



# Quarterly Report on Inflation

March 2014







# Quarterly Report on Inflation

March 2014



Published by the Magyar Nemzeti Bank

Publisher in charge: Eszter Hergár

8–9 Szabadság tér, H-1850 Budapest

[www.mnb.hu](http://www.mnb.hu)

ISSN 1418-8716 (online)

*Act CXXXIX of 2013 on the Magyar Nemzeti Bank, defines the primary objective of Hungary's central bank as the achievement and maintenance of price stability. Low inflation ensures higher long-term economic growth and a more predictable economic environment, and moderates the cyclical fluctuations which impact both households and companies.*

*In the inflation targeting system in use 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, financial 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 Directorate Economic Forecast and Analysis, the Directorate Monetary Policy and Financial Market Analysis, the Directorate Financial System Analysis and the Directorate Financial Analysis, as well as the macroeconomic developments underlying these forecasts. The forecast is 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 under the direction of Dániel Palotai, Executive Director of the Directorate Monetary Policy, with the participation of staff from the Directorate Economic Forecast and Analysis, the Directorate Monetary Policy and Financial Market Analysis, the Directorate Fiscal Analysis, and the Directorate Financial System Analysis. The Report was approved for publication by Dr. Ádám Balog, Deputy Governor.

The Report incorporates valuable input from the Monetary Council's comments. The projections and policy considerations, however, reflect the views of staff in the Directorate Economic Forecast and Analysis, the Directorate Monetary Policy and Financial Market Analysis, the Directorate Fiscal Analysis, the Directorate Financial System Analysis and do not necessarily reflect those of the Monetary Council or the MNB.

*The projections are based on information available for the period ending 18 March 2014.*

## CONTENTS

1. Inflation and real economy outlook .....	6
1.1. Inflation forecast.....	7
1.2. Real economy forecast.....	11
1.3. Labour market forecast.....	16
2. Effects of alternative scenarios on our forecast.....	19
3. Macroeconomic overview .....	22
3.1. International environment.....	22
3.2. Aggregate demand.....	30
3.3. Production and potential output .....	37
3.4. Employment and labour market .....	40
3.5. The cyclical position of the economy.....	41
3.6. Cost and inflation .....	42
4. Financial markets and interest rates .....	50
4.1. Domestic financial market developments .....	50
4.2. Credit conditions of the financial intermediary system.....	55
5. The balance position of the economy .....	58
5.1. External balance and financing .....	58
5.2. Forecast for Hungary's external balance position.....	61
5.3. Fiscal developments.....	63
6. Special topics .....	68
6.1. Global factors in the domestic disinflation .....	68
6.2. Evaluation of central bank's forecasts for 2013.....	72
7. Breakdown of the average consumer price index for 2014 .....	76

## LIST OF BOXES

Box 1–1 Underlying inflation in our forecast .....	9
Box 1–2 Tax effects shaping current inflationary trends.....	10
Box 1–3 One-off effects in domestic exports and industrial production .....	14
Box 3–1 Deceleration in the emerging markets – a permanent or temporary development?.....	27
Box 3–2 The exposure of Hungary and the Central and Eastern European region to Ukraine and Russia .....	35
Box 3–3 The effect of disinflation on the distribution of price changes: Are there deflationary risks?.....	47

**Since August 2012, the Monetary Council has reduced the central bank base rate significantly**

These reductions in the base rate were justified by the low inflation environment, subdued inflationary pressures over the medium term and a degree of spare capacity in the economy. Perceptions of the risks associated with the economy were also generally supportive. In the Council's judgement, the significant reduction in the base rate implemented so far has helped the Bank achieve the inflation target over the medium term and has contributed to the strengthening of domestic economic growth. The Council's aim remains to maintain a balanced and conservative approach to monetary policy. In addition to the priority of meeting the inflation target, the Council also takes into account the condition of the real economy and incorporates financial stability considerations into its decisions. A marked and sustained shift in perceptions of the risks associated with the Hungarian economy may influence the room for manoeuvre in monetary policy.

**Looking ahead, inflation is likely to move in line with price stability; disinflation is expected to slow gradually**

In the Council's judgement, inflation is likely to remain below the 3 per cent target in 2014, before moving into line with the medium-term inflation target from 2015. The inflation rate has been at historically low levels in recent months. Subdued inflation in external markets, the degree of unused capacity in the economy, the fall in inflation expectations and the reductions in regulated prices, implemented in a series of steps, have contributed to the development of a low inflation environment. However, the weaker exchange rate of recent months has passed through gradually to the prices of core inflation items, which in turn points to higher underlying inflation. Capacity utilisation is likely to rise gradually as economic activity continues to recover. Household consumption, however, which is relevant in terms of inflation pressures from the domestic real economy, is likely to grow only slowly, and therefore the real economic environment is expected to continue to have a disinflationary impact, although to a declining extent. In addition, the loose labour market and the adjustment of inflation expectations also suggest that moderate wage growth is likely to continue, which in turn will contribute to inflation moving in line with the Bank's inflation target looking forward. The low inflation environment may help the Bank's inflation target to better anchor the nominal path of the economy.

**The Council judges that the Hungarian economy returned to a growth path in 2013. Looking ahead, economic growth is likely to continue**

Economic activity picked up gradually in the past quarters, with output rising across a wide range of sectors. Looking ahead, Hungarian economic growth may continue in a more balanced pattern than previously. Rising exports are likely to play an important role as a source of growth in the coming years, supported by new production capacity in the automobile industry brought into production and the improvement in competitiveness, in addition to the recovery in economic activity abroad. Domestic demand is expected to strengthen in the coming years. Investments are likely to pick up further, reflecting the improvement in the outlook for activity, the easing in credit constraints due to the Bank's Funding for Growth Scheme and the increasing use of EU funding. However, household consumption is likely to grow only gradually, even as disposable income increases. Propensity to save is expected to remain high, reflecting the ongoing reduction in debts accumulated during the years prior to the crisis and the slow improvement in credit conditions.

**Hungary's external debt is expected to fall further**

The external financing capacity of the Hungarian economy continued to rise towards the end of 2013 and the external debt ratios fell significantly. The external surplus is likely to remain high in the coming years as the trade surplus stabilises at a high level, despite accelerating growth in consumption and investment. The improvement in the terms of trade and the pick-up in export growth as external demand recovers are likely to play a dominant role in this. The transfer balance is expected to fall slightly, due to the new budget cycle of the EU, but is likely to remain above levels recorded in previous years. With the

external financing capacity remaining high, the external debt ratio is likely to fall further, which in turn will reduce the country's vulnerability.

**The Hungarian risk premium did not change significantly in the past quarter, but volatility increased in financial markets**

Due to the Fed's decision to further reduce the pace of its asset purchases, the increased focus on the vulnerability of some emerging economies and the escalation of the conflict between Ukraine and Russia, global investor sentiment has been volatile in the past quarter. Domestic risk premia have been little changed since publication of the December issue of the Bank's *Quarterly Report on Inflation*. The CDS spread and the spreads on foreign currency bonds fell slightly, long-term yields rose modestly and the exchange rate depreciated, accompanied by significant volatility. The volatility of the major risk indicators increased relative to previous quarters. Nevertheless, Hungary's position is fundamentally strong compared to other emerging market economies. The country's persistently high external financing capacity and the resulting decline in external debt are reducing its vulnerability. In the Council's judgement, a cautious approach to policy is warranted by uncertainty related to the global financial environment.

**The macroeconomic outlook is surrounded by both upside and downside risks**

The Monetary Council identified three alternative scenarios around the baseline projection of the *March Report on Inflation*, which might significantly influence the future conduct of monetary policy. In the alternative scenario assuming a persistently low external inflation environment and a slower-than-expected recovery in external demand, the inflation target may be achieved with looser monetary conditions than assumed in the baseline scenario. In the risk scenario assuming an unfavourable external environment and higher investor risk aversion, inflation moves in line with price stability in the medium term under tighter monetary conditions than implied by the baseline projection. A third scenario, assuming a pick-up in domestic employment and consumption, resulting in weaker domestic disinflationary pressures, also implies a tighter monetary policy stance.

After reviewing the projection in the *March Report on Inflation*, the Council judges that there remains a degree of unused capacity in the economy and inflation is likely to move in line with the target in the medium term. The negative output gap is expected to close gradually at the monetary policy horizon, and therefore the disinflationary impact of the real economy is likely to decrease looking forward. In the Council's judgement, there remained some scope for a cautious reduction in interest rates in the context of heightened uncertainty in global financial markets; however, a smaller reduction in interest rates than previously was warranted by the increase in uncertainty. Considering the substantial reduction in interest rates so far, changes in perceptions of the risks associated with the economy and based on currently available information, the central bank base rate has significantly approached a level which ensures the medium-term achievement of price stability and a corresponding degree of support for the economy. In case of a significant deterioration in global financial market environment, the Council will see no scope for continuing the easing cycle.



**SUMMARY TABLE OF THE BASELINE SCENARIO**  
(FORECAST BASED ON ENDOGENOUS MONETARY POLICY)

	2013	2014	2015
	Actual	Projection	
<b>Inflation (annual average)</b>			
Core inflation	3.3	3.0	3.5
Core inflation without indirect tax effects	1.5	2.1	3.3
Inflation	1.7	0.7	3.0
<b>Economic growth</b>			
External demand (GDP based)	0.6	1.7	2.2
Household consumption expenditure	0.2	1.3	1.7
Government final consumption expenditure	1.3	0.7	1.6
Gross fixed capital formation	5.9	7.3	3.6
Domestic absorption	0.8	2.3	2.1
Export	5.3	5.8	6.5
Import	5.3	6.2	6.4
GDP*	1.2	2.1	2.5
<b>External balance<sup>1</sup> (2013 data is forecast)</b>			
Current account balance	3.2	3.0	3.4
External financing capacity	6.8	6.3	6.5
<b>Government balance<sup>1,6</sup></b>			
ESA balance (2013 data is preliminary)	-2.5	-2.9	-3.0
<b>Labour market</b>			
Whole-economy gross average earnings <sup>2</sup>	3.3	3.8	6.1
Whole-economy employment	1.6	1.9	0.1
Private sector gross average earnings <sup>3</sup>	3.6	2.4	3.7
Private sector employment	0.8	1.2	1.0
Unemployment	10.2	9.1	8.9
Unit labour costs in the private sector <sup>4</sup>	1.7	1.9	1.4
Household real income <sup>5</sup>	1.5	2.0	1.3

<sup>1</sup> As a percentage of GDP.

<sup>2</sup> Calculated on a cash-flow basis.

<sup>3</sup> According to the original CSO data for full-time employees.

<sup>4</sup> Private sector unit labour costs calculated with a wage indicator excluding the effect of whitening and the changed seasonality of bonuses and domestic employees.

<sup>5</sup> MNB estimate.

<sup>6</sup> With complete cancellation of free reserves.

\* Data adjusted for calendar effects.

## 1. INFLATION AND REAL ECONOMY OUTLOOK

In recent months, stronger growth and a further decline in inflation were the main characteristics of macroeconomic developments. In line with the upturn in economic activity, private sector employment continued to increase. The economic environment continues to be marked by strong nominal adjustment. At the end of last year, wage dynamics in the private sector were subdued. The lower-than-projected inflation data at the beginning of the year were primarily driven by favourable effects on the cost side.

According to our forecast, inflation this year is expected to be significantly below the target and may still be in line with the medium-term inflation target in 2015, even as the output gap narrows. The steadily low inflation environment is supported by subdued consumer demand, further restrained growth in nominal wages in the slack labour market environment, weak external inflationary effects and a new round of regulated price cuts announced for this year. At the same time, the weaker forint exchange rate compared to last year may gradually pass through into consumer prices, resulting in a gradual increase in core inflation adjusted for indirect taxes. The development of inflation persistently below the central bank's target may strengthen the further adjustment in inflation expectations, which may contribute to maintaining a low inflation environment in Hungary over the medium-term through pricing and wage-setting behaviour.

