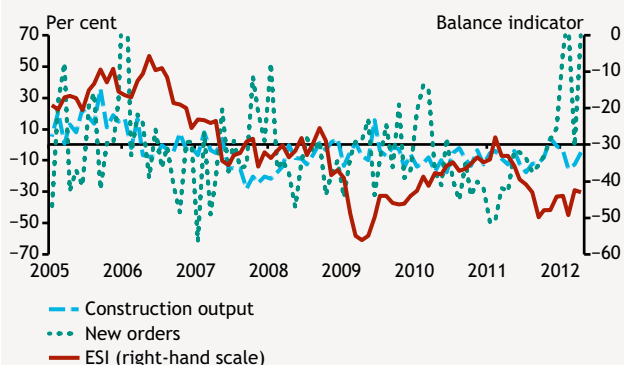


Chart 3-23
Value added of the market services and expectations for future demand

(2005 Q1–2012 Q2)

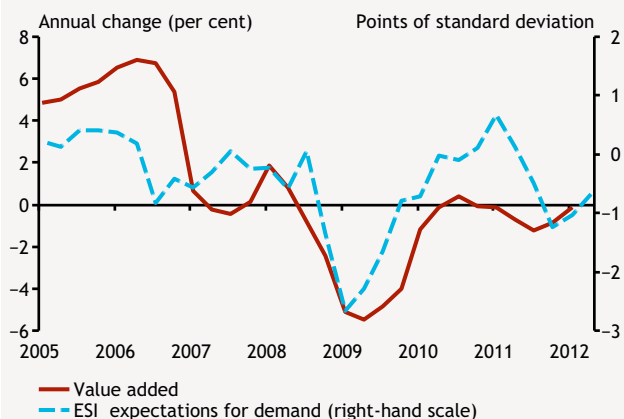
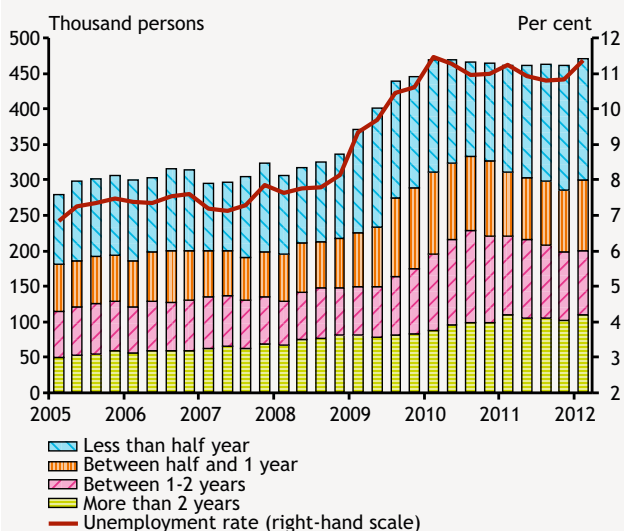


Chart 3-24
Unemployment rate and job-search time

(2005 Q1–2012 Q1)



from Q2 (Chart 3-21). The performance of the *transport* sector, which is closely related to external demand, also continued to weaken in the first months of the year. The bankruptcy of Malév early in the year also had a negative effect on the output of the sector.

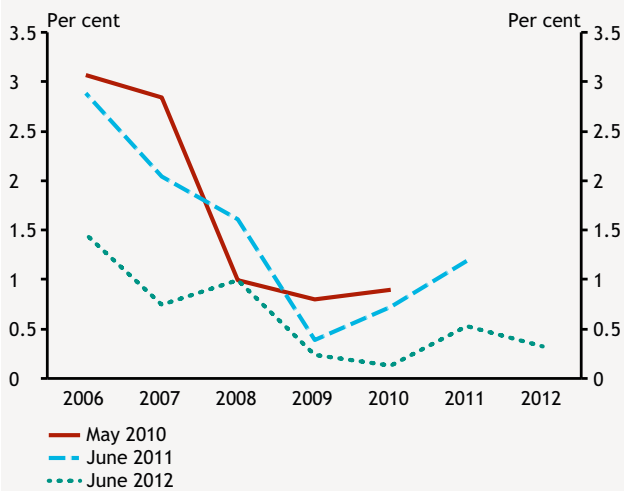
The year-end data on *construction* production showing a slight increase proved to be a temporary phenomenon, and Q1 information points to a continuing decline in the output of this sector. In addition to the deterioration in general economic conditions, the cold weather that hindered construction in the first months of the year also contributed to the nearly double-digit decline in construction output. There was a slight increase during spring in the output of the sector but due to the weak data of January-February the performance of the sector is characterized by a declining trend. This year, the market of new dwellings may bottom out at a historically low level, and no recovery is expected in the near term. Infrastructure projects financed from EU funds may somewhat brighten the overall picture of construction in the next quarter (Chart 3-22).

Retail sales expanded slightly in early 2012 as well. Purchases by domestic households may not have shown any considerable fall in spite of the material decline in real income at the beginning of the year, while the persistently weak exchange rate may have stimulated non-resident households' purchases in Hungary in the first months of the year. Despite deteriorating business conditions, the *tourism* sector was able to demonstrate some slight growth at the beginning of this year as well. The persistently weak exchange rate of the forint may continue to improve the performance of the sector. As a result of the increase in the number of flights by rapidly reacting competitors, for the time being the failure of Malév has not caused any major fall in hotel reservations (Chart 3-23).

The profit of the *financial sector* originating from traditional banking business and thus the sector's added value were reduced by several factors in the first quarter of this year. Deposit withdrawals by households at the beginning of the year reduced domestic funds, whereas on the asset side the early repayment programme that took place until February considerably reduced households' outstanding foreign exchange loans. The activity of the sector in new lending, especially to corporations, proved to be even weaker than our earlier expectations. As a unique factor, the result-worsening effect of the early repayment programme early in the year was accounted at the beginning of 2012.

Our picture of the potential level of output has somewhat worsened since the March issue of the *Quarterly Report on Inflation* (Chart 3-25). The deep crisis in 2009 and the

Chart 3-25
Revisions of our estimates for potential growth



subsequent slow, protracted recovery may have significantly restrained the expansion of the production capacities of the economy. The domestic investment rate, which had been low in the pre-crisis years as well, has continued to decline even more than expected in recent quarters. Against the background of uncertain prospects for business activity and outflows of bank funds, which are strong in a regional comparison, the sectors that produce for the domestic market are characterised by permanently low investment activity, while an expansion in capital stock is only perceived in manufacturing, which is less sensitive to domestic lending (for details on investments, see Box 3.3).

Due to the government measures in recent years, since the crisis there has been a further rise in labour market activity. The growing labour supply, however, does not result in a similar pace of growth in employment. The unemployment rate has remained at persistently high levels in recent years. High unemployment adds to the chance of becoming permanently unemployed, which eventually may entail the obsolescence and erosion of the skills required for active job-seeking. The deepening of long-term unemployment is indicated by the growing of average job-search times (Chart 3-24). The proportion of people who search for a job for more than one year has increased in recent years. Overall, the developments observed both in the labour market and capital accumulation indicate a permanent deceleration in potential growth.

Box 3-3

Analysis of investment behaviour in a sectoral breakdown

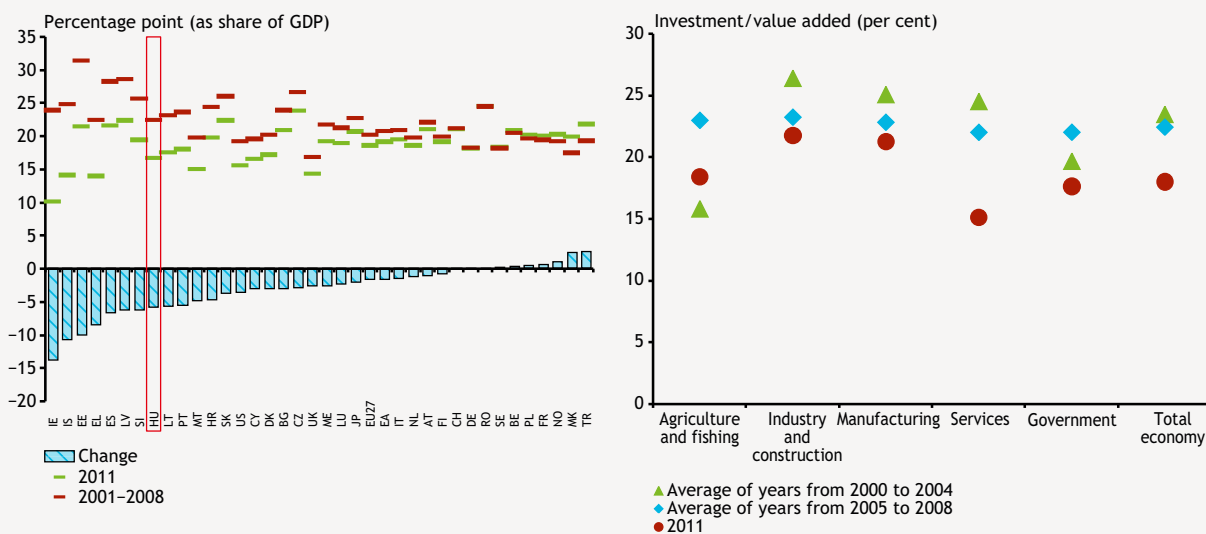
In the last years, new data on domestic investment was often a negative surprise compared to our forecast. This persistently weak investment activity not only negatively affects the actual growth figures for the year in question, but also results in a deterioration of Hungary's medium-term growth prospects. In this analysis, we examine the developments in investment with international comparison and a domestic sectoral breakdown, in order to obtain a better perspective on the weak domestic investment.

The crisis had an unfavourable impact on investment activity, as the investment ratio generally decreased at the international level and still remains below the pre-crisis level. In Hungary, underlying investment trends had already started to deteriorate in 2006, i.e. before the outbreak of the crisis. Following the start of the crisis in 2008, the downswing in investment accelerated, and whole-economy investment fell by around one quarter compared to 2008. The decrease is significant in international comparison, and our investment ratio is lower than that in the neighbouring regional countries.

Comparison of the investment activity of individual sectors of the national economy with the gross national product produced by them reveals that in relation to the pre-crisis period there has been a considerable decline in the investment rate, and this decline was already observed in the years prior to the crisis. The sharpest downturn was observed in market services, whereas the lowest decline was typical of industrial sectors.

This duality is partly attributable to pre-crisis decisions. Due to the strong demand, a considerable amount of new producing capacities – often financed with loans – were developed. This was mainly the case in the sectors producing for the domestic economy. The persistently weak domestic demand may cause a partial reduction of these excess capacities. By contrast, Hungary's export

Chart 3-26
Changes in investment rate in the sectors of the national economy



Note: Sectoral investment rates were calculated from the sectoral data of investment statistics and from the sectoral added value data shown in the national accounts.

performance increased significantly compared to the peak of the crisis, and looking ahead the prospects of companies producing for external markets are more favourable, which may provide adequate support for investment decisions. In addition, the strong downturn in domestic lending may also have played an important role in the major fall in investment of companies producing for the domestic market, because exporting companies have much more favourable access to credit due to their more stable economic position, foreign interests and possible foreign parent companies. Finally, risks in the business environment also generally lead to a decline in investment activity.

The downward movement in the domestic investment ratio started before the crisis. The process was accelerated by the crisis, and the significant drop in investments has turned into a lasting phenomenon in recent years. The persistently weak investment climate has a negative impact on Hungary's medium-term growth prospects.

3.4 Employment and labour market

Labour market activity continued to pick up at the beginning of this year. As a result of the deteriorating prospects for business activity, the number of employed stopped increasing in the past months. An expansion of employment was observed only in the public work programmes, while a decline in the demand for labour is typical in the private sector. Unemployment increased slightly at the beginning of the year, and, consequently, the labour market may still be considered loose.

Loose labour market conditions may continue to limit nominal wage increases. The administrative pay raises early in the year resulted in an acceleration of wages, but excluding this effect the underlying processes of wage-setting may be characterised by more restrained dynamics than the average of pre-crisis years. Loose labour market conditions may cushion the inflationary effects of growing production costs.

Chart 3-27
Changes in activity compared to 2008 Q1
(2008 Q1–2012 Q1)

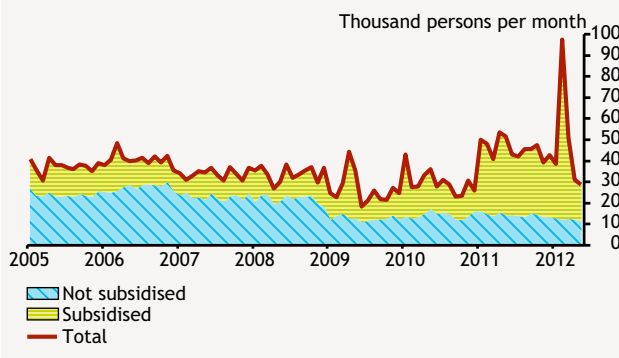


In line with the trend seen in recent years, labour market activity continued to increase in 2012 Q1. As a result of stimulatory government measures (mainly the tightening of retirement conditions and unemployment benefits), the activity rate has increased by 2 percentage points compared to the pre-crisis level, rising to 56.5 per cent (Chart 3-27).