We expect to see continued improvement in economic growth over the forecast horizon. Stronger external economic activity and a weaker exchange rate both facilitate growth in exports. At the same time, the deteriorating and increasingly uncertain economic prospects of emerging countries which are faced with an unstable political situation may hamper Hungarian exports over the short term. In Russia, which has ties with the emerging region, no significant economic growth can be expected in the short run, due to sluggish growth in investments and falling oil prices, which could somewhat curb the upswing in Hungary's exports. We expect dynamic expansion in exports in the second half of our forecast horizon, driven by Hungary's higher competitiveness resulting from the weaker exchange rate. Public investments financed from EU funds will also support stronger investment activity going forward. Easing lending constraints thanks to the Funding for Growth Scheme and improving real economic prospects support corporate investments by SMEs. We expect a gradual increase in household consumption over our forecast horizon. Rising real household income stemming from low inflation points towards growing household consumption. Nevertheless, factors working in the opposite direction include tight lending conditions, the ongoing reduction in household debt, and households' presently precautionary stance which is only slowly easing.

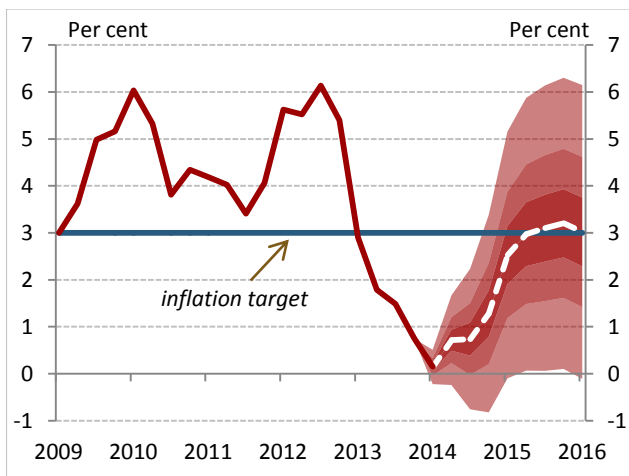
In line with stronger real economic growth, we expect a gradual rise in both labour market activity and employment. Hiring in the private sector and public labour programmes may both contribute to a rise in employment. Restrained growth in nominal wages may result from the low inflation environment, firms' improving profitability, the persistently lax labour market conditions and the adjustment of inflation expectations.

The cyclical position of the real economy (the output gap) may close in the second half of the forecast horizon, mainly due to the performance of exports and stronger investment. Household consumption, which is relevant from the perspective of the inflationary pressure exerted by the Hungarian real economy, may pick up more slowly and fall significantly short of its pre-crisis level even at the end of the forecast horizon. Thus, the real economy environment will continue to exert a disinflationary effect over our forecast horizon. In line with our assumption for external demand and the improvement in Hungarian economic fundamentals, we expect a steady improvement in financial market conditions.

### 1.1. Inflation forecast

Compared to our December forecast, we have decreased our short-term inflation expectations, but maintain a similar forecast for price increases over the medium term. Inflation is expected to steadily rise towards the medium-term inflation target over our forecast horizon. The reductions in regulated prices carried out in several steps have decreased inflation considerably over the short run, and inflationary pressure from foreign trade partners might also remain subdued. Restrained wage dynamics and lower inflation expectations generally support the low inflation environment.

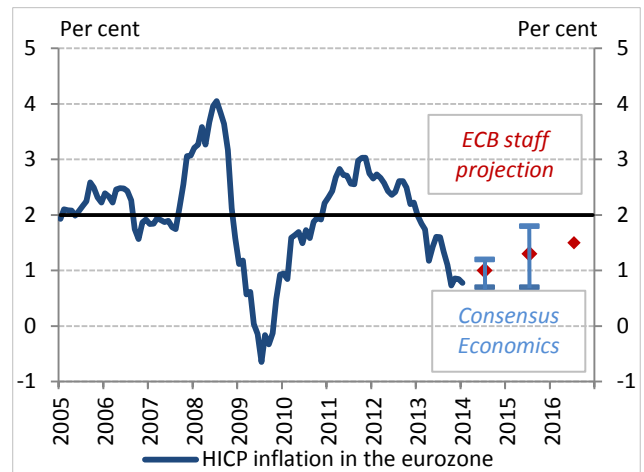
Chart 1–1 Fan chart of the inflation forecast



Source: MNB

**The CPI may remain substantially below target this year and be close to the price stability target of 3 per cent in 2015.** In line with the more favourable underlying inflation trends observed in the past period, inflation in 2014 is expected to be lower than our December forecast and close to the forecast in 2015 (Chart 1-1).

Chart 1–2 HICP inflation in the eurozone



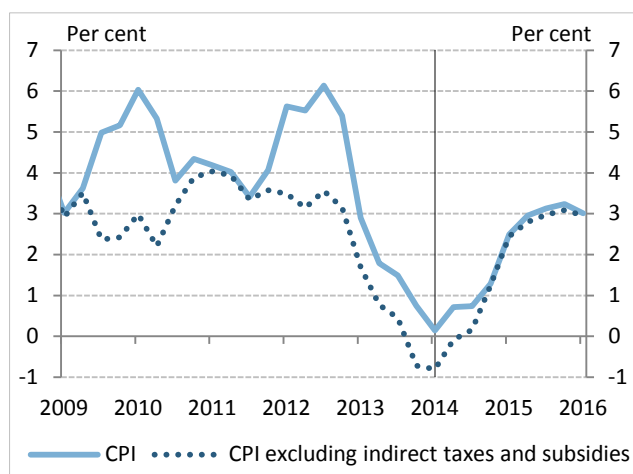
Source: ECB, Consensus Economics

**Core inflation excluding indirect tax effects shows historically low dynamics,** mainly as a result of restrained inflation in market services and the slowing global price dynamics of imported products. In addition, subdued domestic demand and low wage dynamics contribute materially to restrained price changes in core inflation items. On the other hand, we have raised our forecast for core inflation based on the gradual pass-through of the weaker exchange rate into consumer prices (Chart 1-2).

**On the whole, factors determining medium-term inflation trends point to a low inflation environment.**

The real economy has a disinflationary impact over the entire forecast horizon. Although the output gap may close in the second half of our forecast period, the structure in which this occurs ensures that inflationary pressures from the real economy should remain subdued. The narrowing of the output gap will mainly be driven by the recovery in the export sector and investment, while the effect of stronger consumption will only be gradually felt. According to our expectations, although GDP may exceed its pre-crisis level next year, consumption may well fall short of the values observed in the pre-crisis years.

**Chart 1–3 CPI with and without indirect taxes and subsidies**



Source: MNB

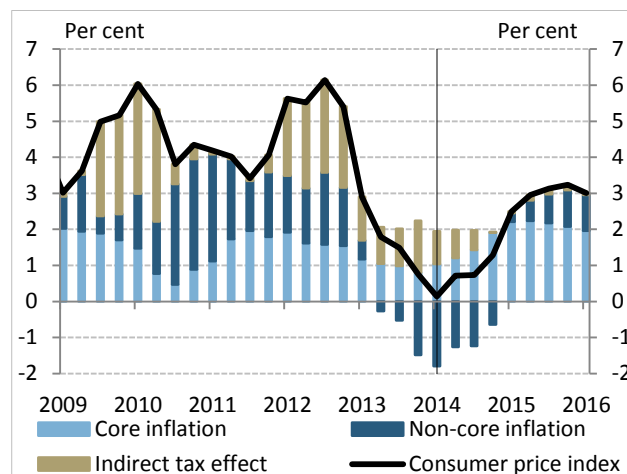
Efforts to restore low profitability may continue to be a determining factor in corporate behaviour. In the low demand environment, **price adjustment remains limited**, and therefore firms attempt to improve their profitability mainly by cutting wages and other costs. Slack labour market conditions and the downward revision of inflation expectations also contribute to restrained wage dynamics. The persistently low inflation environment may reduce price and wage expectations over the long term, thus helping to maintain low inflation over the medium term (Chart 1-3).

**We project subdued price increases in non-core items over the entire forecast horizon.** Global crude oil prices have fallen since December and, owing to globally favourable harvest results, unprocessed food prices are low. Futures contracts for both crude oil and foods point to moderate dynamics.

**The direct impact of government measures on inflation may remain below the historical average over our entire forecast horizon.** The new round of regulated price cuts, passed at the beginning of the year, resulted in a lower price level compared to our December assumption. The impact of this on average inflation for 2014 is -0.2 percentage points and -0.3 percentage points for 2015. In light of this, we maintain the assumption that regulated

energy prices will not rise until the end of our forecast horizon. In addition, we expect restrained dynamics in the regulated prices of non-energy items as well (Chart 1-4).

**Chart 1–4 Decomposition of the inflation forecast**



Source: MNB

**Table 1-1 Details of the inflation forecast**

		2012	2013	2014	2015
Core inflation		5.1	3.3	3.0	3.5
<i>Contribution to inflation</i>		3.3	2.2	2.0	2.3
Non-core inflation	Unprocessed food	6.8	6.1	-2.0	4.5
	Gasoline and market energy	11.9	-0.9	0.5	2.4
	Regulated prices	4.7	-3.7	-6.2	0.9
	Total	6.8	-1.2	-3.7	1.9
<i>Contribution to inflation</i>		2.4	-0.5	-1.3	0.7
Inflation		5.7	1.7	0.7	3.0

Source: MNB

On the whole, a steadily low inflation environment is suggested by subdued domestic demand, the predominantly disinflationary government measures and lower inflation expectations. The rise in consumer prices may be far lower than the medium-term inflation target in 2014 and is expected to rise close to the 3 per cent target in the second half of the forecast horizon (Table 1-1).

### Box 1–1 Underlying inflation in our forecast

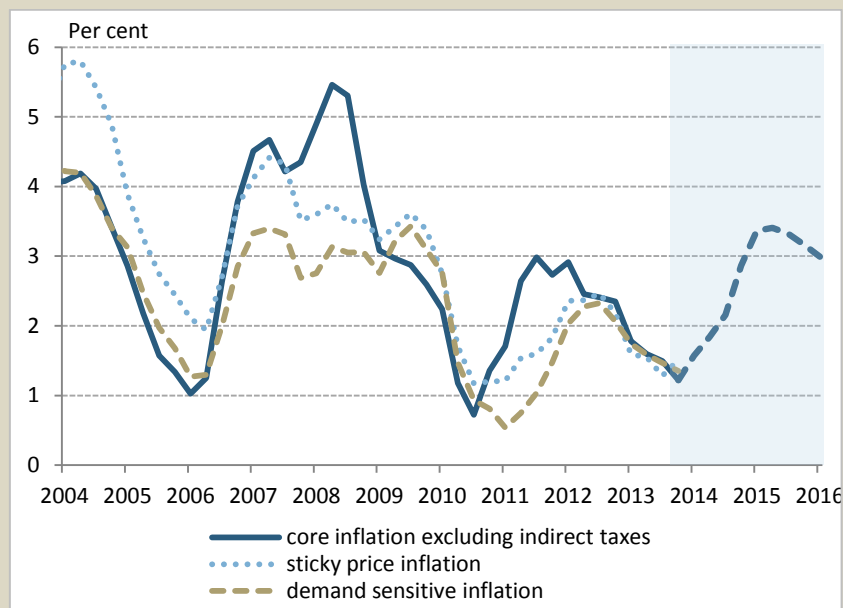
The MNB has developed various measures of underlying inflation to capture longer-term inflationary trends. Eliminating the transitory effects of highly volatile items and government measures from the price index provides a more reliable picture of underlying inflationary pressure in the economy, particularly over the medium term, which is the relevant horizon for central bank decision making. In our assessment of the inflation stance, we put particular emphasis on monitoring demand-sensitive and sticky-price inflation.

We cannot, however, prepare all of the above indicators in a forward-looking manner, due to the highly aggregated nature of our forecast system and for reasons of calculation methodology. Our forecast captures underlying inflation trends mainly through developments in core inflation adjusted for taxes. Over the past year and a half, this indicator has co-moved closely with the other two underlying measures. A significant gap between core inflation adjusted for taxes and the other two underlying indicators only occurred during periods of food price shocks (2007-2008, 2010-2011); otherwise, the indicators showed similar dynamics.

According to our current forecast, the weaker exchange rate compared to 2013 H2 will gradually shape developments in underlying inflation in the upcoming quarters. The exchange rate is reflected in core inflation adjusted for taxes mainly in the changing price of tradables and, to a smaller degree, of processed foods. However, the subdued domestic demand since the recession may substantially limit the weaker exchange rate from being passed on to consumer prices and thus pass-through may be smaller compared to the pre-crisis period.

Over the medium term, core inflation is shaped by persistently low imported inflation, the adjustment of inflation expectations and depressed developments in wages; as a result, core inflation adjusted for taxes may gradually return to a value consistent with price stability from 2015 (Chart 1-5).

Chart 1–5 Forecast of core inflation excluding indirect taxes



Source: MNB

## Box 1–2 Tax effects shaping current inflationary trends

Recent years have seen the introduction of several tax changes which resulted in temporary increases in inflation. Changes in indirect taxes exert a significant impact in terms of monetary policy, if they entail permanent price increases by spilling over through corporate cost structures. However, the probability of indirect taxes triggering second-round effects is low and they are not expected to affect medium-term trends. In light of this, it is warranted to adjust time series for indirect tax effects when considering monetary policy.

Value added tax is a typical example of the impact of indirect taxes. Consumer prices are adjusted for VAT based on the estimated effect, as VAT may be passed on to different degrees based on the prevailing state of the economy. If demand is weak, hikes in VAT are unlikely to fully make their way into consumer prices. The price index is also adjusted for the effect of excise duties, the other typical form of indirect tax, and other sales taxes.

Several one-off measures were recently introduced (such as the increase in the retail margin for tobacco products<sup>1</sup>) which do not qualify as classical tax changes. It is warranted to eliminate these effects, because from a monetary policy point of view their impact mechanism on the consumer price index completely resembles a change in a consumption tax: they resulted in a temporary rise in inflation for a narrow range of goods and will presumably have no second-round inflationary effects.

In February 2014, the CPI stood at 0.1 per cent, while inflation adjusted for indirect taxes<sup>2</sup> as determined by the MNB was -0.7 per cent. For the most part, the gap between inflation and inflation adjusted for indirect taxes stems from the following measures: the introduction and increase in the financial transaction levy (January and August 2013), the increase in the retail margin for tobacco products (July 2013) and the two monthly free cash withdrawals of up to HUF 150,000 introduced in February of this year (Table 1-2).

**Table 1-2 Indirect tax effect in consumer price index estimated by MNB**

Tax content	Inflation		Core inflation	
	February 2014	2014 average	February 2014	2014 average
Increase in retail margin on cigarettes	0.7	0.5	1.0	0.7
Financial transaction levy	0.3	0.2	0.5	0.3
Two cash withdrawals free of charge every month up to a total of 150,000 HUF	-0.1	-0.1	-0.2	-0.2
<b>Total</b>	<b>0.8</b>	<b>0.6</b>	<b>1.3</b>	<b>0.9</b>

Source: MNB

<sup>1</sup> See the June 2013 Inflation Report for a more in-depth analysis of the increase in the retail margin on tobacco products.

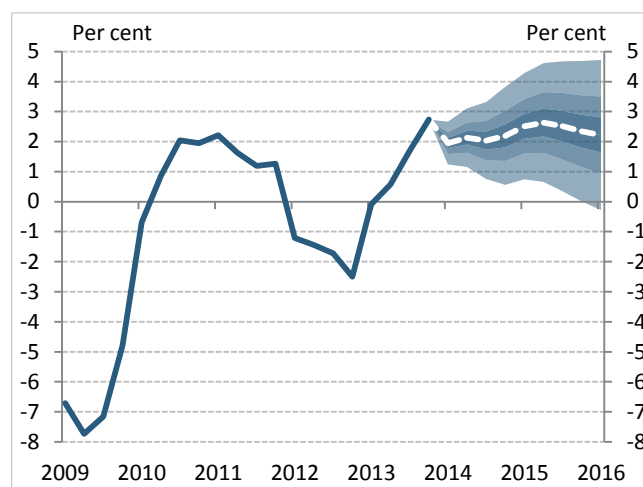
<sup>2</sup> The difference between the constant tax rate CPI published by the Central Statistical Office, and inflation adjusted for indirect taxes calculated by the MNB stems from the fact that the indirect tax effect estimated by the MNB differs from the technical effect applied by the CSO for determining the constant tax rate CPI in terms of both the tax measures taken into account and their quantification.

## 1.2. Real economy forecast

We expect to see continued improvement in economic growth over the forecast horizon, similarly to our December predictions. Investment and exports may be the main drivers of growth. Economy-wide investments are primarily fuelled by government investments implemented with EU funding, while the central bank's Funding for Growth Scheme substantially eases the financing constraints on small and medium-sized enterprises, thus boosting investment activity in the private sector. Despite the increase in real wages, household consumption may only pick up gradually due to tight lending conditions, the reduction of debt accumulated prior to the crisis and the slow easing of precautionary considerations.

**In line with our December forecast, the Hungarian economy continued growing in Q4, albeit at a somewhat slower rate compared to the previous quarter.** Monthly indicators of production reveal that economic performance maintained the same growth structure as in previous quarters. Industrial output increased, driven by the automotive industry and related sectors in late 2013, while the electronics sector saw output decline. Construction industry output expanded significantly at the end of the year, thanks in part to the mild weather compared to previous years. The construction industry's strong performance was fuelled mainly by the increased utilisation of European Union development funds, which primarily drove the investment activity of sectors linked to the state. Sectors producing for the domestic market (retail and market services) showed slow improvement in Q4. After last year's correction of poor agricultural harvest results from 2012, we forecast average harvest figures for this year (Chart 1-6).

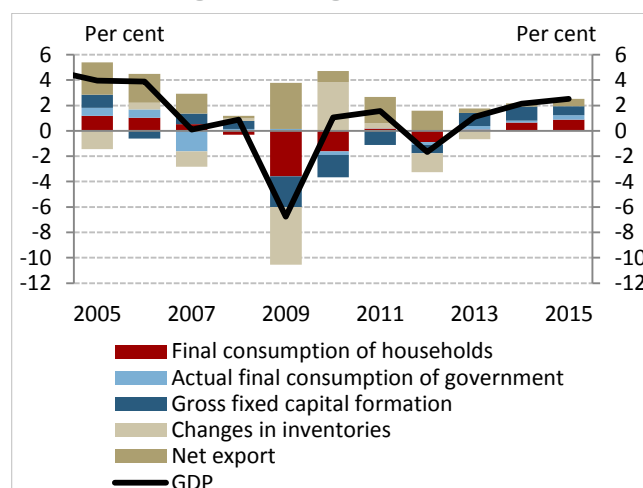
Chart 1-6 Fan chart of the GDP forecast (based on seasonally adjusted and reconciled data)



Source: MNB

**Economic growth may continue strengthening over our forecast horizon.** In line with our December forecast, economic growth should occur in a more balanced structure than before, with domestic expenditure also picking up alongside exports. The gradual improvement in international activity, a more pronounced utilisation of EU funds, accommodating monetary conditions and the Funding for Growth Scheme all foster economic growth (Chart 1-7).

Chart 1-7 Changes in GDP growth

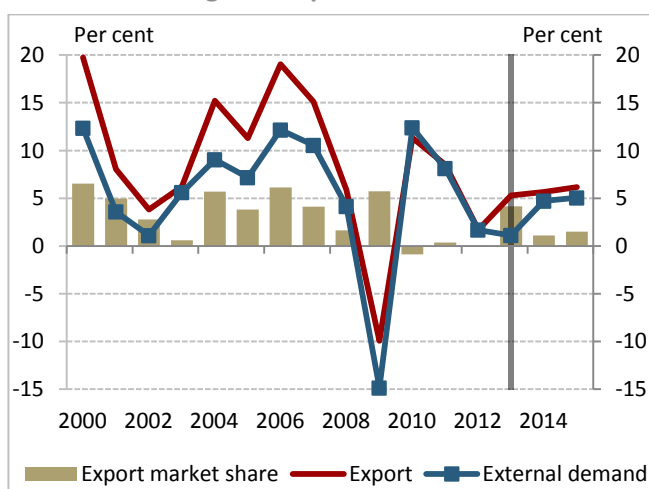


Source: CSO, MNB

**Hungary's export performance may develop in line with strong external demand.** Growth in the euro area, Hungary's main export market, exceeded expectations in Q4, and the short-term growth forecast is also somewhat more positive. This is partly offset by the fact that, in parallel with the improving economic outlook for developed countries, emerging markets show signs of slowing; therefore, on the whole we expect similar

demand conditions over our forecast horizon. A weaker exchanged rate compared to December may significantly boost growth in Hungary's export market share. Export sales may primarily be driven by additional capacity expansion in the automotive industry: with gradual increases in production, the number of vehicles manufactured in Hungary could rise by one-third during 2014. In addition, we expect a pick-up in other industrial sectors as well, and sectors that have long been in decline may see a turnaround in this negative trend. Along with improving exports, we expect a gradual increase in import demand, and net exports' contribution to growth may be reduced by the combination of steadily increasing consumption, the utilisation of EU funds, and stronger investment activity thanks to the FGS (Chart 1-8).

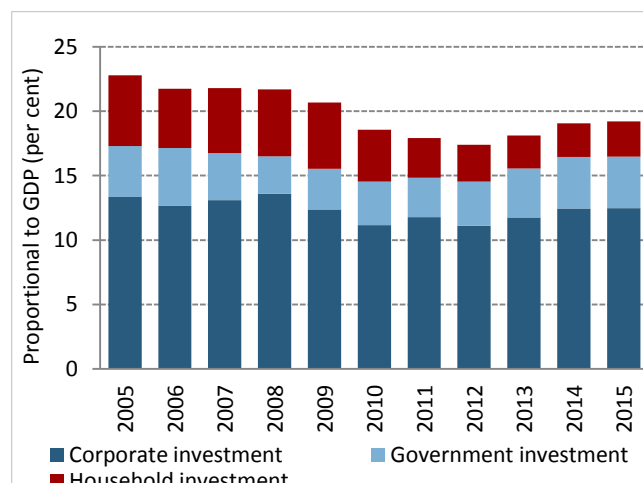
Chart 1-8 Changes in export market share



Source: MNB

Expanding public investments implemented from EU funds are contributing to significant investment growth. The accelerated use of transfers from the EU's 2007-2013 budget period notably increases the volume of co-funded investment projects over short run (Chart 1-9).

Chart 1-9 Development of sectoral investment

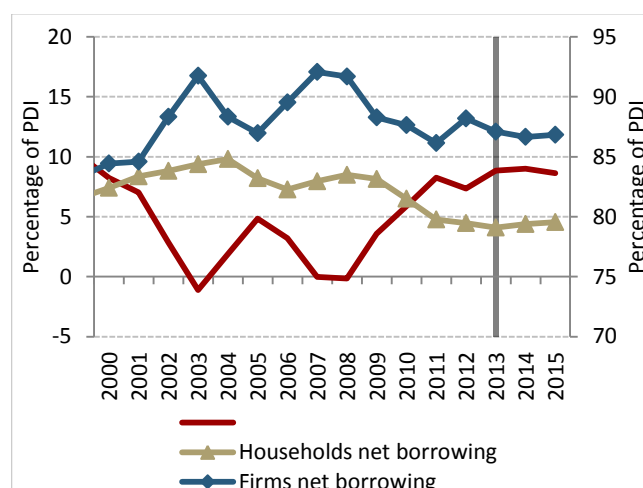


Source: CSO, MNB

**Corporate investment may grow significantly, in line with the improving economic outlook and easing lending constraints.** The Funding for Growth Scheme represents a significant contribution to easing the financing constraints of small and medium-sized enterprises, thereby facilitating the implementation of investment projects which allow for the preservation and expansion of capital.

**The FGS results in expansion of bank lending to small and medium-sized enterprises over the entire forecast horizon and the decline in lending to the whole corporate sector may come to an end.** This will be accompanied by a more balanced structure, due to the increase in long-term, forint-denominated loans (Chart 1-11 and Chart 1-12).

Chart 1-10 The use of household income



Note: As percentage of disposable income. Net financial savings of households exclude mandatory contributions payable to the private pension funds.