The number of employed in the whole economy stopped increasing in Q1. In line with the deteriorating prospects for business activity, companies in the private sector are characterised by even more cautious labour demand than in earlier months. Accordingly, the number of employed fell in this sector in Q1 (Chart 3-28). The deteriorating employment situation was seen in a wider range of sectors, which was also exacerbated by the one-off effects of mass layoffs at some major employers (Malév, Nokia) early in the year. Employment mainly declined at the small and medium-sized enterprises, which is also attributable to statistical measurement effects.¹ Over the short run, the cost increasing effect of administrative pay rises was reduced by the wage compensation system introduced by the government.

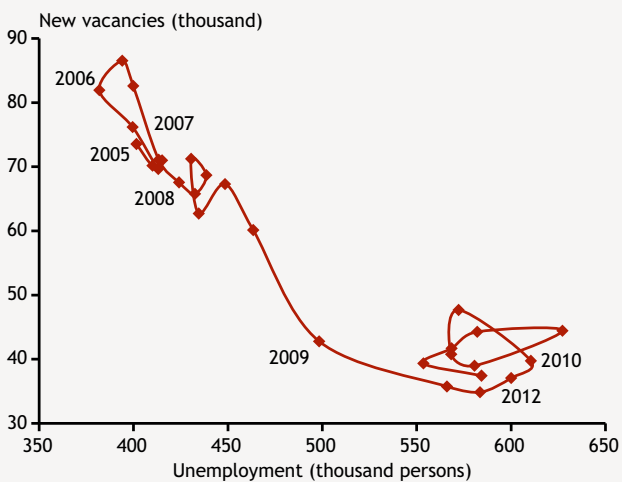
At whole-economy level, the decline in demand of the private sector was offset by an increase in public employment. Although the number of employed at government institutions remained unchanged in the past quarter as well, the expansion of public work programmes resulted in an increase in the weight of public employment.

Chart 3-28
Number of new vacancies advertised
(Jan. 2005–May 2012)



¹ For more details, see Chapter 6.2 of the March issue of the Quarterly Report on Inflation.

Chart 3-29
Beveridge curve*
 (2005 Q1–2012 Q1)



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

Unlike in previous years, a greater portion of those employed in public work are employed in full-time programmes.

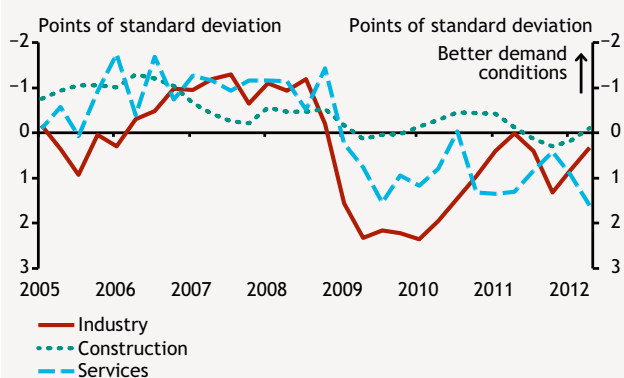
Against the background of increasing activity and stagnating employment, the unemployment rate exceeded 11 per cent in 2012 Q1. The significant volatility observed in the number of registered unemployed early in the year was caused by timing effects stemming from the closing of public work programmes at the end of the year and their relaunching at the beginning of the year.

The unemployed per vacancy ratio continues to be high. The labour market can still be considered loose; there has been no major shift in the Beveridge curve in recent quarters (Chart 3-29).

3.5 Cyclical position of the economy

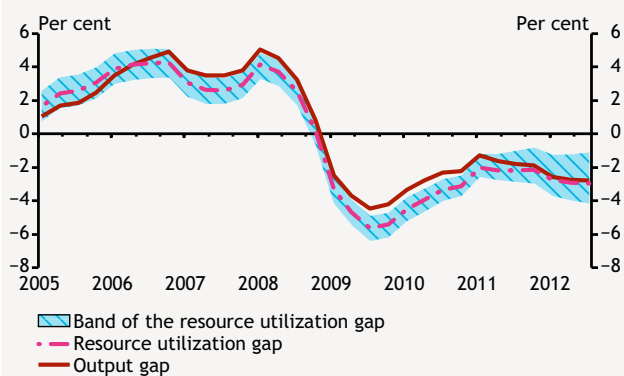
Improvement of the cyclical position came to a halt in the middle of last year and since then weakening demand conditions have been observed again. Although developments in the main factors of production may indicate weaker potential growth, the economic environment continues to be influenced by strong cyclical effects. They stem from the deterioration in the external environment as well as from the increasingly tight credit conditions and the demand-reducing government measures. Accordingly, the functioning of the economy may continue to be characterised by significant free capacities over the short run, which may continue to slow the passing-on of the increase in production costs into consumer prices.

Chart 3-30
Demand constraints in the main sectors according to the ESI survey
(2002 Q1–2012 Q2)



Note: Insufficient demand as the main obstacle ahead of production, standardized, on an inverse scale.

Chart 3-31
Changes in the output gap*
(2005 Q1–2012 Q3)



* The band of output gap estimates is derived from various methodologies for measuring the output gap. The resource utilization gap is derived from data indicating capacity utilization in the private sector.

Following the crisis, the cyclical position of the economy was characterised by a slow but gradual upswing, which was mainly attributable to an improvement in external demand conditions. Since the middle of last year, demand conditions have gradually weakened, and therefore renewed deterioration in the cyclical position of the economy can be seen. Although developments in the main factors of production – unemployment has stabilised at a high level and investments have significantly declined – may indicate weaker potential growth, the economic environment continues to be influenced by strong cyclical effects (Chart 3-30).

The output gap is estimated to have been around 2-2.5 per cent in early 2012. The disinflationary effect of weak demand continues to prevail. Significant unused capacities may exist in the economy, which is also confirmed by cyclical indicators based on sectoral surveys. The different capacity utilisations typical of the various sectors became general at the beginning of the year. With the slowdown in external demand, capacity utilisation in the sectors producing for exports is as low as in the ones producing for the domestic market.

Looking ahead, a further opening of the output gap is expected as a result of external and internal factors. The less favourable external demand may increase unused capacities in the export sector, while the increasingly tight lending environment and declining real incomes may impair the cyclical position of consumption (Chart 3-31).

3.6 Costs and inflation

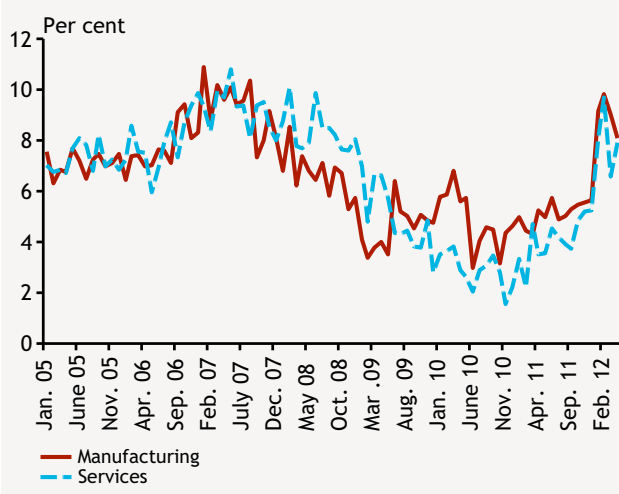
As a result of the administrative wage increases at the beginning of the year, growth in regular wages in the private sector accelerated considerably. Companies adjusted to increasing nominal wages by making use of the government wage compensation and also by reducing other labour costs. Consequently, the accelerating wage outflows did not result in a similar increase in wage costs.

In recent months as well, inflation figures have been close to the dynamics observed at the beginning of the year, exceeding the medium-term inflation target. In the restrained demand environment, the inflationary effects of the persistently weak forint exchange rate remained subdued, whereas the decline in commodity prices was reflected in the faster-than-expected adjustment of processed food prices. The prices of market services and tradables, which are sensitive to demand, showed persistently low dynamics.

With the deterioration in global economic prospects, global commodity prices also declined. Accordingly, an easing in imported inflationary effects is expected over the short run. At the same time, the direct and indirect inflationary effects of the newly announced government measures focused on achieving the fiscal deficit targets may appear in the consumer prices already this year.

3.6.1 WAGES

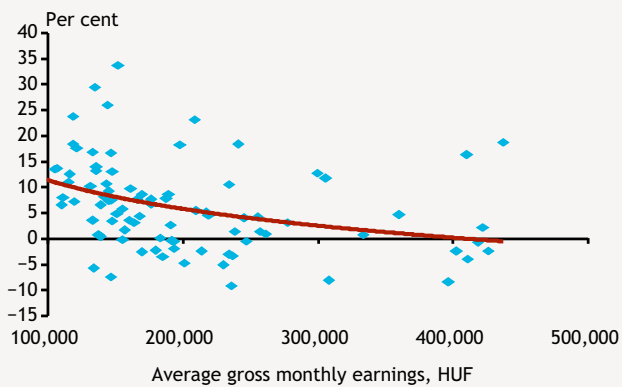
Chart 3-32
Changes in regular monthly gross average earnings
(excluding premiums and one-month bonuses) in the private sector
(Jan. 2005–Apr. 2012)



At the beginning of the year, the increase in regular wages in the private sector accelerated considerably. The more than 8 per cent increase in regular earnings is mainly attributable to the administrative wage raises at the beginning of the year. However, the rapid nominal wage outflow did not result in a similar increase in wage costs, as companies reduced the additional burdens through several channels (Chart 3-32).

Recourse to government wage compensation was the strongest short-term adjustment channel. The government compensation provided for the more than 5 per cent wage increase might have been used in the case of more than three fourths of eligible employees. In line with the deterioration in business conditions and the loose labour market conditions, companies smoothed the cost increasing effect of administrative wage raises by other wage-related decisions as well. Wage elements other than regular earnings fell nearly 20 per cent short of the value of the same period of the previous year. Cafeteria disbursements were cut especially strongly, whereas bonus payments are lower in an annual comparison mainly due to a base effect.

Chart 3-33
Changes in regular wages
(in Mar. 2012 compared to Dec. 2011)

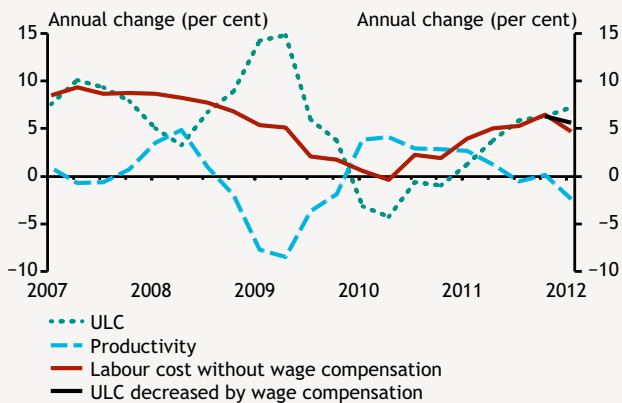


In addition to wage compensation, another way for companies to adjust to the higher wage costs was to significantly moderate the wage increases of those whose earnings were higher than the average wage (Chart 3-33).

The effect of the heterogeneity appearing in the growth conditions of various sectors is reflected in wage-setting as well. Developments in both gross average earnings and regular wages were more favourable in manufacturing than in market services.

As a result of the increase in labour costs and the decline in productivity early in the year, growth in unit labour cost continued to accelerate in the first months of the year. The increase in the wage-side inflationary pressure is partly offset by the recourse to wage compensation (Chart 3-34).

Chart 3-34
Labour cost, productivity and unit labour cost in the private sector
(2007 Q1–2012 Q1)

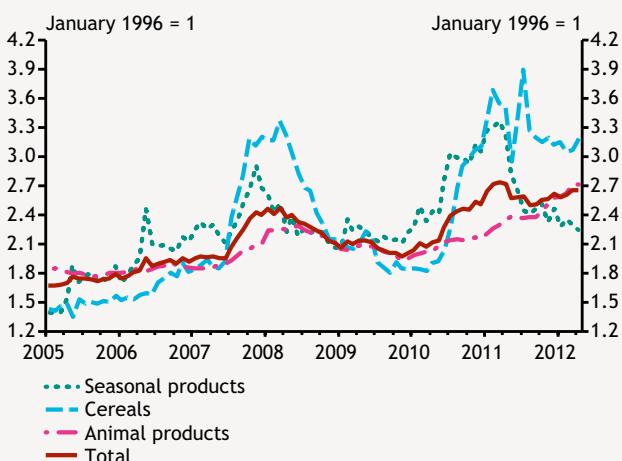


The gross average earnings of public sector employees declined by 0.5 per cent in 2012 Q1. Declining nominal wages mostly reflect the composition effect stemming from the increasing weight of public work programmes. In the case of wages excluding public employment a 2.7 per cent increase was observed, which is below inflation.

3.6.2 PRODUCER PRICES

In line with the deteriorating demand outlook, global commodity market prices have declined considerably in recent months. The agricultural harvest results in 2011, which were favourable at a regional level as well, also contributed to the fall in food prices. In certain market segments (egg and poultry meat), the introduction of stricter rules in animal husbandry resulted in a drastic increase in producer prices, despite the generally prevailing disinflationary effects. The temporary drop in supply caused a spectacular increase in producer prices in the domestic market as well (Chart 3-35).

Chart 3-35
Agricultural producer prices
(Jan. 2005–Apr. 2012)



Further declines in food prices may be limited by the unfavourable weather conditions observed so far this year. Looking ahead, weather may pose an upside risk to the developments in agricultural producer prices.

In line with the trends in world market price effects and in the exchange rate of the forint, the dynamics of industrial producer prices has remained practically unchanged in recent months.