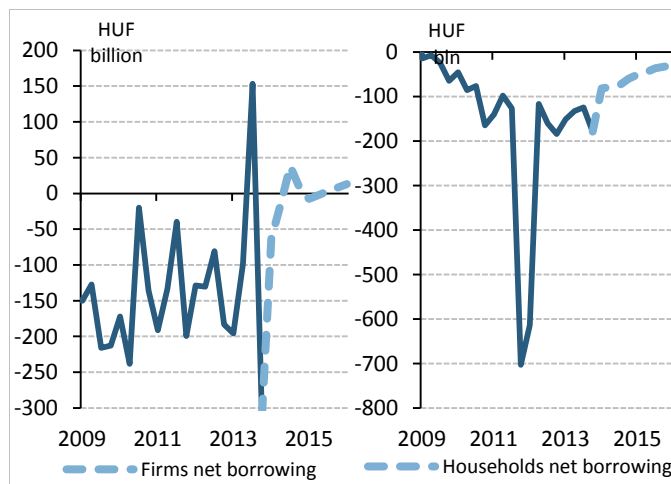
Source: CSO, MNB

Household consumption decisions are characterised by two trends. On the one hand, the low inflation



environment has significantly lifted the purchasing power of household income, which fosters a rise in consumption. On the other hand, efforts to reduce debts accumulated prior to the crisis remain a key pattern for a significant share of the population. Moreover, the strict credit conditions and the only slowly easing precautionary considerations are holding back a rise in household consumption demand. On the whole, we predict a slow and gradual rise in household consumption (Chart 1—10).

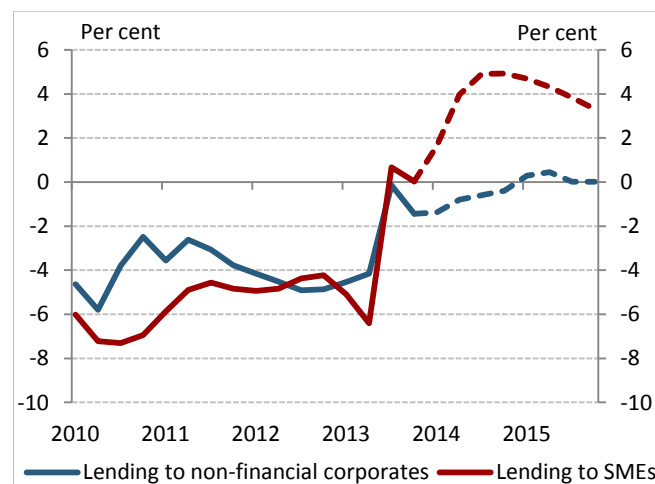
**Chart 1—11 Our forecast for household and corporate lending**



Note: Includes the fall in stocks of loans due to write-offs and sales, which means that regarding from transaction side in 2013 Q4 there is a 210 HUF billion fall.

Source: MNB

**Chart 1—12 Forecast for lending to non-financial corporates and the SME sector**

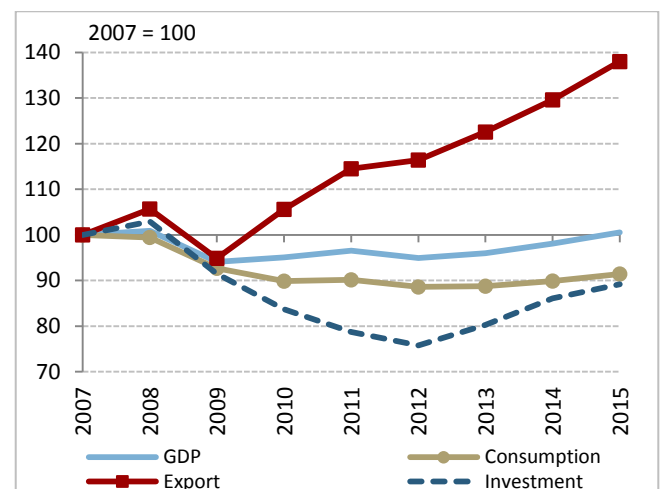


Note: Year on year change.

Source: MNB

In the second part of the forecast period, aggregate output may reach its potential level determined by the production capacities of the economy and thus the output gap may close, driven mainly by a pick-up in exports and investment. Domestic demand, which is relevant in terms of inflationary pressure of domestic origin, could fall short of its pre-crisis level even at the end of the forecast horizon, despite the steady increase (Chart 1—13). **The narrowing of the output gap may take place in a structure that allows the general real economy environment to retain its disinflationary effect over our entire forecast horizon.**

**Chart 1—13 Changes in GDP and main components since the crisis**



Source: CSO

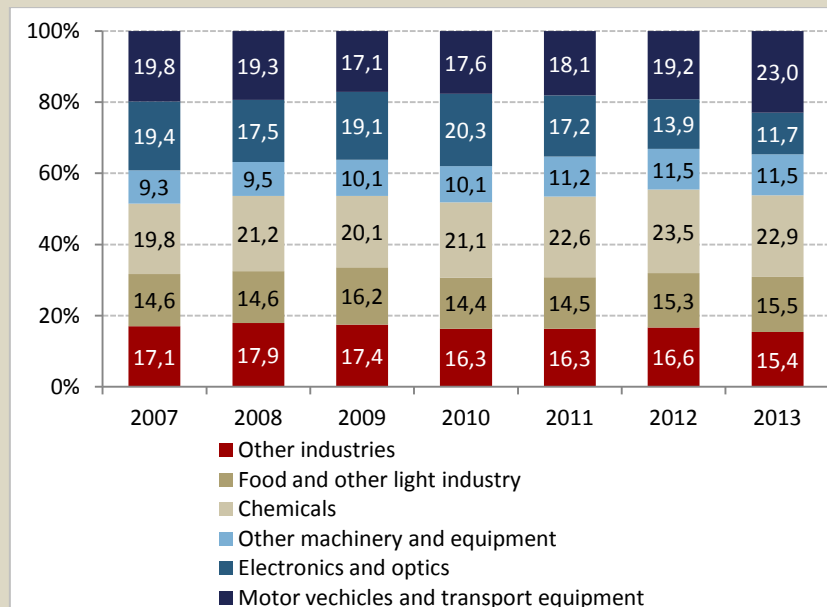
### Box 1–3 One-off effects in domestic exports and industrial production

In the years following the outbreak of the crisis, the Hungarian economy underwent a major transformation. Net exports contributed significantly to the increase in gross domestic product, the level of which was also boosted by the rise in export sales from 2009 and a decline in import demand amidst restrained internal demand. The continuous increase in exports was accompanied by a restructuring in the manufacturing sector: over the past five years, the share of road vehicle production and that of the related sectors have increased sharply within industrial production, while the share of the sector of computers, electronics and optical products has gradually declined. Since the post-crisis deterioration of existing capacities was faster in the indicators of production than the implementation of new investment projects and the installation of new capacities, Hungary's export market share has decreased somewhat in recent years as a result of these combined effects. Changes in industrial production and exports can be better understood once one-off effects are quantified.

Demand in the automobile market fell significantly across Europe, and the recovery to pre-crisis levels will be a slow process, while at the same time demand in developing countries remained strong. Asian exports – mainly connected to Germany – are among the drivers of growth in Europe, which can also affect the growth prospects of the Hungarian economy. All companies engaged in automobile production in Hungary during the pre-crisis years (Audi, GM, Suzuki) have expanded their activities to varying degrees in recent years and with the construction of the new Mercedes factory in Kecskemét, another important player has entered the Hungarian manufacturing sector. As a net result of these effects, the capacities of the automobile industry have nearly doubled, and by 2016 production may commence, subject to sufficient demand, at all new plants.

Similarly, adverse developments affecting the manufacturing sector have also resulted from the market environment which was altered by the crisis. As regards the electronics sector – which had boasted a significant weight in previous periods – a wide range of companies (Flextronics, Elcoteq, Jabil Circuits) terminated production partly or fully, resulting in significant layoffs. Nokia was one of the biggest losers in this process in Hungary, as it had to reconsider its activities in Hungary due to the change in its global position. Production in the Komárom-based plant and several other activities were discontinued, affecting two-thirds of the former domestic export performance of the Group (Chart 1–14).

Chart 1–14 Production structure shift in manufacturing sector

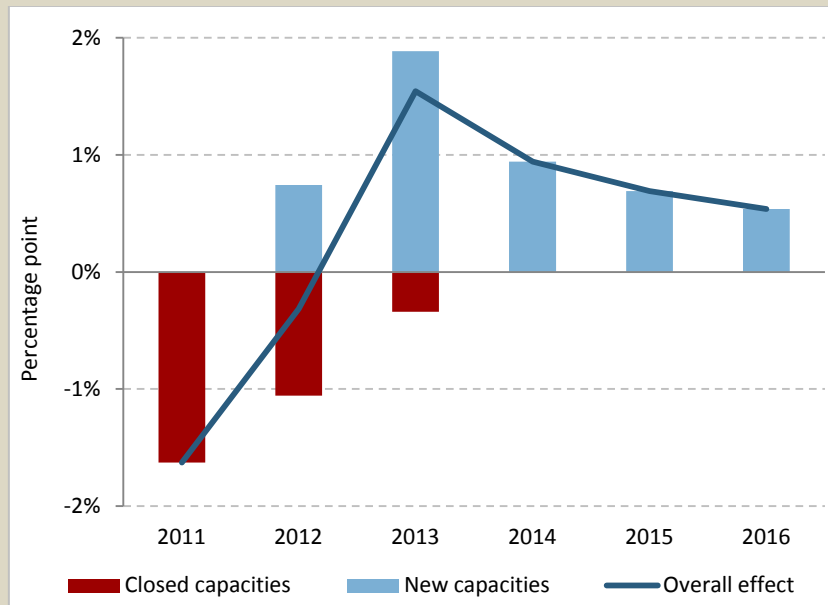


Source: CSO

The changes that started in recent years in vehicle production and the electronics sector are still in progress and, exerting opposing effects, this process greatly influence developments in industrial production and export sales. Output in vehicle production already exceeds its pre-crisis level and looking ahead the share of this sector in industrial production and exports may increase further. By contrast, the share of the electronics sector in industrial production has shrunk to one-half of its earlier share. One-off effects can be quantified based on the public profit and loss accounts of the companies concerned, by determining – relative to pre-crisis production levels and export sales revenues and also taking into account the expected

maximum capacity – the extent of the extra export performance to be generated by the new investment projects in the vehicle manufacturing sector. The negative results stemming from the deterioration of electronics sector capacities can be quantified in a similar manner. Overall, we can conclude that – assuming that automobile production runs at full capacity in the coming years – the extra performance it generates will exceed the loss in capacity in the electronics sectors, and thus after years of decline, Hungary’s export share may begin to increase again (Chart 1–15).

Chart 1–15 One-off effects in manufacture of motor vehicles and electronics



Source: CSO

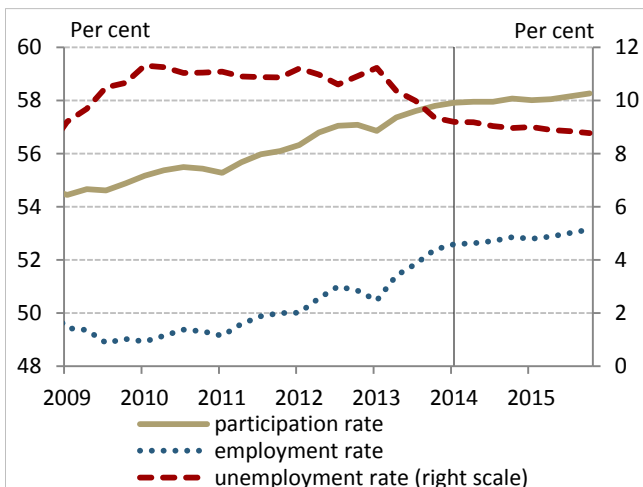
### 1.3. Labour market forecast

We project both activity and employment in the whole economy to rise over the forecast horizon. Hiring in the private sector and public labour programmes should both be able to contribute to a rise in employment. The rate of unemployment may remain below 9 per cent over the forecast horizon. The number of people employed in the private sector may also increase gradually as the economy recovers. Part-time employment forms may continue to gain ground, resulting in a slower rise in the number of hours worked compared to the expansion of employment. In line with slack labour market conditions and companies' wage and other cost cuts aimed at restoring their profitability, we expect wage dynamics to be subdued.

**Employment in the private sector increased until 2013 Q4, but the average number of work hours per capita was low.** The trend-like growth in part-time employment contributed to this, facilitated by the new Labour Code via easier application of flexible forms of employment.

**In our forecast, employment increases in parallel with output growth.** The number of employed in the private sector may reach pre-crisis levels by the end of our forecast horizon. At the same time, we expect a further rise in part-time employment, as a result of which the corporate sector's effective labour demand may increase more moderately than indicated by the employment figures. Public employment programmes may continue to play a key role in the developments in whole-economy employment (Chart 1–16).

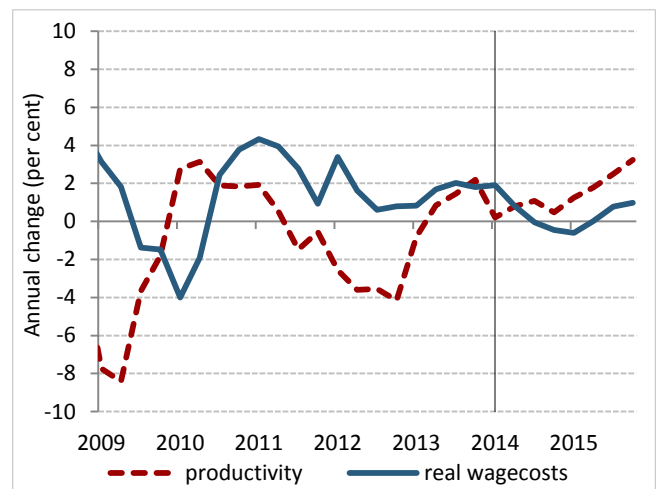
**Chart 1–16 Employment and unemployment, total economy**



Source: CSO

**We expect restrained wage dynamics, in line with the slack labour market conditions.** Weak domestic demand limits companies' ability to increase prices, and thus companies will primarily aim to curb their production costs in order to improve their profitability. Restrained wages could be a key element in this effort, supported by the overall low inflation environment and the gradual decline in inflation expectations. As the minimum wage increase envisaged for 2014 is only slightly higher than the average wage increase expectations, it is not expected to cause significant wage extrusion (Chart 1–17).

**Chart 1–17 Evolution of productivity and real wagecosts**



Source: CSO, MNB

**Persistently below-target inflation may facilitate a decline in inflation expectations, which in turn may contribute to the stabilisation of low wage dynamics.** Overall, inflationary pressure from the labour market remains weak.

**Table 1-3 Changes in our projections compared to the previous Inflation report**

	2013	2014		2015	
	Actual	Projection			
		December	Current	December	Current
<b>Inflation (annual average)</b>					
Core inflation	<b>3.3</b>	3.0	<b>3.0</b>	3.0	<b>3.5</b>
Core inflation without indirect tax effects	<b>1.5</b>	2.2	<b>2.1</b>	2.8	<b>3.3</b>
Inflation	<b>1.7</b>	1.3	<b>0.7</b>	2.8	<b>3.0</b>
<b>Economic growth</b>					
External demand (GDP-based)	<b>0.6</b>	1.7	<b>1.7</b>	2.2	<b>2.2</b>
Household consumer expenditure	<b>0.2</b>	1.5	<b>1.3</b>	1.8	<b>1.7</b>
Government final consumption expenditure	<b>1.3</b>	0.7	<b>0.7</b>	1.4	<b>1.6</b>
Fixed capital formation	<b>5.9</b>	7.4	<b>7.3</b>	4.8	<b>3.6</b>
Domestic absorption	<b>0.8</b>	2.4	<b>2.3</b>	2.3	<b>2.1</b>
Export	<b>5.3</b>	5.4	<b>5.8</b>	6.1	<b>6.5</b>
Import	<b>5.3</b>	6.0	<b>6.2</b>	6.4	<b>6.4</b>
GDP*	<b>1.2</b>	2.1	<b>2.1</b>	2.4	<b>2.5</b>
<b>External balance<sup>1</sup> (2013 data is forecast)</b>					
Current account balance	<b>3.2</b>	2.8	<b>3.0</b>	3.2	<b>3.4</b>
External financing capacity	<b>6.8</b>	5.5	<b>6.3</b>	5.8	<b>6.5</b>
<b>Government balance<sup>1,6</sup></b>					
ESA balance (2013 data is preliminary)	<b>-2.5</b>	-2.5	<b>-2.9</b>	-2.9	<b>-3.0</b>
<b>Labour market</b>					
Whole-economy gross average earnings <sup>2</sup>	<b>3.3</b>	3.9	<b>3.8</b>	5.1	<b>6.1</b>
Whole-economy employment	<b>1.6</b>	1.7	<b>1.9</b>	0.3	<b>0.1</b>
Private sector gross average earnings <sup>3</sup>	<b>3.6</b>	2.8	<b>2.4</b>	3.5	<b>3.7</b>
Private sector employment	<b>0.8</b>	1.3	<b>1.2</b>	0.9	<b>1.0</b>
Private sector unit labour cost <sup>4</sup>	<b>1.7</b>	1.4	<b>1.9</b>	1.1	<b>1.4</b>
Household real income <sup>5</sup>	<b>1.5</b>	1.8	<b>2.0</b>	1.2	<b>1.3</b>

<sup>1</sup> As a percentage of GDP.

<sup>2</sup> Calculated on a cash-flow basis.

<sup>3</sup> According to the CSO data for full-time employees.

<sup>4</sup> Private sector unit labour costs calculated with a wage indicator excluding the effect of whitening and the changed seasonality of bonuses and domestic employees.

<sup>5</sup> MNB estimate.

<sup>6</sup> With complete cancellation of free reserves.

\* Data adjusted for calendar effects

**Table 1-4 MNB baseline forecast compared to other forecasts**

	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Consumer Price Index (annual average growth rate, %)</b>			
MNB (March 2014)	1.7	0.7	3.0
Consensus Economics (February 2014) <sup>1</sup>	1.7	0.7 - 1.4 - 2.5	2.3 - 3.0 - 4.4
European Commission (February 2014)	1.7	1.2	2.8
IMF (October 2013)	2.3	3.0	3.0
OECD (November 2013)	1.9	2.1	3.5
Reuters survey (February 2014) <sup>1</sup>	1.7	0.8 - 1.3 - 2.6	2.0 - 2.85 - 3.5
<b>GDP (annual growth rate, %)</b>			
MNB (March 2014)	1.2	2.1	2.5
Consensus Economics (February 2014) <sup>1</sup>	1.1	1.3 - 1.9 - 2.8	1.3 - 2.1 - 3.5
European Commission (February 2014)	1.1	2.1	2.1
IMF (October 2013)	0.2	1.3	1.5
OECD (November 2013)	1.2	2.0	1.7
Reuters survey (February 2014) <sup>1</sup>	1.1	1.1 - 1.8 - 2.2	1.3 - 1.9 - 2.5
<b>Current account balance<sup>3</sup></b>			
MNB (March 2014)	3.2	3.0	3.4
European Commission (February 2014)	2.9	2.7	2.6
IMF (October 2013)	2.2	2.0	1.3
OECD (November 2013)	1.8	2.1	2.4
<b>Budget deficit (ESA-95 method)<sup>3,4</sup></b>			
MNB (March 2014)	2.5	2.9	3.0
Consensus Economics (February 2014) <sup>1</sup>	2.8	2.7 - 3.0 - 4.0	2.5 - 2.8 - 3.1
European Commission (February 2014)	2.4	3.0	2.9
IMF (October 2013)	2.7	2.8	3.0
OECD (November 2013)	2.7	2.9	2.9
Reuters survey (February 2014) <sup>1</sup>	2.6	2.8 - 3.0 - 3.5	2.5 - 2.9 - 3
<b>Forecasts on the size of Hungary's export markets (annual growth rate, %)</b>			
MNB (March 2014)	1.1	4.7	5.0
European Commission (February 2014) <sup>2</sup>	1.1	4.5	6.1
IMF (October 2013) <sup>2</sup>	1.7	3.9	3.8
OECD (November 2013) <sup>2</sup>	1.2	4.5	5.5
<b>Forecasts on the GDP growth rate of Hungary's trade partners (annual growth rate, %)</b>			
MNB (March 2014)	0.6	1.7	2.2
European Commission (February 2014) <sup>2</sup>	0.6	1.9	2.3
IMF (October 2013) <sup>2</sup>	0.8	1.8	2.3
OECD (November 2013) <sup>2</sup>	0.5	1.8	2.1

<sup>1</sup> For Reuters and Consensus Economics surveys, in addition to the average value of the analysed replies (i.e. the median value), we also indicate the lowest and the highest values to illustrate the distribution of the data.

<sup>2</sup> 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.

<sup>3</sup> As a percentage of GDP.

<sup>4</sup> With complete cancellation of free reserves.

Sources: Eastern Europe Consensus Forecasts (Consensus Economics Inc. (London), February 2014); European Commission Economic Forecasts (February 2014); IMF World Economic Outlook Database (October 2013); Reuters survey (February 2014); OECD Economic Outlook No. 93 (November 2013).

\*Data adjusted for calendar effects.

## 2. EFFECTS OF ALTERNATIVE SCENARIOS ON OUR FORECAST

The Monetary Council identified three alternative scenarios around the baseline projection of the March Report on Inflation, which might significantly influence the future conduct of monetary policy.

In the alternative scenario assuming a persistently low external inflation environment and a slower-than-expected recovery in external demand, the inflation target may be achieved with looser monetary conditions than assumed in the baseline scenario. In the risk scenario assuming an unfavourable external environment and higher investor risk aversion, inflation moves in line with price stability in the medium term under considerably tighter monetary conditions than implied by the baseline projection. The third scenario, assuming a pick-up in domestic employment and consumption, resulting in weaker domestic disinflationary pressures, also implies a tighter monetary policy stance.

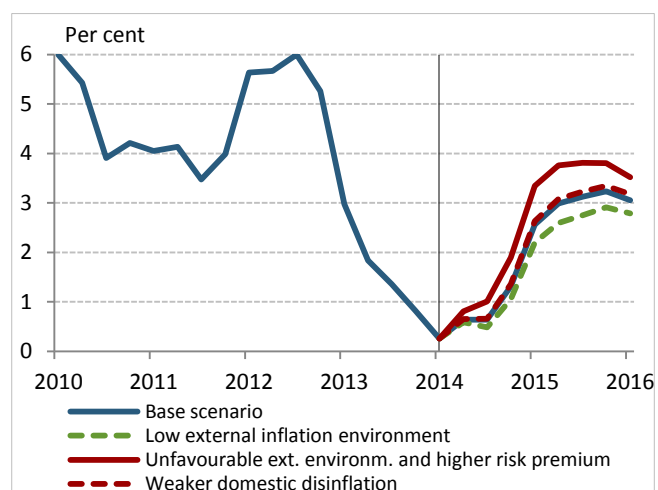
**Incoming data in recent months indicate that global inflation was moderate, which significantly contributed to the fall in inflation in Hungary as well in 2013.** Euro-area inflation was below expectations in recent months and is expected to remain subdued going forward. Global inflation is expected to remain moderate according to the baseline projection.

Low euro-area inflation, which is steadily below expectations and the related **deflation fears may raise the possibility of a slower-than-expected recovery in the euro area** resulting in a more open cyclical position of Hungary's external markets than presently assumed. Furthermore, tapering of the Federal Reserve's asset purchase programme may warrant tighter monetary policies in certain emerging countries, which could also contribute to slowing global economic activity and to a decrease in commodity prices. If weak external demand exerts a stronger disinflationary effect, the external inflation environment may remain persistently low, resulting in lower imported inflation which could mainly be reflected in more moderate price increases of tradables and food.