3.6.3 CONSUMER PRICES

In 2012, the Q1 consumer price index stood at 5.6 per cent and core inflation was 5.1 per cent. A slight pick-up in April was followed by an adjustment in May both in inflation (5.3

Chart 3-36
Industrial producer prices
 (Jan. 2005–Apr. 2012)

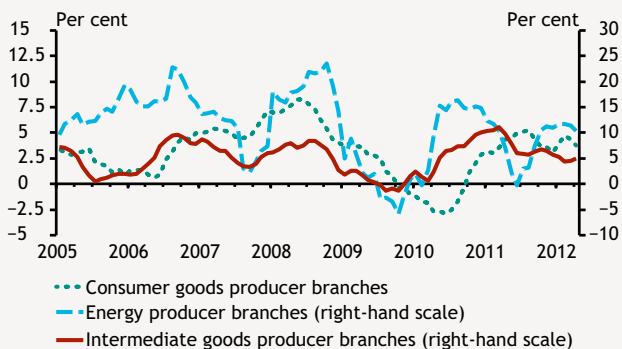


Chart 3-37
Consumer price index and core inflation
 (Jan. 2005–May 2012)

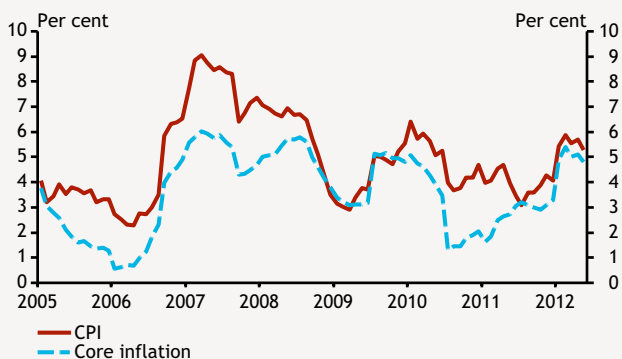
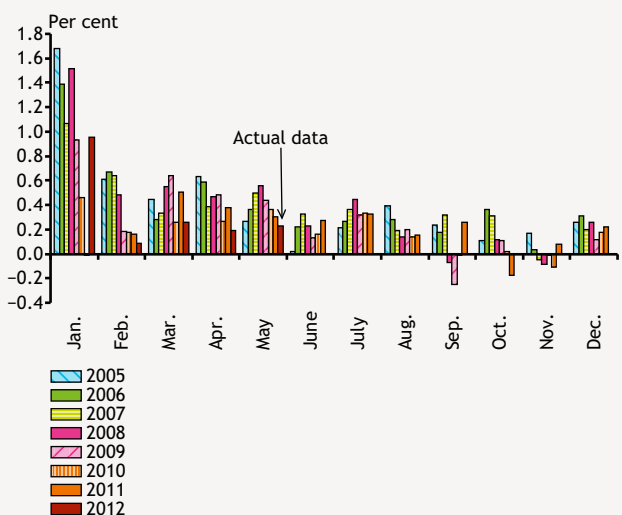


Chart 3-38
Market services inflation*
 (Jan. 2005–May 2012)



* Excluding indirect taxes.

per cent) and core inflation (4.8 per cent). In recent months, the inflation figures were slightly more favourable than our projection. The lower core inflation is mainly attributable to the decline in food inflation (Chart 3-37).

The indicators measuring developments in underlying inflation corrected back following the acceleration at the beginning of the year, and were around 3 per cent in recent months again, just as in 2011 (Chart 3-39). The strong adjustment observed in the developments in underlying inflation confirms that firms used the VAT increases at the beginning of the year as a coordinative opportunity to raise prices as well as for passing through the accumulated increase in their costs. In accordance with this behaviour, pricing decisions in the coming months may again be determined by subdued domestic demand.

Following the strong dynamics observed at the beginning of the year, partly stemming from repricings brought forward, *tradables* inflation declined. The prices of durable goods continued to decline, which may be explained by the fall in the prices of motor vehicles, which represent a significant weight in the consumer basket. Non-durable goods inflation shows the average dynamics observed in the past one year. The price decline in May was attributable to the fall in prices of flight tickets, which was a one-off effect.² Overall, the inflationary effects of the weak exchange rate continue to be subdued in the pricing of this group of products.

Since February, developments in the prices of *market services* were more favourable than the usual seasonality, which was also reflected in a decline in the annual index. The coordinated repricing related to the VAT increase and the subsequent adjustment were mainly observable in the behaviour of service providers (Chart 3-38).

Following the sharp rise early in the year, *processed food* inflation declined, and the price level stabilised in May. The slowdown in inflation covered a wide range of products. Within this group of products, meat and dairy price developments reflected processes that were observed internationally as well.

In recent months, the increase in the prices of *alcohol and tobacco products* exceeded the degree of the excise tax increase implemented at the beginning of the year. The price increase, exceeding the tax effect, indicates that the strong price competition typical in the tobacco market last year may have come to an end. Consequently, the rise in raw material prices may be reflected in a more pronounced manner in consumer prices as well.

² The CSO classifies flight tickets as a part of 'Other travels' items. The external component represents a significant weight in the prices of flight tickets, and thus it is sensitive to the exchange rate. Therefore, flight tickets are part of non-durable tradable goods in the MNB classification of the consumer price index.

Chart 3-39
Range of underlying inflation indicators
 (Jan. 2005–May 2012)

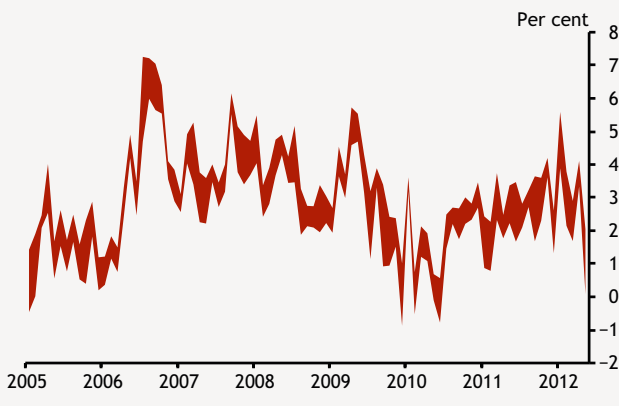


Chart 3-40
Households' inflation expectations
 (Jan. 2005–May 2012)

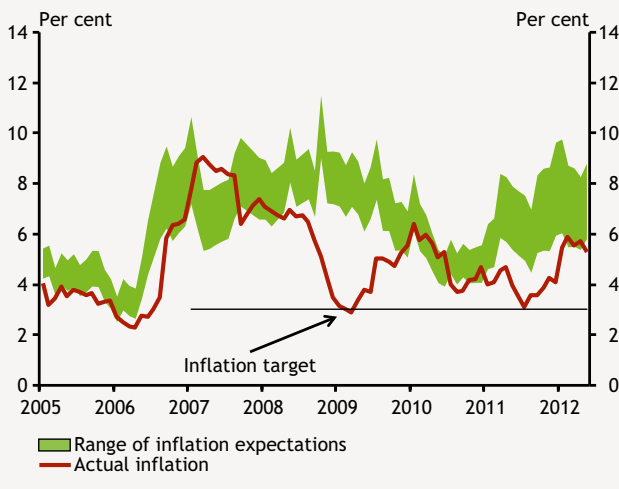
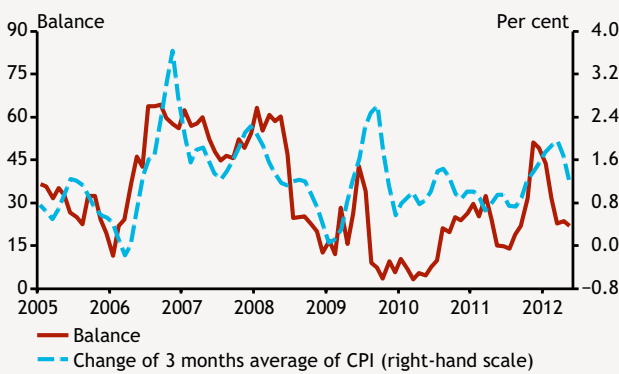


Chart 3-41
Expected changes in retail sales prices in the next 3 months* and actual inflation
 (Jan. 2005–May 2012)



* Balance is the difference between the proportion of corporations expecting price increase and price decrease.

Of the non-core inflation items, *unprocessed food* prices have declined slightly since the beginning of the year. Within this product group, the prices of products of animal origin increased, whereas the prices of products of plant origin decreased, in line with developments in agricultural producer prices. Following the movements in global oil prices and the shifts in the exchange rate, domestic *fuel prices* increased considerably until mid-April, before showing a gradual correction. Following the price increases at the beginning of the year, administered prices stagnated in line with our expectations.

3.6.4 INFLATION EXPECTATIONS

Following a strong increase until the beginning of the year, households' perceptions in connection with the expected inflation environment have declined, which may have been related to the moderating oil prices and the appreciation of the exchange rate. Despite the decline, households' inflation perceptions continue to be at a high level. Uncertainty of perceptions related to the expected inflation environment also increased in accordance with the strong volatility of inflation measured in recent quarters (Chart 3-40).

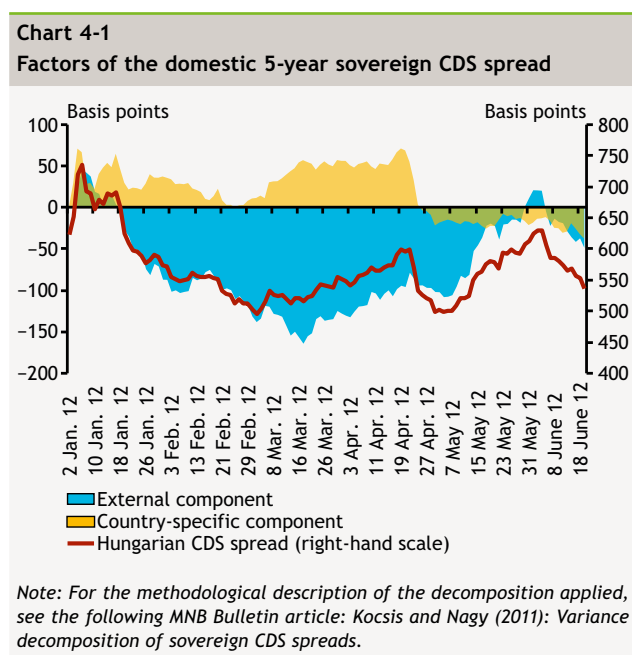
From the perspective of short-term developments in consumer prices, the expectations of the trade sector regarding sales prices are informative. After declining early in the year, expectations stagnated, which may indicate that in the coming months domestic inflation may be determined by the price-reducing effect of subdued domestic demand and by the fall in raw material costs (Chart 3-41).

4 Financial markets and interest rates

4.1 Domestic financial market developments

Despite strong fluctuations, the overall risk assessment of Hungary has not materially changed compared to the end of March 2012. The increasingly gloomy external investment environment, closely related to the concerns about Greece and Spain, moved Hungary's indicators in an unfavourable direction, and due to the higher sensitivity of the Hungarian indicators, these moves were more significant than those seen in other countries in the region. At the same time, however, developments in risk perceptions of country-specific origin were favourable on the whole, which was primarily attributable to the hopes related to the start of the EU-IMF negotiations. The two forces had different relative importance across markets, which led to differences in the total movement of various indicators. While the 5-year CDS spread was nearly unchanged, the forint appreciated against the euro and government securities yields and interbank markets declined for the period as a whole. The non-resident sector was a seller of the forint, however, it boosted its stock of forint government securities by nearly HUF 200 billion.

4.1.1 RISK ASSESSMENT OF HUNGARY

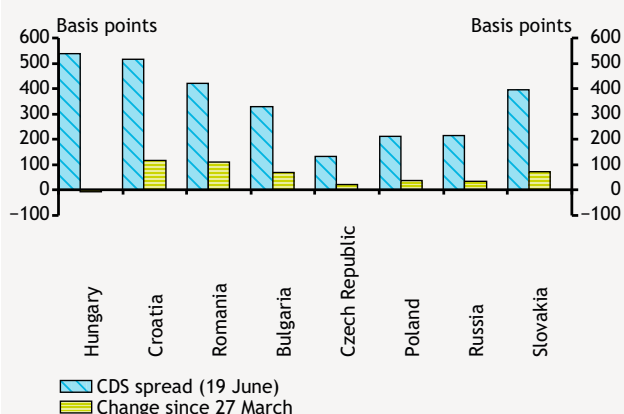


Over the past three months, the risk assessment of Hungary did not change. On the one hand, unfavourable external factors contributed to rises in risk indicators, which was exacerbated by the traditionally more sensitive domestic responses to global shocks in international comparison. On the other hand, these movements were countered by shifts of country-specific origin, whose direction was favourable (Chart 4-1).

The international environment was mainly determined by the negative newsflow on the euro area periphery countries. Uncertainty about the future of Greece within the euro area as well as the increase in risks related to the government debt and the banking sector of Spain resulted in a decline in global appetite for risk. The change in global financial market sentiment affected the risk indicators of Hungary more strongly than those of other countries in the region (Chart 4-2).