**In light of the above, the scenario assumes a slower recovery in external demand and lower commodity prices, resulting in low external inflation and lower imported inflation for a long period of time.** In addition, weaker external demand also dampens Hungarian exports, leading to a slower closing of the domestic output gap, which reduces the price pressure exerted by aggregate demand. In this scenario, as a result of stronger

disinflation, the inflation target can be achieved in the medium term with looser interest rate conditions than those assumed in the baseline scenario, while loose monetary policy can only partially offset the unfavourable growth effects of weaker demand (Chart 2—1).

**Chart 2—1 The impact of the risk scenarios on our inflation forecast**



Source: MNB

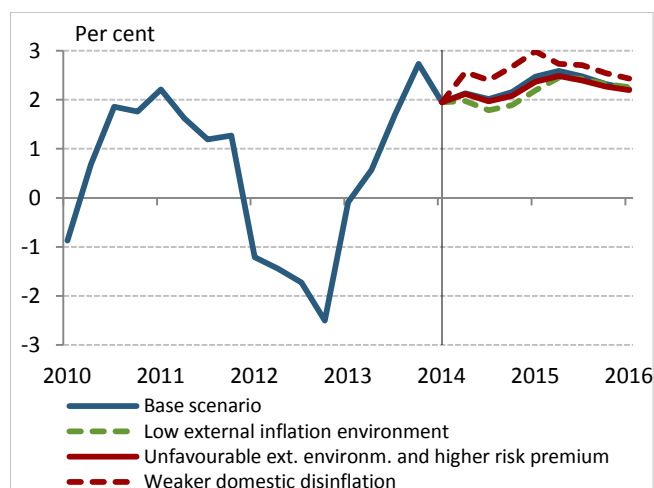
**International investor sentiment has been volatile** in the past quarter, and Hungarian risk premia remained essentially unchanged, while the exchange rate deteriorated amidst substantial volatility. In addition, the divergence in growth prospects of developed and emerging economies continued as growth prospect in the latter group gradually deteriorated.

**There are numerous risk factors that may have a negative impact on Hungary's external demand and risk premium.** These include a deterioration in global risk appetite, due the vulnerability of certain emerging economies and the future withdrawal of unconventional tools applied by globally important central banks. The recent financial market turbulence in vulnerable emerging economies may result in these countries facing a permanently higher risk premium, tighter monetary conditions and more sluggish growth in the near future. This environment may be conducive to more financial market turmoil, which would in turn lead to a deterioration of the risk perception of most emerging countries and could also spread to the region and Hungary. There is also significant uncertainty about economic performance in certain emerging countries (such as Russia, China and India): fragile growth prospects or possible deceleration in these countries could have a negative impact on global investor sentiment.

Finally, the potential challenges faced by the euro-area periphery's banking sector may also involve a substantial risk: protracted balance sheet adjustments by more vulnerable banks may trigger tensions on the financial markets and undermine investor sentiment. The current Ukrainian crisis presents similar risks, fuelled by concerns regarding its banking system and potential sovereign default.

**In light of the above, this scenario assumes lower external demand and an increase in the risk premium due to external factors.** The deteriorating global investor climate raises Hungarian risk premia, which restrains bank lending through higher funding costs, and consequently credit conditions both for firms and households may tighten. A rise in the risk premium causes exchange rate depreciation, which in turn increases inflation. Due to the deterioration in external demand and the impact of the risk premium on lending, growth in this scenario is lower than outlined in the baseline projection. In terms of inflation developments, the effect of the weaker exchange rate is only partially offset by the wider output gap resulting from slower growth and the disinflationary impact of the external environment. Against the backdrop of deteriorating risk perceptions and rising inflation, tighter monetary policy compared to the baseline scenario may ensure that inflation is in line with the 3 percent target by the end of the forecast horizon (Chart 2—2).

**Chart 2—2 The impact of the risk scenarios on our GDP forecast**



Source: MNB

**Past quarters have been characterised by restrained inflation and wage growth in line with subdued domestic demand,** which allows firms to stabilise their profitability by curbing wage increases. In addition, households'

protracted balance sheet adjustment and the subdued dynamics of core income point to slow growth in consumption.

**At the same time, several factors suggest that wage dynamics and the consumption path might be higher than assumed in the baseline scenario.** In line with the upswing in economic activity and employment, the labour market may become tighter. This is suggested by last year's marked decline in the unemployment rate, the rise in the number of new non-subsidised jobs and in private sector employment. Sectoral labour market indicators also suggest that the shortage of labour is becoming a constraint in production for an increasing number of firms. A less loose labour market does not allow for stronger wage adjustment by firms, and thus companies may pass on rising wage costs in their prices, in a trend that may grow as economic activity accelerates. In addition, the stronger-than-expected growth in labour demand may also exert inflationary pressure.

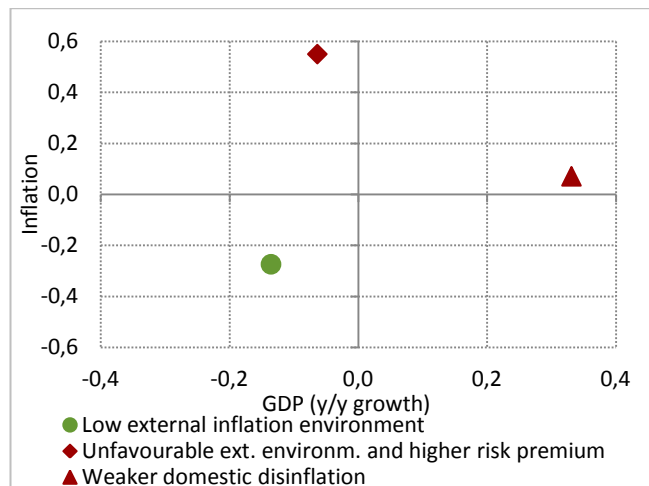
In addition to the labour market trends, there are also several upside risks related to the future development of consumption. First, independently of the real economic indicators, a positive impact on confidence indicators has been observed, which may trigger a stronger-than-expected rise in consumption compared to the baseline scenario. Moreover, substantial deleveraging has occurred in the household sector in the recent past, and consequently there may have been an increase in the proportion of households with easing balance sheet adjustment constraints and thus higher disposable income. Finally, the recent rise in employment may also foster more favourable developments in households' income position, and the low inflation since early 2013 coupled with certain government measures may also improve households' purchasing power.

**A tighter labour market compared to the baseline scenario and the increase in households' disposable income could trigger a faster closing of the output gap – which can be viewed as a measure of inflationary pressure.** Higher wage dynamics materialising in a tighter labour market represent cost pressures for firms. In a context of higher wage costs and rising demand, firms can improve their profitability by increasing retail prices, which strengthens inflationary pressure. In addition, households' improved income position and lower balance sheet adjustment pressure entail a higher consumption path. On the whole, rising domestic demand entails a narrower output gap and lower disinflationary effect, and therefore



in this scenario tighter monetary conditions than in the baseline scenario are needed for inflation to remain in line with the 3 per cent target (Chart 2—3).

**Chart 2—3 Risk map: The effect of alternative scenarios on baseline forecast**



Note: The risk map presents the average difference between the inflation and growth path of the alternative scenarios and the baseline forecast on the forecast horizon. The red markers mean tighter and the green markers mean looser monetary policy than the baseline forecast.

Source: MNB

### 3. MACROECONOMIC OVERVIEW

#### 3.1. International environment

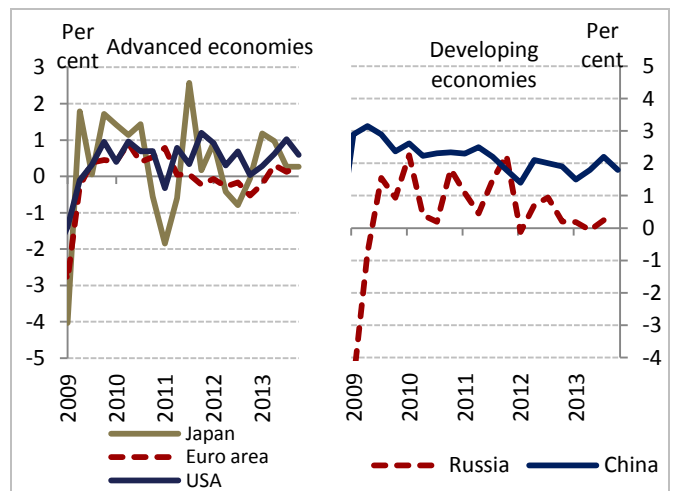
The global economy continued to recover slowly during the past quarter. The growth environment developed on different paths for the developed and emerging economies. Previously fast-growing emerging economies were characterised by slowing growth in the final months of 2013, while at the same time a broader group of advanced economies showed signs of strengthening economic activity. Declining commodity prices and the present moderate growth in the global economy have a disinflationary effect, and consequently inflation rates stayed below the inflation targets of the major central banks. The Fed began to taper its asset purchases, while some central banks indicated in forward guidance that the current loose monetary conditions may persist for an extended period of time. The turbulence seen in the emerging markets at the beginning of the year primarily affected countries with weak economic fundamentals and resulted in interest rate hikes in several cases.

##### 3.1.1. Developments in global economic activity

**During the fourth quarter, global economic activity picked up.** Compared to earlier quarters, higher annual rates of growth were observed in the most important economic regions. The differential between the growth of developed and emerging economies increased; i.e. in contrast to the acceleration seen in the former group, output growth has slowed in various emerging countries. The diverging paths of economic activity were the combined result of various factors. Fiscal consolidation eased up in advanced economies, mitigating the negative impact of fiscal policy on growth. In addition, the forward guidance published by central banks in several developed countries indicated that monetary conditions may stay loose for an extended period of time. In developed economies, bank lending may show signs of picking up (although from a low base), due to easing credit conditions and stronger economic activity. The financial fragmentation observed in the euro area declined, while lending prospects improved. In contrast to the above, the central banks of various emerging countries were compelled to tighten their policies as a result of increasing risk premiums and weakening exchange rates in the wake of financial tensions. The lending boom seen recently may be followed by more restrained credit conditions. Furthermore, the decline in commodity prices due to deceleration in emerging economies may have an adverse effect mostly on net importers of commodities. On the

whole, while the gradual global recovery is expected to continue in the quarters ahead, growth rates may differ across regions (Chart 3—1).

**Chart 3—1 GDP growth in the major economies (seasonally adjusted quarterly change)**



Source: OECD

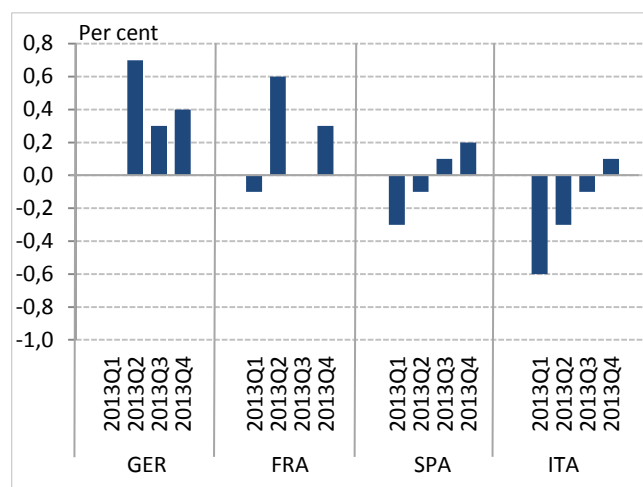
**The continued growth of the US economy was accompanied by increasing consumer confidence and improvement in the housing market.** In the fourth quarter, GDP increased by 2.5 per cent year-on-year. In addition to rising household consumption and the easing of fiscal tightening, this faster growth was also due to favourable net exports. Consumption was supported by the improving labour market and by rising house prices and stock exchange indices. At the end of the year, economic indicators showed a slight deceleration, which may also have reflected the impact of adverse weather conditions. Unemployment in the US has continued to fall. By January, the unemployment rate declined to 6.6 per cent, approaching the 6.5 per cent threshold set in the forward guidance of the central bank. One negative aspect, however, is the decline in the activity rate, which may indicate discouraged workers exiting the labour market. Moreover, in some cases, the number of hours worked is still low due to cyclical reasons. Taking the improving macroeconomic environment into consideration, the Fed decided to start tapering its asset purchases in December.