In contrast to the international effects, the overall impact of country-specific events was favourable. The Orbán-Barroso meeting, and the statements by international organisations and the Hungarian government had positive messages for investors in connection with the EU-IMF talks, although market analyses indicate that the timing of such continues to result in considerable uncertainties. Nevertheless, the increasingly optimistic investor attitude

Chart 4-2
Changes in five-year CDS spreads in the region since 27 Mar. 2012



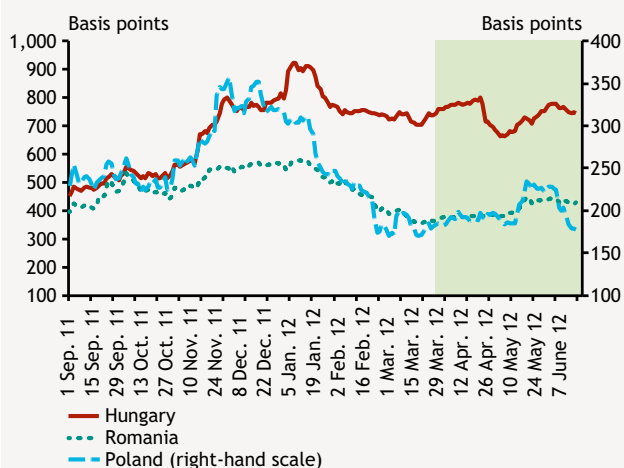
towards Hungary countered the unfavourable developments of international origin.

As a result of favourable country-specific effects, Hungary's five-year CDS spread outperformed in a regional comparison and thus the increase in the spread seen in the first half of the period was quickly corrected in recent weeks (Chart 4-3).

The significant difference between the spread on EUR-denominated Hungarian FX bonds compared to German yields and the CDS premium remained in place. The path of FX bond spreads was similar to that of the CDS spread in the past months.

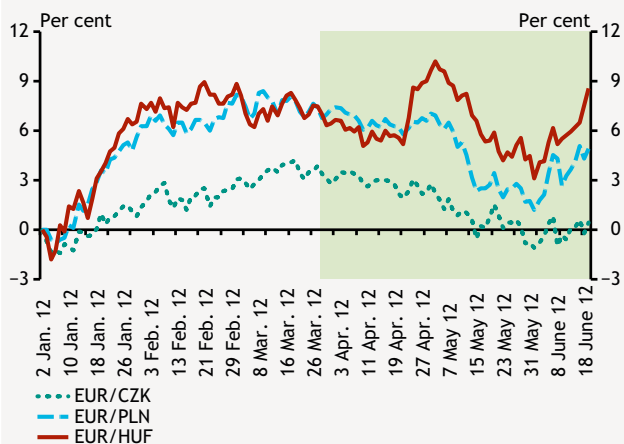
4.1.2 DEVELOPMENTS IN FOREIGN EXCHANGE MARKETS

Chart 4-3
Five-year euro-denominated currency bond spreads in the region



The trends observed in risk assessment were also reflected in movements in the EUR/HUF exchange rate. Until the end of April, the Hungarian currency depreciated slightly, in line with other currencies in the region. At the beginning of May, the forint appreciated by approximately 4 per cent as a result of favourable news related to the talks with the IMF. However, the strengthening proved to be temporary and by the end of May, in a worsening international environment, the exchange rate of the Hungarian currency exceeded the level of 300 against the euro again. After mid-June favourable news regarding the Central Bank Act resulted in an appreciation of the forint even relative to regional peers. With the correction seen in June, the exchange rate appreciated by around one and a half per cent relative to the date of the interest rate decision in March (Chart 4-4).

Chart 4-4
Foreign-exchange rates in the region



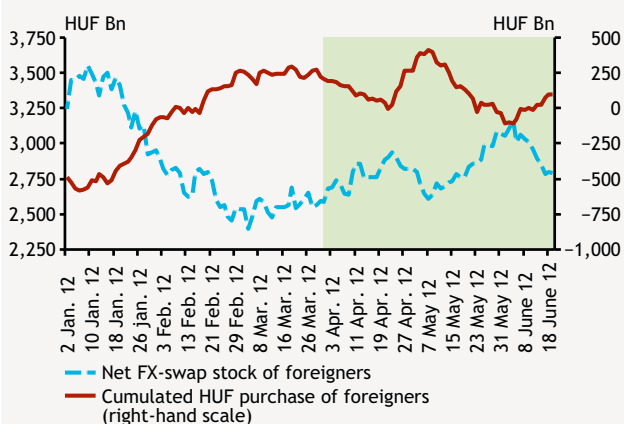
Note: Change compared to the beginning of the year. Positive values indicate the appreciation of the regional currency.

Based on FX market option quotations, the forward-looking risk indicators of Hungary deteriorated considerably. Reflecting increased uncertainty, the one-month implied volatility exceeded 20 per cent, and risk reversal spreads, which express the relative probability of a major depreciation, also rose.

The net position of the non-resident sector increased sharply in the FX swap market, which was almost entirely attributable to a decline in forint liquidity providing swap holdings. Part of forint liquidity received by non-residents from expiring FX swaps was sold in the spot market, another part of the liquidity was used to increase forint asset holdings (Chart 4-5).

FX swap market spreads declined in the period under review. At the overnight maturity, the spreads implied on the basis of EUR/HUF transactions were dispersed around 0

Chart 4-5
Non-residents' net forint-foreign-exchange swap holdings and cumulated forint purchases



Note: Non-residents' cumulated forint purchases: 4 January 2010 = 0.

Chart 4-6
Non-residents' government securities holdings

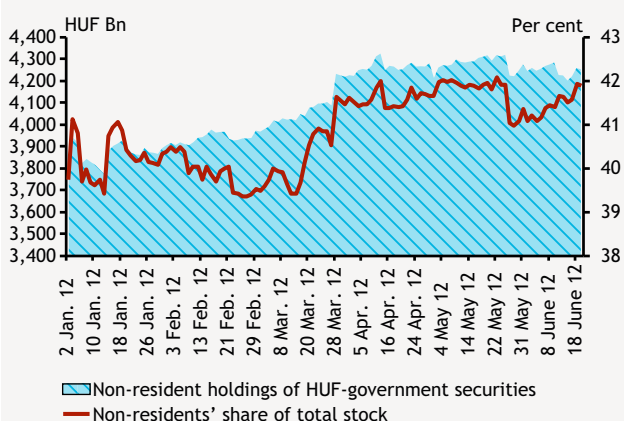
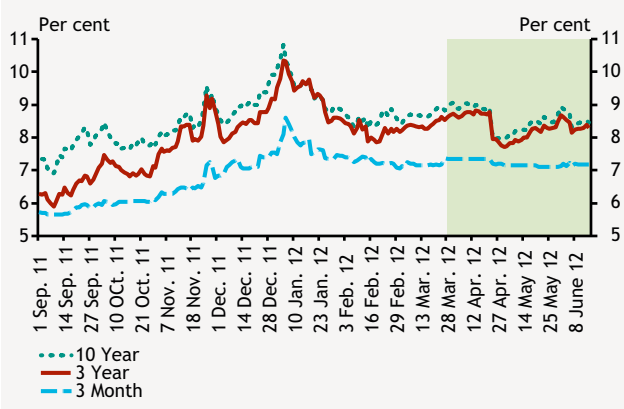


Chart 4-7
Changes in government securities market reference yields



basis point; and at three-month maturity they declined by some 50 basis points to around 100 basis points.

4.1.3 GOVERNMENT SECURITIES MARKET AND CHANGES IN YIELDS

In the past months, the primary government securities market was characterised by variations in investor interest. Compared to earlier periods, at the discount treasury bill and bond auctions the Government Debt Management Agency (ÁKK) raised the accepted quantities from the announced ones several times, although the increase in the extent of the coverage was smaller.

Since the end of March, the non-resident sector has increased its HUF-denominated government securities holdings by an additional nearly HUF 200 billion. At the end of the period, non-residents held treasury bills and bonds in a value of HUF 4,255 billion, which amounted to 41.9 per cent of the total market holdings (Chart 4-6).

Government securities market yields followed the path of risk indicators, and examining the period as a whole, yields declined, especially at longer maturities. Following the initial stagnation, at the end of April, an around 100 basis point fall took place in the reference yields over one year in a few days, and a decline of 20-30 basis points was observed at shorter maturities as well. Deteriorating sentiment neutralised the earlier declines during May. However, considering the period as a whole, government securities yields fell by 30-40 basis points at longer maturities as a result of the adjustment in early June.

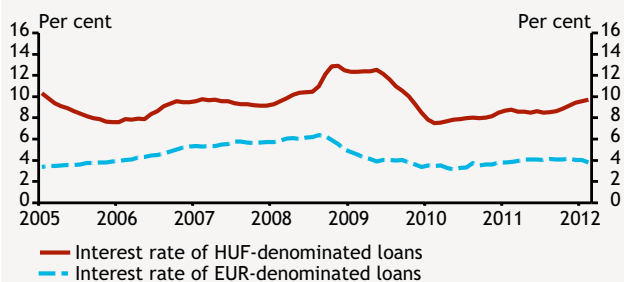
In the interbank market, very similar trends were observed at the longer maturities of the curve both in terms of dynamics and extents, although the decline in yield was more moderate for the period as a whole. Overall, in the money market the quotations of forward rate agreements, which reflect the interest rate expectations, decreased by around 10-20 basis points. The FRA curve is consistent with the current level of the base rate until the half-year starting horizon (Chart 4-7).

4.2 Credit conditions in the financial intermediary system

Banks' lending conditions tightened slightly further in early 2012. In the corporate segment, forint interest rates continued to increase, while euro interest rates declined modestly over the past months. Within the household segment, the APR (annual percentage rate of charge) on mortgage loans continued to increase, mostly in March. According to the latest lending survey, in the corporate and household segments the share of banks tightening their lending conditions declined markedly in 2012 Q1. However, the financial transaction tax announced after the survey increases the risk of persistently tight credit conditions. The calculated real interest rate of the one-year government securities yield continued to decline slightly.

Chart 4-8
Smoothed interest rates on corporate loans by denominations

(Mar. 2005–Apr. 2012)



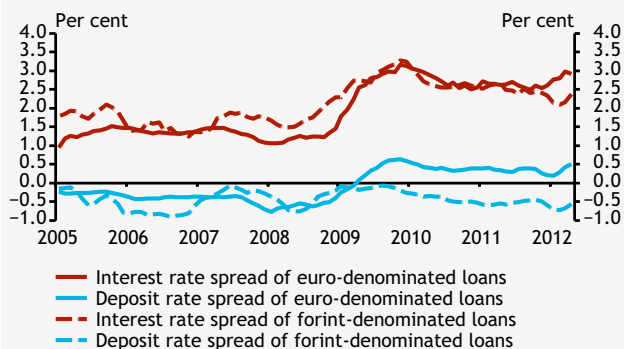
Note: The spread on the moving average of the three-month BUBOR and EURIBOR, respectively.

4.2.1 CREDIT CONDITIONS OF CORPORATE LOANS

Spreads on corporate forint and foreign currency denominated loans rose in the first months of the year. However, this represented an actual rise in the interest rate only in the case of the former. HUF interest rates on corporate loans increased to nearly 10 per cent by April (Chart 4-8), resulting in a 40 basis point rise in the spreads (Chart 4-9). By contrast, in the case of EUR-denominated loans, the interest rate level declined from 4 per cent to only 3.8 per cent, despite the significant decline in the reference interest rate (3-month EURIBOR), consistent with the increase in the interest rate spread from 2.5 percentage points to 3 percentage points (Chart 4-9).

Chart 4-9
Smoothed interest rate spreads on corporate loans by denominations

(Jan. 2005–Apr. 2012)



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

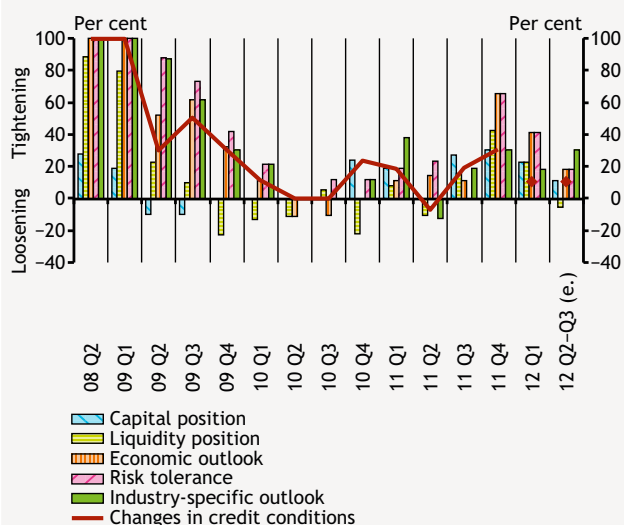
At the same time, aggregate interest rates do not provide a comprehensive picture of the dispersion of interest rate conditions across various company types. First, large companies are overrepresented due to the large loans sizes. Second, the range of corporate clients with access to credit has narrowed considerably due to tight non-price credit conditions. In risk-based pricing, clients with prime credit rating have access to loans at a more favourable price. The separate questionnaire of the April 2012 lending survey³ suggests that smaller enterprises can borrow at a much higher price, with an interest rate spread of some 4-7 percentage points, depending on their credit rating.

Based on the lending survey, credit conditions were reported to have tightened in the corporate segment, and this trend is expected to continue over the next half year as

³ http://english.mnb.hu/Root/Dokumentumtar/ENMNB/Penzugyi_stabilitas/hitelezesi_felmeres/mnben-hitelezesi-felmeres-201205/SLO_201205_ENG.pdf

Chart 4-10
Changes in credit conditions and factors contributing to changes in the corporate segment

(2008 H2–2012 Q3)

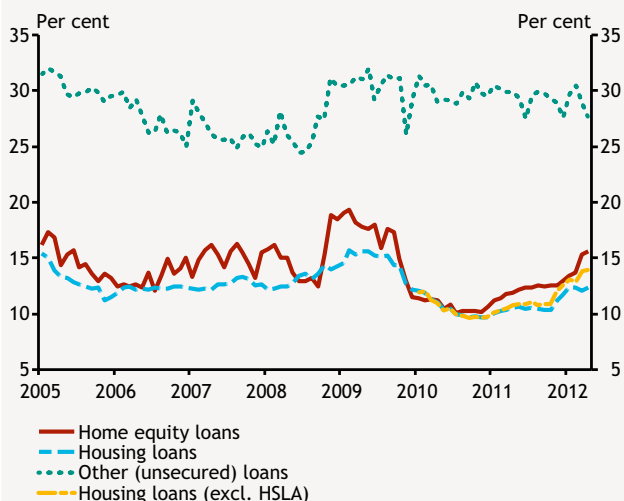


Note: Net percentage balance of respondents reporting tightening/easing, weighted by market share.

Source: MNB lending survey, based on the responses of banks.

Chart 4-11
Annual percentage rate (APR) on forint-based housing and consumer loans

(Jan. 2005–Apr. 2012)



Note: Forint-denominated mortgage loans played a marginal role before 2009. HSLA stands for home savings and loan associations.

well. At the same time, the share of tightening banks dropped sharply (Chart 4-10). Factors related to willingness to lend continues to be the main drivers of tightening of credit conditions, whereas compared to the previous survey there was a considerable decline in the share of banks that mentioned weakening capacity to lend (liquidity and capital position) as a factor contributing to the tightening.

In the previous survey, the majority of banks expected tightening for early 2012, but eventually, also as a result of the three-year ECB loans, much fewer banks changed their conditions in this direction. However, it is important to emphasise that tightening the persistence of the tight credit conditions evolved since the onset of the crisis, a risk that increased due to the financial transaction tax, may also result in significant risks and a considerable credit crunch in the real economy.

4.2.2 CREDIT CONDITIONS OF HOUSEHOLD LOANS

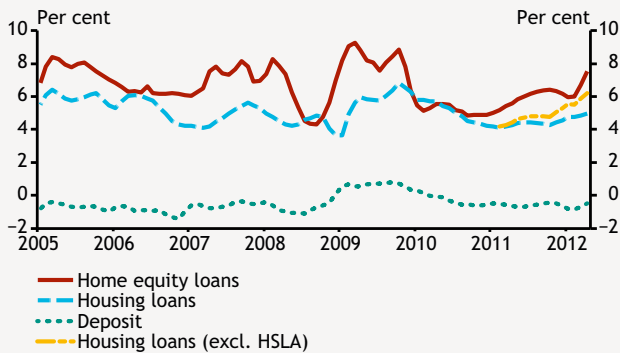
The increase in interest rates on household mortgage loans, which started at the time of the introduction of the early repayment programme, continued in the period between February and April 2012. Most of the increase took place in March, i.e. in the first month following the early repayment scheme and the related remortgaging. Although the annual percentage rate of charge (APR) on housing loans stagnated around 12.5 per cent, within new loans it was highly attributable to the significant weight of home savings and loan associations, offering special schemes. The aggregate interest rate on traditional commercial bank housing loans increased to 13.8 per cent by April (Chart 4-11). Consequently, the interest rate spread over the domestic interbank rate (BUBOR) reached 6 percentage points for housing loans (Chart 4-12). The APR on home equity loans rose from 13 per cent to 15.5 per cent (Chart 4-11), while the interest rate spread over the BUBOR increased from 6 percentage points to 7.5 percentage points.

The APR on unsecured consumer loans fell from around 30 per cent to 28 per cent (Chart 4-11). While the temporary declines seen on several occasions in earlier years were mainly attributable to special offers on higher purchase loans, this time it was the more than 2 percentage point drop in the interest rate on personal loans that caused the fall in rates. At the same time, the evaluation of data is rather difficult, as the decline in interest rates took place when new lending was at an all time low.⁴ Therefore, a composition effect may also have distorted interest rate

⁴ New lending amounted to HUF 5.7 billion in April 2012, while average monthly lending in personal loans amounted to HUF 7-8 billion in 2012 Q1 and in 2011 as well.

Chart 4-12
Interest rate spreads over the three-month BUBOR

(Jan. 2005–Apr. 2012)



Note: Spreads smoothed by the three-month moving average. HSLA stands for home savings and loan associations. Forint-based mortgage loans played a marginal role before 2009.

statistics, and thus it is likely that the lower interest rate spread of more creditworthy clients is reflected in the aggregate indicator.

The lending survey conducted in April 2012 shows that tightening continued in the credit conditions of the household segment in 2012 Q1, although the share of tightening banks was considerably lower relative to the previous survey (Chart 4-13). Banks expected easing over the next half year, and thus they projected some correction in the strict credit conditions which had evolved during the early repayment scheme. However, the financial transaction tax announced after the survey increases the risk that tight credit conditions may prevail for a longer period.

4.2.3 DEVELOPMENTS IN REAL INTEREST RATES

Chart 4-13
Changes in credit conditions in the household segment

(2005 H2–2012 Q3)



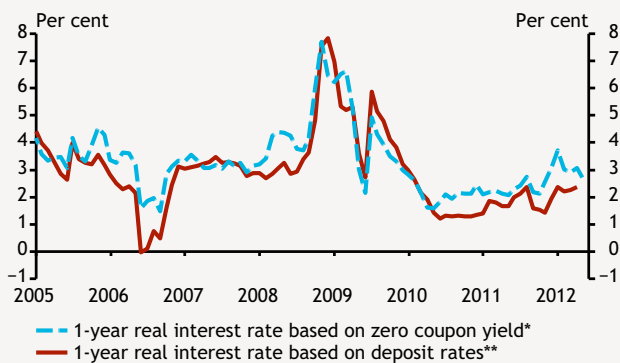
Note: Net percentage balance of respondents reporting tightening/easing, weighted by market share.

Source: MNB lending survey, based on the responses of banks.

The one-year real interest rate calculated on the basis of the government securities yield continued to decline in the three months since the previous Report. It declined from 3 per cent in February 2012 to 2.7 per cent by May (Chart 4-14), mainly reflecting the continued decline in the one-year government securities yield. The real interest rate calculated from deposit rates with maturities of up to one year remained practically unchanged around the level of 2.3 per cent in the period under review. These levels can be considered historically low; however, they reflect a tightening of interest rate conditions compared to the average of the last two years.

Chart 4-14
Changes in forward-looking real interest rates

(Jan. 2005–May 2012)



* 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.

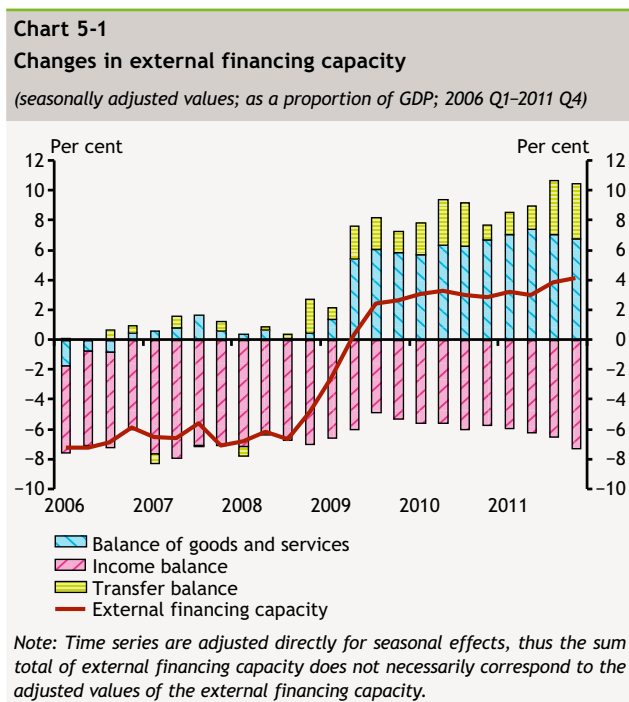
** Based on one-year forward-looking inflation expectations of analysts calculated by the MNB using bank deposit rates with maturity up to one year (corporate and household weighted) and the Reuters poll.

5 External position of the economy

5.1 External balance and financing

At the end of 2011, the external surplus of the Hungarian economy reached 4 per cent of GDP. Net exports improved the external balance improving effect of net exports declined slightly, while EU transfers increased in the second half of the year. The surplus on the balance of goods and services remained significant in the first months of 2012 as well. The early repayment programme, which was completed at the beginning of the year, reduced domestic agents' external debt, but the persistently weak forint exchange rate hindered a stronger adjustment of debt indicators. In early 2012, banks' lower fund outflows and the recurring increase in non-residents' government securities holdings may have slowed down a further decline in debt indicators.

5.1.1 CHANGES IN THE EXTERNAL BALANCE OF HUNGARY

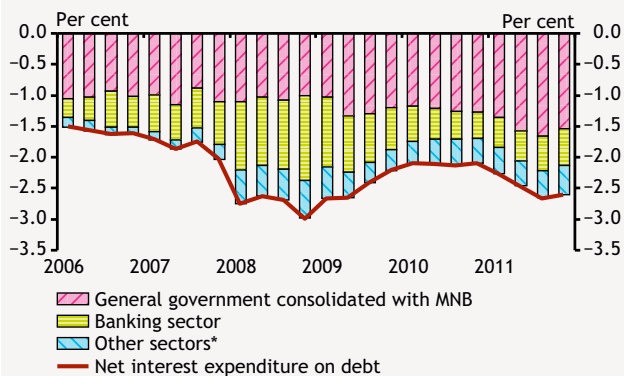


The external financing capacity of the Hungarian economy continues to be high. The combined current and capital account surplus was around 4 per cent of GDP in 2011 H2. Although foreign trade dynamics started to decelerate from the middle of last year, net exports, which amount to some 7 per cent of GDP, continue to be the strongest contributing factor to the external surplus. The beginning of this year was characterised by deterioration in the external environment. Nevertheless, based on foreign trade statistics, there was no major decline in the surplus of the balance of goods. The balance of transfers – which practically reflects the effect of EU transfers – added another 2 per cent to the external surplus. As regards the deficit on the income balance, the gradual increase following the initial phase of the crisis continued (Chart 5-1).

The deterioration in the interest balance, which is related to the external debt, stopped at the end of last year. At the same time, the risk premium, which is permanently high compared to pre-crisis levels, results in an increase in interest expenditures and a decline in the external surplus through the gradual repricing. During 2011, the interest expenditures of the state on its (foreign) forint and foreign-exchange bonds grew steadily. Presumably, the continuously increasing foreign government securities holdings and the repricing with a higher risk premium played a role in this. The deterioration in the interest balance of consolidated general government was mitigated by an increase in the interest income of the MNB earned on foreign exchange

Chart 5-2
External interest balance of selected sectors

(values as a proportion of GDP; 2006 Q1–2011 Q4)



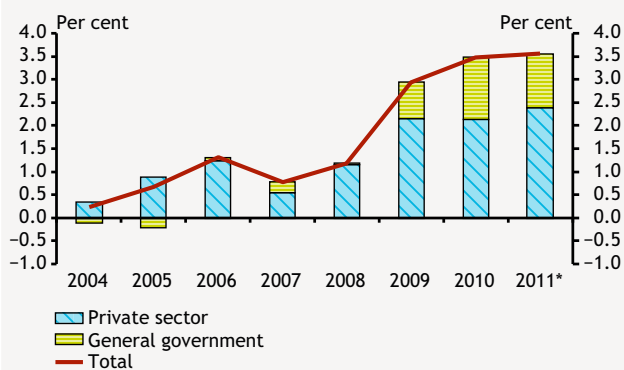
* Non-financial corporations, other financial corporations, households.

reserves. Risk premium indicators measuring the external assessment of Hungary declined slightly in 2012 H1. The level of the indicators, however, can still be considered very high, which may further increase the interest expenditures of Hungary to be paid abroad (Chart 5-2).

Examining 2011 as a whole, the funds received from the EU improved the financing capacity of domestic sectors and the external position to a similar extent as in 2010. Net EU transfer utilisation amounted to EUR 3.6 billion (3.5 per cent of GDP) in 2011. Although the sectoral distribution of transfers in 2011 is still based on estimates, most of the funds may have been transferred to non-financial corporations last year as well, according to balance of payments data (Chart 5-3).

Chart 5-3
Changes in net EU transfers

(values on an accrual basis, as a proportion of GDP)



* The distribution of EU transfers in 2011 according to sectors is based on estimates in the balance of payments. Actual data will be available from September 2012 on.

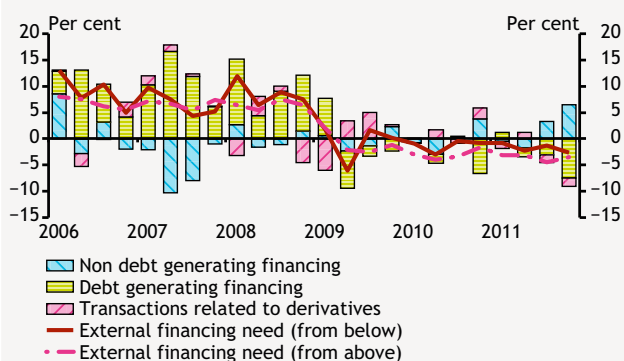
5.1.2 DEVELOPMENTS IN FINANCING

The external balance indicator, which is based on the financial account, indicated a similarly high surplus in 2011 Q4.⁵ The structure of external financing was characterised by a strengthening decline in debt at the end of the year. Meanwhile, both non-debt type FDI and portfolio type funds increased (Chart 5-4).