**Last year, the rate of growth accelerated in Japan. In addition to expansive monetary and fiscal policies, this was also fostered by the depreciation of the yen.** Exports continued to increase, while domestic demand strengthened as a result of private sector consumption and

investment. In view of the consumption tax increase scheduled for April, households brought forward a part of their consumption, which may have contributed to the upturn in consumption. As a result of growing employment, there was a slight improvement in households' income situation. As nominal wages are expected to resume growth, household consumption may also continue to increase. Despite a slight deterioration, consumer confidence is still considered relatively strong.

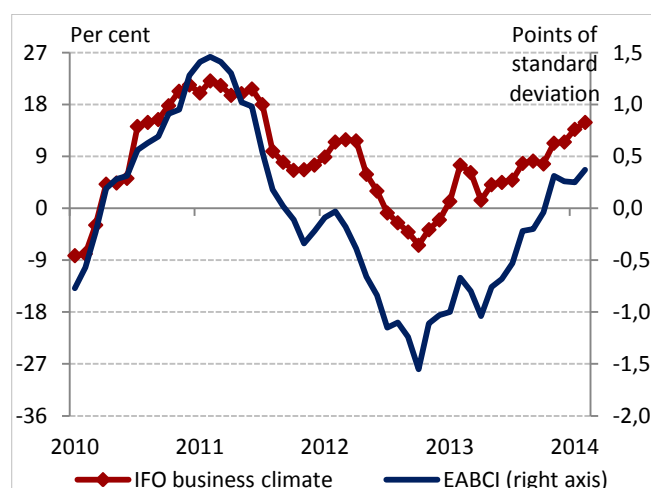
**The euro-area economy clearly emerged from the recession in the second half of last year.** Recovering activity has been observed in an increasing number of Member States. At the end of 2013, of the core EU countries, economic growth compared to the third quarter picked up both in Germany and France. In Germany, growth has been driven by private and public consumption, supported by a low interest rate environment, lower-than-expected inflation and favourable labour market trends. Similarly, production indicators suggest a promising outlook in peripheral countries. In Spain, positive quarterly growth of a more balanced structure was recorded in the fourth quarter, owing to improving confidence and easing lending constraints. The increase in exports proved to be robust, supported by both improved competitiveness and the growth experienced by foreign trade partners. The persistently high levels of debt and unemployment, however, may make the growth outlook fragile. Euro-area business indicators continued to improve in recent months, possibly indicating the continuity of a gradual economic recovery. However, the economic recovery in the euro area may affect the labour market with some delay. The unemployment rate remained high at a 12 per cent level. Outside of the euro area, the United Kingdom saw a stronger upswing in economic growth. Growth has been driven by robust domestic demand, offsetting the impact of poor performance in exports. In the fourth quarter, UK economic activity increased by 2.8 per cent year-on-year (Chart 3—2 and Chart 3—3).

**Chart 3—2 Quarterly GDP growth in major euro area economies**



Source: Eurostat

**Chart 3—3 Business climate indices for Germany and the euro area**

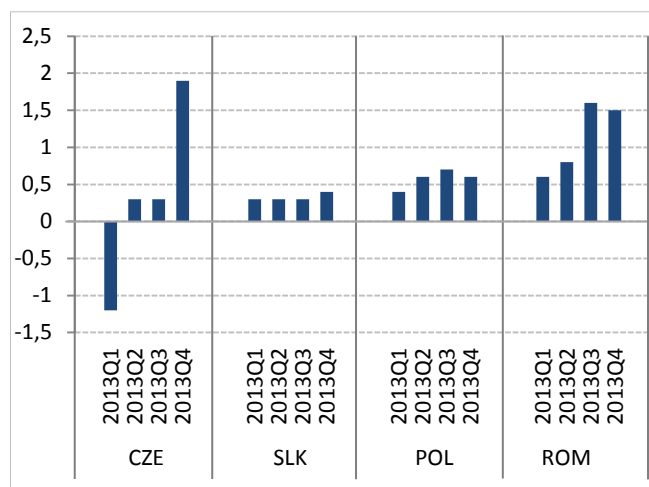


Source: IFO

**Growth in the CEE region has also accelerated compared to the previous quarter, at a rate exceeding the EU average.** The economic recovery in the major foreign trade partners, primarily in Germany, may have played an important role in the region's favourable performance. Good net exports played a substantial role in economic growth. Industrial, retail sales and construction industry data point to an ongoing recovery, along with confidence indicators as well. Household consumption is still restrained by weak consumer confidence and a relatively high unemployment rate. Based on preliminary data, in the fourth quarter GDP increased by 1.6 per cent quarter-on-quarter in the Czech Republic. Thus, for the first time in two years, the annual growth rate returned to the positive range. In the fourth quarter of 2013, exports continued to

drive the Romanian economy, thanks to robust industrial output and favourable harvest results (Chart 3—4).

**Chart 3—4 Quarterly economic growth of the CEE countries**



Source: Eurostat

Of the major emerging economies, following a slight deceleration, China recorded year-on-year growth of 7.7 per cent, i.e. the country's economy has been growing at a relatively steady pace for a year and a half. Growth was supported by developments in industrial production and investment. Consumption was favourable owing to households' increasing disposable income. Despite the slowdown in infrastructure projects, the growth rate of investment remained stable, although the sustainability of such growth is still uncertain.

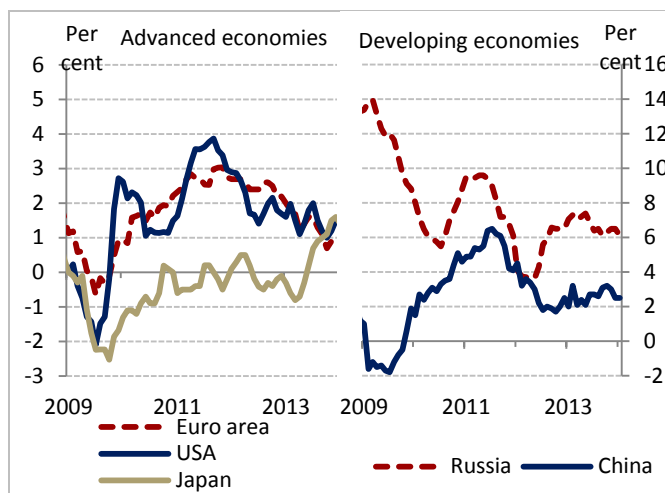
Many countries with significant current account deficits or partly unstable political environments were hit particularly hard by capital outflows from emerging markets at the beginning of the year. In addition to the financial market turbulence and the tightening interest rate reaction of central banks, the economic outlook of affected countries also deteriorated and became more uncertain. With close economic ties across the region, Russian economic prospects may be hindered by subdued investment growth and the decline in oil prices.

### 3.1.2. Global inflation trends

**Commodity prices have continued to decline slightly on global markets in recent months.** For several months, the Brent crude oil price has fluctuated around USD 110 per barrel (Chart 3—6). A modest decline began late last year in the context of general optimism concerning the settlement of the situation in North Africa and the strengthening of the US dollar. Prices of industrial commodities (iron ore and coal) decreased slightly as a

result of deceleration in the Chinese steel industry. Favourable trends have continued to dominate global market prices of unprocessed food (Chart 3—7).

**Chart 3—5 Inflation in major economies**



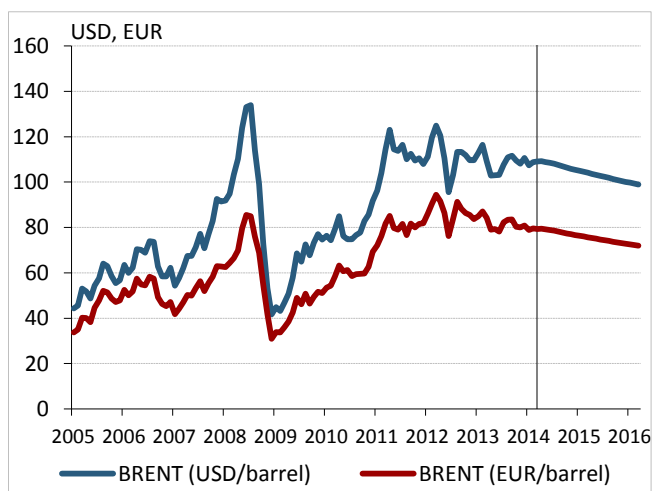
Note: Annual change.

Source: OECD

The combination of declining commodity prices and the slowly growing global economy exerted downward pressure on inflation, and as a result, inflation rates stayed below the inflation targets of the major central banks. The central banks of global importance retained their view that medium-term inflation risks are moderate in the current economic environment, and were thus able to maintain loose monetary conditions. In January, the annual growth rate of the consumer price index was 1.6 per cent and 0.8 per cent in the US and the euro area, respectively. While the moderate inflation rate in the euro area was primarily due to low energy prices, subdued demand and the appreciation of the euro also contributed significantly to disinflation. In Japan, the inflation rate has approached the 2 per cent inflation target of the central bank. This rise in inflation was mostly related to the increase in import prices stemming from the weakening of the exchange rate. While inflation expectations have increased slightly, for the time being there has been no significant growth in wages. In the United Kingdom, the inflation rate dropped to 1.9 per cent in January, and thus moved into line with the 2 per cent inflation target. Of the major emerging economies, the inflation rate in China remained relatively moderate. Following an increase at the end of last year, annual inflation was around 2.5 per cent during the first few months of the year. Inflation declined in Russia at the beginning of the year, which can be attributed primarily to falling food prices, but the rate still

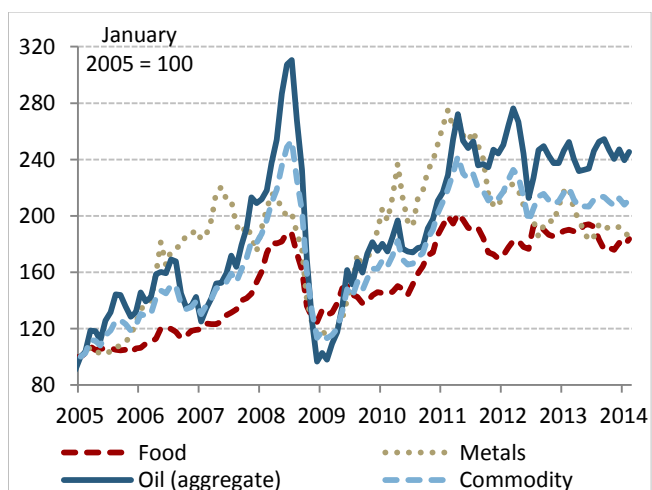
exceeded the 5 to 6 per cent inflation target band of the central bank (Chart 3—5).

**Chart 3—6 Brent spot and futures oil prices in various currencies**



Source: Bloomberg

**Chart 3—7 Changes in major commodity prices (USD)**



Source: IMF-IFS

**The rate of inflation generally remained below the target in the CEE region.** In the Czech Republic, both the change in the overall consumer price index and inflation excluding the primary effect of indirect tax changes (monetary policy relevant inflation) dropped to close to zero in January. To a large degree, this was due to the waning effect of a previous VAT increase and falling inflation in regulated prices. Weak domestic demand continues to have a disinflationary effect, whereas the weaker exchange rate resulting in part from central bank intervention puts upward pressure on inflation. In Poland, CPI inflation remains significantly lower than the 2.5 per cent target. The low core inflation figure continues to indicate moderate demand pressure. Disinflation continued to

strengthen in Romania. Annual inflation slowed to 1.1 per cent in January, while the core inflation indicator has been in the negative range for several months. Apart from temporary effects, disinflation has been associated mostly with the negative output gap and decreased inflation expectations.

### 3.1.3. Monetary policy and financial market developments

At the end of 2013, global financial markets remained calm, despite the fact that the Fed's decision to taper asset purchases in December – which was justified by improving labour market prospects – came earlier than expected. In addition, the Fed signalled that the current near zero per cent interest rate may be maintained well after the unemployment rate declines below 6.5 per cent, especially if inflation is expected to stay below 2 per cent over the long term.