Partly during the balance sheet adjustment of the banking sector, which accelerated as a result of the early repayments, banks' external debt type liabilities (loans, bonds) declined considerably, i.e. by more than EUR 4 billion during the early repayment programme. The outflow of bank funds contributed to the reduction in gross external debt. As foreign exchange reserves also declined during the foreign exchange auctions related to the early repayment programme, the programme did not result in any change in the net external debt of the economy.

Chart 5-4
Structure of external financing*

(transactions as a proportion of GDP; 2006 Q1–2011 Q4)



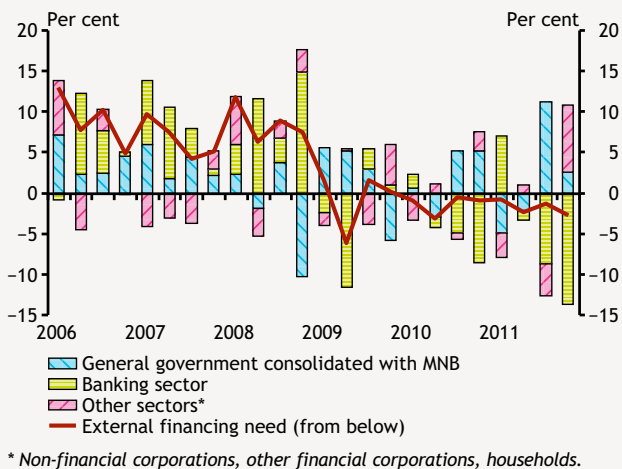
* The financing requirement calculated by a bottom-up method corresponds to the total of the external financing requirement and the BOP balance of statistical errors and residuals.

The end-year net inflow to the private sector excluding banks (in the chart: other sectors) can be considered significant, taking account of the period since the crisis. To a smaller extent, the inflow of funds is attributable to FDI type financing, which is increasing slightly. To a greater extent, it is attributable to the deleveraging of the foreign assets of the private sector (mainly a decline in corporate commercial credit claims and in households' currency reserves).

External debt indicators declined again at end-2011. The net external debt-to-GDP ratio declined below 50 per cent, while gross external debt amounted to 113 per cent. There was a major shift in foreign exchange rates important in terms of the external debt, which considerably hindered

⁵ The 'Errors and omissions', i.e. the error of the balance of payments, amounted to EUR 190 million in 2011 Q4. Examining 2011 as a whole, the error of the balance of payments was EUR 1.8 billion, which cannot be considered an outlier compared to the errors of previous years.

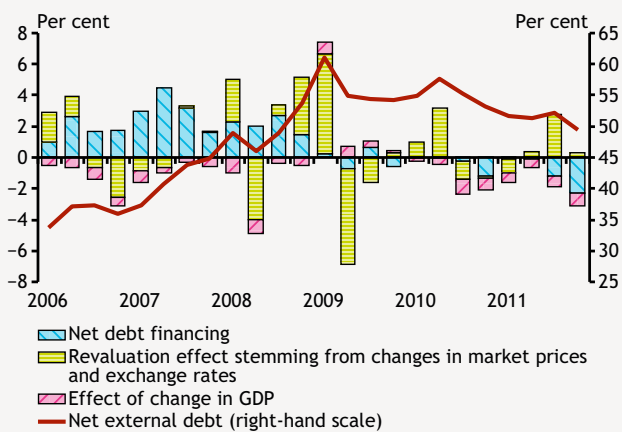
Chart 5-5
External financing according to sectors
(transactions as a proportion of GDP; 2006 Q1–2011 Q4)



the adjustment of gross external debt. At the same time, price and exchange rate movements in the market revalued the foreign exchange reserves as well, and, as a result, their overall effect on net external debt was not significant (Chart 5-5).

In early 2012 the outflow of bank funds decelerated, leading to a slower decline in external debt indicators. In addition, the recurring increase in government securities held by non-residents also implies more restrained external debt reduction. At the same time, the revaluation effects, i.e. appreciation of the exchange rate of the forint compared to the levels observed at the end of last year, may have contributed to the adjustment of external debt indicators. Repayment of the EU-IMF loans received earlier started at the end of last year and continues this year. This by itself also contributes to the reduction of the gross external debt of Hungary, but does not result in a change in the country's net external debt (as foreign exchange reserves also decline by a similar amount) (Chart 5-6).

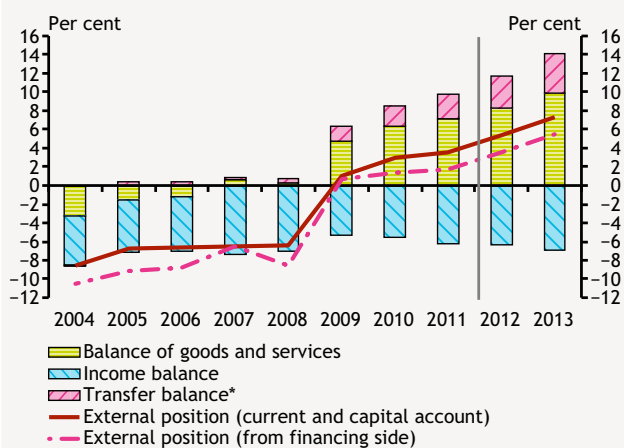
Chart 5-6
Breakdown of changes in net external debt
(values as a proportion of GDP; 2006 Q1–2011 Q4)



5.2 Forecast for Hungary's external balance position

The improvement in the external balance position of Hungary is expected to continue. Subdued domestic demand and the related low import demand will maintain the surplus on the external balance at a high level over the entire forecast period. Starting from the second half of the year, the expected upswing in export performance may contribute to an increase in the surplus on the external balance again. An increase in external financing capacity may take place in parallel with an improvement in the financial position of general government and the corporate sector as well as with a decline in household savings. Households may offset the impact on consumption of the government measures announced recently by partly reducing their savings. The downturn in investment may be even greater than previously expected; in parallel with this, the financing capacity of the corporate sector may continue to increase. The correction of Hungary's external debt indicator may continue in line with the further increase in external financing capacity. Net external debt may decrease significantly by the end of the forecast horizon, hence, the level of it will not be an outlier even in regional comparison.

Chart 5-7
Changes in external financing capacity
(as a proportion of GDP; 2004–2013)



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

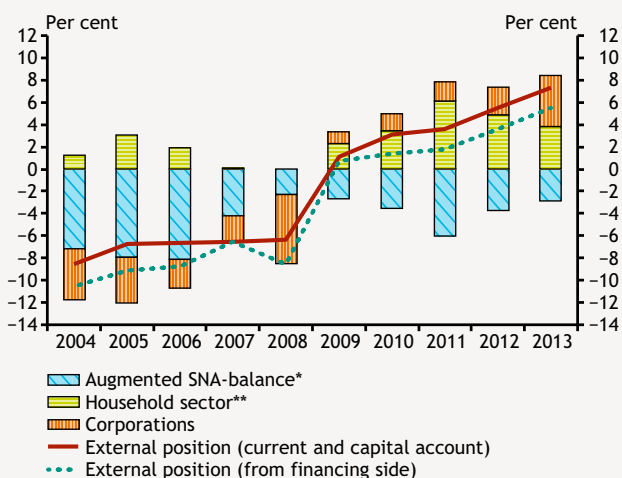
Hungary's external balance position may continue to improve markedly, despite the unfavourable external environment in the short run. The external financing capacity of the economy, which is the sum of the current and capital accounts, may amount to around 5 per cent of GDP in 2012 and around 7 per cent of GDP in 2013. The contractionary impact of government measures on domestic demand may keep the surplus on the external balance at a high level via subdued imports. There may be an upswing in the export performance of the economy again starting from 2012 H2, as a result of external demand factors and the expected contribution of automotive exports (Chart 5-7).

External and domestic demand conditions may also contribute to the high external financing capacity through developments in incomes transferred abroad. Material increases in the profit of foreign-owned companies and in the deficit on the income balance are only expected from 2013 on.

Continued improvement in the external balance may materialise in parallel with an improvement in the financial position of corporations and general government as well as gradually declining but still considerable savings of households.

As a result of the government measures announced recently, the financing requirement of general government will decline, and at the same time the income position of companies and households will deteriorate. Households

Chart 5-8
Changes in financing capacities of sectors
 (as a proportion of GDP; 2004 - 2013)

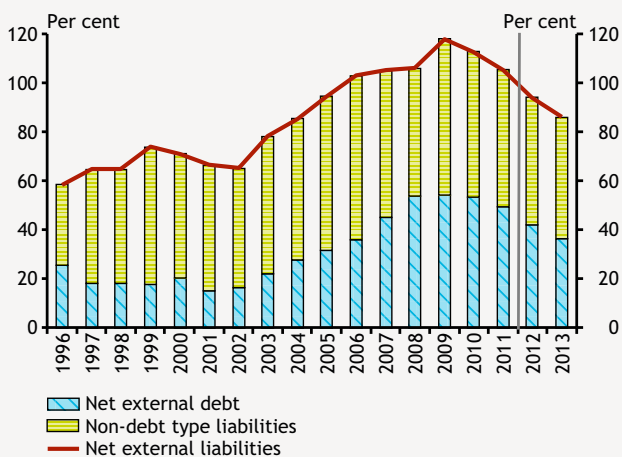


* In addition to the central government, the augmented general government includes local governments, ÁPV Ltd., institutions discharging quasi-fiscal duties (MÁV, BKV), the MNB and authorities implementing capital projects initiated and controlled by the government but formally implemented under PPP schemes. The augmented SNA deficit takes into account private pension savings.
 ** Net financing capacity of households consistent with the SNA deficit does not contain private pension savings. The official financing capacity (shown in the financial account) is different from the data in the chart.

may partly offset the effect of the decline in real income by reducing their savings in order to smooth their consumption path as best as possible. Accordingly, household savings may gradually decline over the forecast horizon, but may still amount to as much as 4 per cent of GDP in 2013 (Chart 5-8). Declining household savings, which at the same time still remain at a high level, may be reflected in the current account surplus through the continued fall in consumption and the low import demand of the economy. Meanwhile, developments in corporate investment in the coming two years may be even less favourable than previously expected, which may also reduce import demand. This may also be reflected in a further increase in the financing capacity of the corporate sector. The expected increase in the utilisation of EU transfers will also improve the financial position of companies and the external balance through the balance of transfers.

A further increase in the external balance, i.e. an increase in the savings of domestic sectors, also means a continued net outflow of external funds from the economy. Accordingly, the improvement in the external balance, which is partly connected to the unfavourable macro developments, is reflected in the adjustment of the external debt indicators. By the end of the forecast horizon, net external debt may decrease below 40 per cent of GDP. According to end-of-2011 data, this level is not deemed to be an outlier even in regional comparison (Chart 5-9).

Chart 5-9
Net external debt and debt indicators
 (as a proportion of GDP; 1996-2013)



Note: In our calculations we suppose the HUF exchange rate to remain unchanged (fixed at the average exchange rate of the past 3 months).

5.3 Fiscal developments

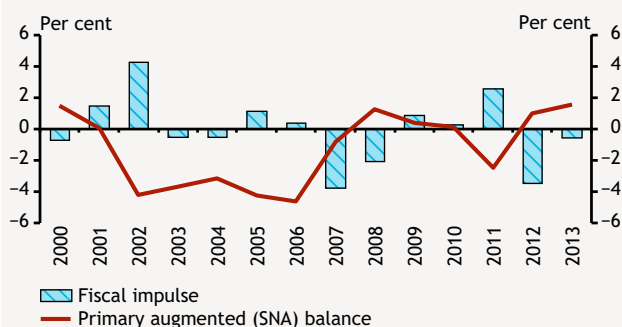
As a result of the deficit reducing measures announced in recent months for 2012 and 2013, the fiscal policy's contribution to the aggregate demand becomes more limited. The significant fiscal stimulus of 2.6 per cent of GDP in 2011 is followed by a contraction of 3.5 per cent of GDP (assuming the cancellation of free reserves) in 2012 and a further 0.6 per cent contraction may take place in 2013. Compared to our earlier forecast the negative fiscal impulse has increased in absolute value in 2012 and 2013, mainly due to the revenue-raising measures of the Széll Kálmán Plan 2.0.

The strong negative fiscal impulse reflected in the aggregate demand will help reducing inflation in 2012. However, certain elements of the fiscal tightening (especially the newly introduced indirect taxes levied on the corporate sector) may increase prices.

ESA deficit forecasts of 2.7 and 2.4 per cent of GDP (excluding free fiscal reserves) for 2012 and 2013 are the base assumptions for the calculation of the fiscal impact directly from significantly improving augmented SNA balance. Gradually decreasing deficit and debt path is expected over the forecast horizon. According to these figures the deficit is likely to remain below 3 per cent of GDP in both years, although our deficit forecasts will slightly exceed the deficit targets of the government over the forecast horizon.

5.3.1 FISCAL DEMAND EFFECT⁶

Chart 5-10
Historic development of the fiscal impulse and the primary SNA balance
(as a percentage of GDP)



Note: 1. The fiscal impulse is the year-on-year change in the primary SNA balance. 2. Assuming the cancellation of central free reserves in 2012-2013.

Following the fiscal stimulus in 2011, a greater tightening equalling 3.5 per cent of GDP is likely to be implemented in 2012. Moreover, in 2013 private sectors may face a further negative fiscal demand effect of 0.6 percentage point (Chart 5-10).⁷

Based on data available for the first five months of this year, the tightening can be observed both in terms of significant revenue increase due to the implemented tax measures and in terms of stricter government control of the expenditures. However, the growth environment being more unfavourable than expected earlier has already affected revenues.

In 2011, one-off effects, i.e. the disbursement of the pension fund real yields and the VAT refund due to the decision of the European Court of Justice represented a

⁶ Fiscal impulse, i.e. the demand effect generated by the budget, indicates how fiscal measures, developments and automatic stabilizers affect the income position of other sectors. The fiscal impulse is quantified by the change in the augmented primary SNA balance. The SNA balance is the augmented accrual-based balance indicator of the general government that also takes account of the quasi-fiscal activity. The primary balance does not include the interest expenditures and the effect of the change in the financial position of MNB. Upon quantifying the fiscal demand effect, the cancellation of the free reserves of the budget is assumed.

⁷ The changes in the fiscal impulse are presented in a structure complying with the national accounts released by the Central Statistical Office. However, because of the adjustments applied in the augmented SNA balance, our figures may differ from the data released by the CSO.

Table 5-1
Changes in the fiscal impulse using CSO methodology
(as a percentage of GDP)

	2011	2012	2013
I. Fiscal impulse total (1+2+3)	2.6	-3.5	-0.6
1) Impulse towards households	2.1	-1.0	-0.8
1.1 Transfer of private pension yields	0.8	-0.8	0.0
1.2 Other measures and impulse effects	1.3	-0.2	-0.8
2) Net indirect taxes*	0.2	-1.1	-0.7
3) Other (corporate and external sectors, government purchases)	0.2	-1.4	1.0
3.1 VAT refund to companies	0.7	-0.7	0.0
3.2 Other unallocable items	-0.5	-0.6	1.0
II. One-off effects total (1.1+3.1)	1.5	-1.5	0.0

* Net indirect taxes comprise factors that shape the GDP deflator through the difference between market prices and basic prices, and can significantly affect inflation in economic sense as well. The revenue loss stemming from the elimination of specific sectoral taxes in 2013 is accounted for within this category.

fiscal stimulus amounting to 1.5 per cent of GDP. This is reversed in 2012.⁸ This year a further tightening of 2 percent of GDP is caused by the government measures, including the increase of VAT and excise duty and the tightened control of the expenditures (Table 5-1).

The positive demand effect in 2011 primarily improved the households' income position (disbursement of real yield, reduced effective PIT rate). In contrast, the strong tightening implemented in 2012 appears in the net indirect taxes⁹ and in the various expenditure items. In 2013 the measures will mostly reduce household disposable income: partly withdrawal of wage compensation and moderation of cash transfers. The rise in indirect taxes exceeds both the improvement in the position of the corporate sector due to the halved bank tax and the increased intermediate consumption and capital expenditure in the 2013 budget bill compared to the previous forecast round.¹⁰

5.3.2 FISCAL POSITION AND OUTLOOK

As a result of the joint effect of balance improving measures and the worsening macroeconomic path, with the cancellation of the free fiscal reserves, an ESA deficit of 2.7 per cent is expected for 2012. Based on our projection, in 2013 the deficit may improve by a further 0.3 percentage

⁸ Within the one-off effects, 0.8 per cent of GDP is represented by the private pension fund real yields paid to households last year. A further 0.7 percentage point impulse effect originates from the fact that this year there will be no VAT refund due to the decision of the European Court of Justice to the benefit of the corporate sector.

⁹ The most important measures: increasing of the VAT rate and excise duties containing the net expenditures of the pharmaceutical budget. Expenditure was cut in case of intermediate consumption, net investment expenditure, subsidies and social transfers (decrease in social transfers is higher than the phasing out of one-off spending).

¹⁰ Most of the effect of the measures put forward in the Széll Kálmán Plan 2.0 appears in indirect taxes.

points, which will mainly reflect the result of the planned revenue increasing measures.¹¹

The reduction in our expected 2012 ESA deficit compared to the previous forecast is the result of the introduction of the telecommunication tax, the assumed implementation of the expenditure cancellation announced at end-December 2011 and one-off effects of the capital transfer received due to the return of private pension fund members to the public pension system. These effects are partly offset by the wage adjustment of public health care employees.

The considerable fall in our 2013 deficit forecast is caused by the measures of the Széll Kálmán Plan 2.0, which will improve the ESA balance by a total of 1.7 percent of GDP compared to March.¹² There will be a significant increase in primary expenditures compared to our March forecast: the increase in pension and pension-type social expenditures, the higher level of public sector wages (appropriation of the public work programme and teachers' career model) and the deterioration in the interest balance will add a total 0.8 percentage points to the deficit. The balance of local governments may also be less favourable than our earlier expectation as the withdrawal of funds from the sector exceeds the decline in financing requirement stemming from centralization of their tasks.¹³

According to our projection, the budget deficit may remain below the 3 per cent threshold in 2012 and 2013. Assuming the cancellation of free reserves, both the 2.2 per cent target for the 2012 ESA deficit and the 2.5 per cent target for 2013 may be slightly exceeded (Table 5-2).

Table 5-2
General government balance indicators
(as a percentage of GDP)

	2011	2012	2013
ESA balance*	4.2	-2.7	-2.4
Augmented SNA balance	-6.0	-3.0	-2.7
Cyclical component	-0.5	-0.7	-0.7
Cyclically-adjusted augmented SNA balance	-5.5	-2.3	-2.0

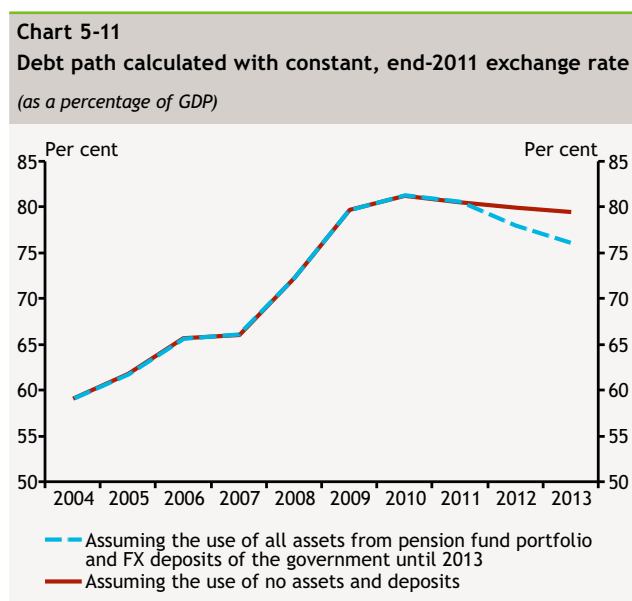
* Assuming the complete cancellation of the free central reserves for all balance indicators in the table.

¹¹ In our 2013 forecast, in addition to the inclusion of the measures of the Széll Kálmán Plan 2.0 and the expenditure cancellation announced in December 2011, we assumed that the sector-specific extra taxes will be terminated, the special tax on financial institutions will be halved and the obligation of insurance corporations to pay this type of tax will be cancelled. Moreover, it was also assumed that the personal income tax will not include at all the so-called half super gross component and that a new reduction in contribution can be applied after employees with low education, while the social contribution tax allowance due to the wage compensation will decline, and that the simplified entrepreneurial tax will not be terminated, but will continue to exist in line with the regulation prevailing in 2012.

¹² The 1.7 percentage points are calculated in net terms; more exactly, it was adjusted for the amount of the direct tax revenue shortfall and the investment and maintenance costs arising in relation with implementation. The fiscal effect of the financial transaction duty was quantified on the basis of the relevant bill.

¹³ A shift has taken place in the balance of local governments, which may worsen by 0.2 per cent of GDP in 2013 compared to the previous forecast. At general government level, the planned reallocation of tasks and funds will result in minor savings through the balance of the local government sector.

Mainly as a result of the measures, both the SNA deficit path and the *cyclically adjusted augmented balance* will considerably improve over the forecast horizon. Assuming a complete cancellation of the free reserves included in the budget, the cyclically adjusted medium-term balance shows a nearly 2.0 per cent of GDP deficit at the end of the forecast period. Accordingly, although without other measures it is possible to ensure a below 3 per cent deficit in the medium term, this would still exceed the 1.5 per cent threshold of the medium-term objective (MTO) required by the European Commission.



Based on our forecast, the government debt is expected to decline in 2012 and 2013, but the pace of this decline is determined by the size of the deficit, the mode of debt financing and the exchange rate of the forint. In case the budget would maintain its available financing reserves (foreign exchange deposit, portfolio originating from private pension funds), a slight decline, annually 0.4-0.7 percentage point decline may take place (assuming unchanged exchange rate). Giving up the financing reserve may result in an additional decline of some 3 percentage points in the debt ratio.¹⁴

Given the high proportion of foreign exchange debt, the debt ratio is very sensitive to the exchange rate of the forint. Compared to the level of EUR/HUF 311 at end-2011, each appreciation/depreciation of the exchange rate by HUF 10 reduces/increases the debt ratio by 1.3 per cent of GDP (Chart 5-11).

¹⁴ The forecast took account of the withdrawal of the government securities in the portfolio of those who return from private pension funds to the public pension system in 2012 and the debt increasing effect of the Student Loan II scheme.

6 Special topic

6.1 Macroeconomic effects of the measures in the Széll Kálmán Plan 2.0 in our forecast

The government made its new convergence programme named Széll Kálmán Plan 2.0 public in April 2012. The announced measures aim at a major fiscal balance improvement starting from 2012. Most of the improvement is provided by new taxes, of which the government expects additional revenues amounting to nearly 2 per cent of GDP by 2014. Over the period relevant for monetary policy, the measures may have considerable effects on inflation and growth; therefore, they are of crucial importance in our current forecast as well. The analysis below discusses the inflationary and growth effects expected of the new measures over the forecast horizon and over the longer term.

6.1.1 THE MAIN MEASURES

The balance improvement expected by the Széll Kálmán Plan 2.0 is mostly provided by new indirect taxes. Taxes on telecommunication services and bank transactions as well as a considerable increase in road tolls account for most of the revenues. Indirect taxes typically have a price level

Table 6-1
Fiscal effect of the new measures of the Széll Kálmán Plan 2.0*
(as a percentage of GDP)

	2012	2013
Reduction of expenditures of budgetary institutions, chapter- and other centrally administered appropriations	0,2	0,1
Reduction of pharmaceutical subsidies	0,0	0,1
Telecommunication services tax	0,1	0,2
Electronic road toll	-	0,2
Elimination of central subsidies to the Research and Technological Innovation Fund	-	0,1
Financial transaction tax	-	0,9
Merging and transforming income tax on energy providers	-	0,1
Insurance tax	-	0,2
Total	0,3	2,0

* The table contains the additional gross impact of new measures accounted for in the June inflation report, as a percentage of GDP. In harmony with the budgetary data available to us until 20th June, in the case of financial transaction tax we have calculated with a revenue of 280 billion forints.

increasing effect, as they are passed on by producers to consumers. In addition, the reduction of pharmaceutical subsidies may also result in price increases.

The corporate sector bears additional burdens. The rate of the Robin Hood tax paid by energy supply companies will increase and the group of affected firms will broaden; in addition, the amount of state subsidies provided for research and development will decline considerably. Finally, the demand created by the state directly will also fall, mainly as a result of the reduction of material expenditures.

The expected macroeconomic consequences of the measures are difficult to assess. The new taxes to be introduced are relatively rare in international practice; therefore, we can rely on little past experience. It is also difficult to assess the expected behavioural effects. The financial transaction duty, considered as the largest item, is surrounded by especially high uncertainty. Negotiations are still under way; thus the final tax burden might change considerably compared to our current calculations. Based on experiences of Latin-American countries that applied similar taxes, this tax may result in a major welfare loss.¹⁵ Firstly, through deterioration in banks' profitability, the tax may also result in a further narrowing of credit supply. Secondly, the tax base may further be eroded as economic agents may use less domestic financial services due to, for example, increased cash use or increased recourse to the services of foreign banks. Strong behavioural effects are more likely if the tax burden is higher than the adjustment costs (e.g. the cost of substituting Hungarian bank accounts with foreign ones) for a wide range of taxpayers. Thus, a lower tax rate and a wider tax base may lead to smaller behavioural effects and macroeconomic costs. Similar behavioural effects cannot be excluded in the case of the other types of taxes either, for example through the spreading of Internet-based phone calls or international transit traffic that avoids the highway network of Hungary.

6.1.2 INFLATIONARY EFFECTS

The expected macroeconomic consequences mainly depend on the evaluation of the new indirect taxes. The taxes burden economic transactions that are conducted by households directly (e.g. bank transfers) or that take place between companies. Our forecast assumes that the tax content of the services directly used by households will directly increase the consumer price level. At the same time, the taxes imposed on corporate transactions are

¹⁵ The taxes amounted to 0.3-1.9 per cent of GDP in the countries under review, and added 15-150 basis points to bank transaction costs. In the years following introduction, the tax bases fell gradually, but by a total 30-50 per cent. However, the expected macroeconomic effect is not linear, and depends on the types of transactions the tax is imposed on. For a summary of experiences see, e.g. MATHESON, T. (2011), 'Taxing Financial Transactions: Issues and Evidence', *IMF Working Paper*, WP/11/54.

considered as a cost shock that impairs corporate profitability, and therefore it triggers adjustment. This adjustment may result not only in an increase in underlying inflation developments, but also in a fall in investment and labour demand.

According to economic theory, the taxes imposed on the transactions of economic agents eventually burden consumption, similarly to the VAT. Therefore, theoretically we could assume that the taxes will result in a similar increase in the price level as in the case of the VAT. On the basis of earlier experience related to the pass-through of the VAT, this would result in a 3 per cent increase in the price level. However, the picture is more refined, for two reasons.

Firstly, as producers cannot refund the tax, the burden on final consumers greatly depends on the length of production chains, the market structure and the price elasticity of demand in these market segments. In addition, the tax burden of domestic consumers also depends on what proportion of the transactions conducted by the companies operating in Hungary is related to the satisfaction of domestic demand or exports (or to the transit traffic in the case of the road toll).

Secondly, the price level increasing effect of taxes does not only add to the tax content of prices, but it is also reflected in 'net' inflation, excluding taxes. Theoretically, the pass-through of the tax can be observed in the transactions conducted by households; accordingly, an increase in the tax content is expected here.¹⁶ However, the tax content of transactions among producers cannot be statistically filtered from the price level, because producers cannot refund these taxes, so no information is available on the extent of pass-through between intermediate producers. Accordingly, economic agents may perceive the growth in production costs as an increase in underlying inflation developments, which may influence their future pricing and waging decisions. From this point of view, taxes imposed on production have similar effects to other cost shocks, for example oil price increases.

Based on the above considerations, taxes on inter-company transactions can be considered as cost shocks that gradually feed through into the price level excluding taxes, and may thus generate second-round inflationary effects. In addition to raising prices, companies may try to restore their profitability through other channels as well: they may restrain their investment activity and improve their

¹⁶ At the same time, measurement is hampered by the fact that consumers typically subscribe to service packages instead of conducting individual transactions. Therefore, it is conceivable that service providers will shift the taxes on in the subscription fees and not in the prices of individual transactions.

operational efficiency, which may lead to lower labour demand and wages. Finally, it is conceivable that the profitability of certain companies declines permanently as a result of the strong market competition. The importance of individual adjustment channels varies depending on company characteristics. For example, exporters may be price takers in the competitive world market, thus they may be unable to pass the taxes on to their foreign buyers. Hence, real economy adjustment may be stronger in their case. We assumed in our forecast that the corporate sector uses all the possible adjustment channels; therefore, the tax burden is spread across the economy, resulting in higher inflation and lower real economic activity simultaneously.

In our March forecast we expected that following the fading out of the price level increasing effect of the VAT increase in 2012 inflation might reach the 3 per cent target in early 2013. In our current forecast we expect above-target inflation for 2013 as well, which is mainly the consequence of the new tax measures. We estimate that the taxes burdening the goods and services purchased by households will directly increase the consumer price level by approximately 0.5 per cent. In addition, the measures increasing firms' costs would add a further 0.8 to the price level in 2013 and 2014. However, this effect is mitigated in our forecast by the fall in demand and the systematic reaction of monetary policy to higher underlying inflation.

6.1.3 GROWTH EFFECTS

The Széll Kálmán Plan 2.0 affects growth through several channels. Demand directly created by the state declines; growing inflation erodes real incomes and thus it reduces consumption. Finally, corporate profitability also declines with the introduction of the new taxes, prompting companies to reduce their investment and labour demand. Another channel of real economy effects is that the financial transaction duty may reduce the profitability of the banking sector further: firstly because banks cannot fully shift the new duty on to customers, and secondly because turnover may fall considerably in the case of certain money market activities that are easy to relocate abroad or that have low profitability. At the cut-off date of this Report it remained unclear which money market transactions would be burdened by the duty; therefore, these effects could not be assessed. In any case, the outflow of foreign funds may increase due to a permanent deterioration in the profitability of the banking sector, which may lead to a further tightening of credit supply. The lack of credit hinders investment activity, and thus may result in an even slower expansion of production capacities.

The assessment of growth effects is rendered difficult by the fact that the taxes to be introduced are relatively rare, and we have little knowledge of the expected behavioural effects. At the same time, based on earlier empirical research, it is possible to estimate the macro level effects of the package of measures. The literature offers a wide range of views on the real economy effects of fiscal policy. However, there appears a consensus that in the near term tax changes have a smaller effect on economic growth than expenditure side measures, whereas over the longer term expenditure side adjustment packages result in more favourable macroeconomic performance. Empirical research reveals an approximately 0.2-0.3 per cent decline in GDP as a result of a tax increase corresponding to 1 per cent of GDP, while an expenditure reduction of the same extent may reduce output by 0.7-0.9 per cent.¹⁷ At the same time, in an environment of weak business activity and scarce credit, the liquidity constraints of households and corporations are stricter. Moreover, the ability and willingness to lend of the banking sector may decline further as a result of the measures. Therefore, economic agents with liquidity constraints may react to changes in their incomes stronger in the near term.¹⁸

We reduced our expectation for compound economic growth in 2012 and 2013 by 1.7 per cent compared to our March forecast. While the deterioration in this year's prospects is mainly explained the weakness in international economic activity, the slower growth in 2013 is primarily the consequence of the new fiscal measures in our forecast.

In addition to demand-side effects, the measures may also affect the supply potential of the economy, which influences longer-term growth prospects. The supply effects mainly stem from the fact that the taxes raise the user cost of capital (i.e. the gross yield expected of investments), and companies react to it by reducing their capital stock. This effect may be partly or even fully offset by a possible decline in external financing costs due to an improvement in fiscal sustainability. At present, even the magnitude of this latter effect is difficult to estimate, because markets have reacted sensitively to developments in the fiscal balance and short-term growth prospects since the eruption of the sovereign debt crisis. Further uncertainty surrounds the impact of measures reducing banks' profitability on the rollover and the cost of foreign funding.

¹⁷ Further differences appear between various tax and expenditure categories. According to model simulations, the short term growth effects of consumption tax increases may be milder than the impact of income tax increases, which are more distortive to labour supply and investment decisions. For more information, see: *Quarterly Report on Inflation*, June 2011, Chapter 6.2. (The size of fiscal multipliers in the Hungarian economy).

¹⁸ See: IMF Fiscal Monitor, April 2012, International Monetary Fund, Washington D.C.

Table 6-2
The estimated long term impact of the measures in Széll Kálmán Plan 2.0*

	Széll Kálmán Plan 2.0	Széll Kálmán Plan 2.0, +50 bp user cost (deterioration)	Széll Kálmán Plan 2.0, -50 bp user cost (improvement)
GDP	-2.1%	-6.0%	1.7%
Employment	-0.3%	-1.0%	0.3%
Capital stock	-5.4%	-15.0%	4.3%

* The estimates are based on the model of Benczúr et al. (2011) based on the budgetary data available until 20th June.

Simulations conducted with a model built for analysing the effects of the tax and transfer system¹⁹ reveal that the new taxes may reduce potential output by 2 per cent over the long term (Table 6-2). The model cannot endogenously assess changes in the user cost stemming from an improvement in fiscal sustainability, or persistent changes in the investment climate.²⁰ Therefore, we present additional simulations to illustrate the impact of persistent changes in the expected return on capital. Based on this analysis, a persistent decline in the expected return on Hungarian real investments can offset the adverse effect of the new taxes. On the other hand, if the new measures persistently harm the investment climate, the expected return might also increase, leading to much higher real economic costs in the long term.

6.1.4 SUMMARY

The macroeconomic effects of new tax measures announced in Széll Kálmán Plan 2.0 can be assessed only with great uncertainty. The main reason is the lack of information on the tax base and possible behavioural effects. These might be particularly strong in the case of the financial transactions tax: based on international experience, the introduction of the tax can lead to a strong erosion of the tax base and lower credit supply.

Taxes on services purchased by households can directly raise the price level. In addition, taxes on inter-company transactions can be thought of as a cost shock to companies, which prompts them to raise prices, postpone investments and reduce labour demand. Higher taxes also reduce production capacities through an increase in the user cost of capital. Long term effects are materially affected by changes in investors' risk perception. A persistent reduction in the expected return on Hungarian real investments may offset negative effects, while a persistent rise in the expected return can amplify them.

¹⁹ For more details, see: BENCZÚR, P., G. KÁTAY, Á. KISS, B. REIZER AND M. SZOBOSZLAI (2011), 'Analysis of changes in the tax and transfer system with a behavioural microsimulation model', *MNB Bulletin*, October.

²⁰ In the model investment behaviour is affected by the user cost of capital (i.e. the expected return on real investments). The country-specific component of the user cost does not correspond directly to the risk premium on domestic financial assets. Previous estimations suggest that the user cost fell by 35-40 basis points per year between 1995 and 2005, largely due to the deepening economic integration of Hungary and the EU accession. Further calculations reveal that the user cost stagnated between 2005 and 2008. Based on these estimates, the user cost was calibrated to 15.2 per cent in the microsimulation model. For more information on the user cost in Hungary see, e.g.: KÁTAY, G. AND Z. WOLF (2004), 'Investment Behavior, User Cost and Monetary Policy Transmission', *MNB Working Papers*, 2004/12.

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 2012		
	Overlapping effect	Incoming effect	Yearly index
Administered prices	0,1	0,5	0,6
Market prices	0,7	1,5	2,2
Indirect taxes and government measures	0,5	1,9	2,4
CPI	1,4	3,9	5,3

* 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). The figures have been calculated using the technical effect of the VAT hike.

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

	2012				
	Average overlapping effect	Overlapping indirect tax effect	Average incoming effect	Incoming indirect tax effect	Yearly index
Food	-0.4	0.1	3.4	1.2	4.3
non-processed	-3.3	0.0	4.9	1.6	2.9
processed	1.2	0.2	2.6	1.0	5.1
Traded goods	0.9	0.2	0.3	1.3	2.7
durables	-0.3	0.0	-0.9	0.8	-0.5
non-durables	1.2	0.2	0.9	1.5	3.9
Market services	1.0	0.0	1.7	1.8	4.5
Market energy	3.0	0.0	4.3	1.6	9.1
Alcohol and tobacco	0.2	2.8	1.9	6.8	12.0
Fuel	5.2	1.2	2.5	1.6	10.9
Administered prices	0.6	0.7	2.5	1.3	5.2
Consumer Price Index	0.8	0.5	1.9	1.9	5.3
Core inflation	0.9	0.5	1.4	2.1	4.9

* 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). The figures have been calculated using the technical effect of the VAT hike.

Publications of the Magyar Nemzeti Bank

All publications of the Magyar Nemzeti Bank on the economy and finance are available on its website at <http://english.mnb.hu/Kiadvanyok>. From 2009, the publications have been published only in electronic format.

Papers

MNB Bulletin / MNB-szemle

http://english.mnb.hu/Root/ENMNB/Kiadvanyok/mnben_mnbszemle

http://english.mnb.hu/Kiadvanyok/mnben_mnbszemle/mnben_szemle_cikkei

In Hungarian and English; published 3 or 4 times a year.

The aim of the short articles published in the Bulletin is to provide regular and readily comprehensible information to professionals and the public at large about underlying developments in the economy, topical issues and the results of research work at the Bank, which are of interest to the public. Private sector participants, university professors and students, analysts and other professionals working at central banks and international organisations may find the Bulletin an interesting read.

MNB Occasional Papers / MNB-tanulmányok

http://english.mnb.hu/Kiadvanyok/mnben_muhelytanulmanyok

In Hungarian and/or English; published irregularly.

Economic analyses related to monetary policy decision making at the Magyar Nemzeti Bank are published in the Occasional Paper series. The aim of the series is to enhance the transparency of monetary policy. Typically, the papers present the results of applied, practical research, review the technical details of projection work and discuss economic issues arising during the policy making process.

MNB Working Papers

http://english.mnb.hu/Kiadvanyok/mnben_mnbfuzetek

Only in English; published irregularly.

The series presents the results of analytical and research work carried out in the Bank. The papers published in the series may be of interest mainly to researchers in academic institutions, central banks and other research centres. Their aim is to encourage readers to make comments which the authors can use in their further research work.

Regular publications

Quarterly report on inflation / Jelentés az infláció alakulásáról

In Hungarian and English; published 4 times a year.

Report on financial stability / Jelentés a pénzügyi stabilitásról

In Hungarian and English; published twice a year.

Annual report: Business report and financial statements of the Magyar Nemzeti Bank / Éves jelentés: A Magyar Nemzeti Bank adott évről szóló üzleti jelentése és beszámolója

In Hungarian and English; published once a year.

Féléves jelentés: Beszámoló az MNB adott félévi tevékenységéről (Semi-annual report: Report on the MNB's operations in a given half-year)

Only in Hungarian; published once a year.

Időközi jelentés: Beszámoló az MNB adott negyedévi tevékenységéről (Interim report: Report on the MNB's operations in a given quarter)

Only in Hungarian; published twice a year.

Analysis of the convergence process / Elemzés a konvergenciafolyamatokról

In Hungarian and English; published yearly or biennially.

Senior loan officer opinion survey on bank lending practices / Felmérés a hitelezési vezetők körében a bankok hitelezési gyakorlatának vizsgálatára

In Hungarian and English; published 4 times a year.

Public finance review / Elemzés az államháztartásról

In Hungarian and English; published 3 or 4 times a year.

In addition to those listed above, the Bank also occasionally publishes other materials.

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