**While the European Central Bank reiterated its guidance that the key policy rate is expected to stay at or below the current level for an extended period of time,** in January it stressed more firmly that monetary policy will remain accommodative as long as considered necessary. The perception of the periphery of the euro area has continued to improve, leading to a further decline in the bond spreads of periphery countries starting from end-2013. The positive perception was partly the result of improving competitiveness and the reduction of the current account deficit in these countries. Spain, Ireland and Portugal managed to attract a significant amount of market funds in January (Chart 3—9).

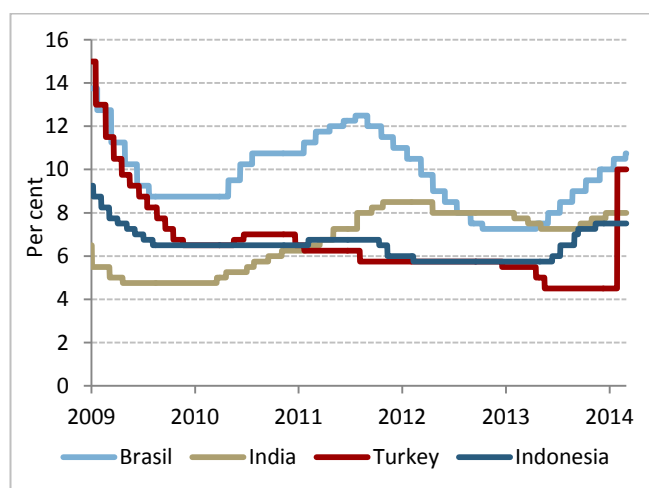
Approaching the unemployment threshold set in its earlier statement, the central bank of the United Kingdom reassessed its economic outlook and adjusted its forward-looking guidance. Key elements of the new guidance include that the interest rate is expected to be raised only gradually, with its timing, extent and progress depending on the economic conditions and various indicators linked mainly to capacity utilisation.

**In Japan, while the central bank left unchanged the total amount and structure of its asset purchases announced with a view to achieving the 2 per cent inflation target,** in February it modified its lending facilities in order to encourage bank lending. To that end, the total amount available under both programmes was doubled and the maturity was extended.

**At the end of January, the uncertainty surrounding the Fed's tapering of asset purchases combined with concerns about Chinese economic growth and political**

**tensions in certain countries led to a significant change in market sentiment.** The main stock exchange indices on developed markets began to fall, which was followed by adjustment in February, whereas developed market long-term yields have declined since the beginning of the year. Of the emerging economies, the turbulence had a greater impact on countries with troubled economic prospects, an uncertain domestic political environment, or a strong need for external financing (e.g. Turkey, South Africa, and Ukraine). In addition to increased investor focus on country-specific vulnerabilities, the exchange rates of the countries affected weakened significantly, prompting the central banks of several emerging countries to respond by tightening monetary conditions. Following a slowdown, the outflow of capital from emerging bond markets accelerated once again at the beginning of 2014 (Chart 3–8).

**Chart 3–8 Central bank rates in major emerging economies**

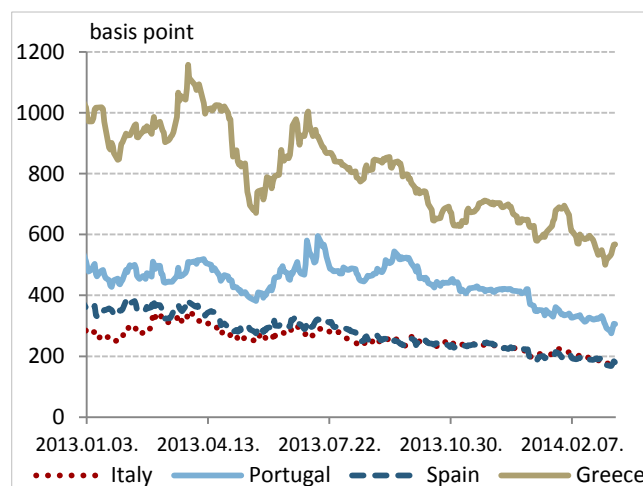


Source: Databases of central banks

**Central banks in the Central and Eastern European region maintained their loose monetary conditions,** while Romania continued its interest rate-cutting cycle. Since November, the Czech central bank has used the weakening of the exchange rate as a monetary policy instrument with a view to avoiding deflationary risks. In February, the Czech central bank announced that it was committed to maintaining the level of the exchange rate at least until the beginning of 2015 to ease monetary conditions, which will accelerate the return to the inflation target. The Polish central bank maintained its guidance, according to which it

will not change the key policy rate until the end of the first half of 2014. The Romanian central bank continued the easing cycle commenced in the summer, reducing the base rate by a total of 50 basis points in the past few months. The latest decision, adopted simultaneously with the publication of the inflation forecast, may indicate the end of the rate-cutting cycle.

**Chart 3–9 10Y periphery bond spreads over the 10Y German bond yields**

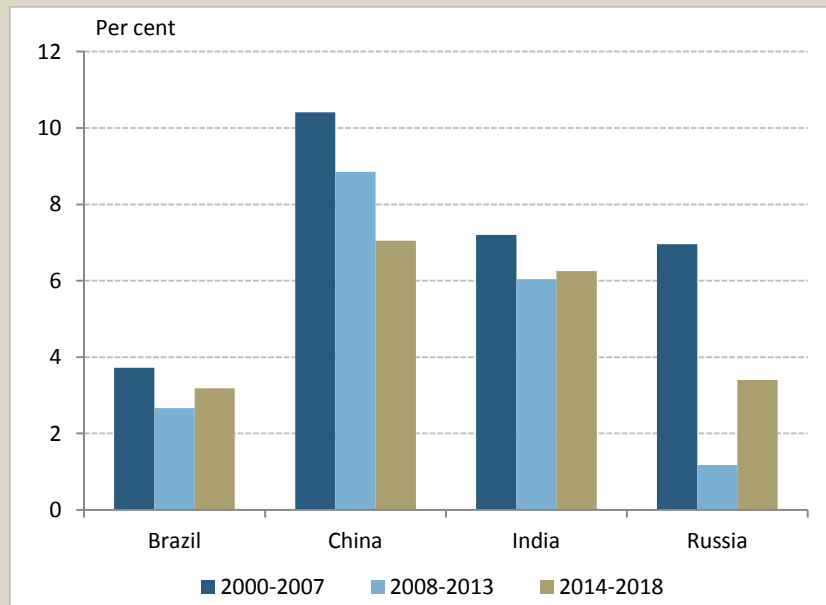


Source: Bloomberg.

### Box 3–1 Deceleration in the emerging markets – a permanent or temporary development?

Over the past two decades, the growth structure of the global economy has changed significantly. The driving force of growth increasingly shifted to developing countries where economic expansion accelerated quickly, as a result of the cheap and abundant workforce, significant natural resources and globalisation which increasingly shaped global trade. Of the countries that mainly produce for exports, Brazil, Russia, India and China – known as BRIC countries – excelled. These countries were able to expand very dynamically, mainly after the turn of the millennium, and it appeared that the economic crisis did not interrupt their growth momentum. However, data from recent quarters as well as forecasts suggest a continuous slowdown in these economies. The question is whether this is a temporary development or if there are more permanent effects behind decelerating growth (Chart 3–10).

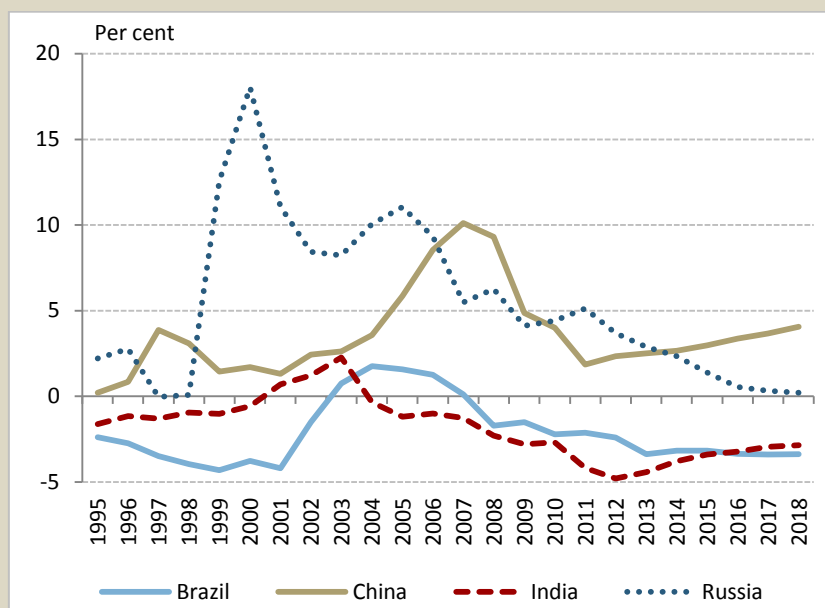
Chart 3–10 GDP growth in BRIC countries



Source: IMF WEO Update (January 2014)

The growth model of BRIC countries was not based on a single pattern; each country had different peculiarities, which were interconnected and strengthened each other. In the Asian economies, the fundamental determinants of growth were cheap labour quickly appearing in industrial production (in the past thirty years nearly 900 million people started to work in the developing regions, while in developed countries this figure was only one-fifth as high), high investment rates financed mainly by domestic savings and quick adaptation of frontier technologies. Dynamically expanding foreign trade not only increased the production of consumer goods, but also significantly boosted demand for commodities, and thus commodity-exporting countries (e.g. Russia, Brazil) also gained significant revenues from rising commodity prices after the turn of the millennium. Accordingly, investments related to commodity exports made a significant contribution to the growth performance of these countries. The substantial foreign trade surplus only slowly raised the consumption level of households, which had high saving rates anyway, given the low social expenditures, and therefore these countries had a positive balance of payments for longer or shorter periods before the crisis (Chart 3–11).

Chart 3–11 Current account position of BRIC countries in percentage of GDP



Source: IMF

The economic crisis destabilised the economic model of BRIC countries in several aspects, while the external environment gradually changed. As a result of the process that turned the financial crisis into a debt crisis, slow but necessary balance sheet adjustment by economic agents started around the world. A combination of falling aggregate demand in the developed markets, globally rising unemployment and declining commodity prices shook the foundations of the former growth models. Developing countries turned towards their own domestic markets to offset lost revenues resulting from decreasing external demand: in harmony with increasing wages and rising household lending, household consumption rose (strong Asian demand represents one of the drivers of the European recovery), while infrastructure and real estate investments – which have a more restrained effect on potential growth – increased. The lower initial debt level and the generally loose monetary policy in the developed markets created an opportunity to access substantial external finance, providing further impetus to domestic demand and in many cases to domestic lending.

Nevertheless, the previous growth rate gradually slowed after the onset of the crisis. Factors affecting partly cyclical growth and partly potential growth are behind these lower growth dynamics. Among the cyclical reasons, one key factor is the restrained consumption demand of developed economies struggling with high levels of debt and unemployment, while among the longer-term, structural factors the following aspects are highlighted by the analyses dealing with this phenomenon:

- Demographic processes point to the direction of an aging society in the case of the large developing countries as well, which may result in a significant decrease of labour market activity and employment. Additionally, during the last few decades the technology gap has become more narrow between the developed and developing economies, and therefore the growth potential stemming from this difference has also become more moderate.
- During the recovery from the 2007-2009 crisis, the dynamics of global trade decelerated tangibly. The phenomenon stems from both cyclical and structural reasons (we discuss this topic in more detail in the box “Cycle or trend? – Change of import intensity of global growth” published in the December 2013 Inflation Report). In supply chains, the rapid globalisation perceived before the crisis cannot be expected, which may pose a challenge to countries with large export shares in the coming years.
- Similar risks stem from the transformation of the oil and gas markets for the large commodity-exporter countries, in the course of which new technologies and new stakeholders appeared in global production. Changes in market structure and pricing prospects may severely impact the external balance position and growth prospects of large commodity-exporting countries.



- • Before and after the crisis in several emerging markets, indebtedness increased substantially by exploiting the low interest rate environment. Along with productive manufacturing investments, the growth in debt increasingly shifted in the direction of consumption and real estate related uses. The rise in the level of interest rates or decreases in asset prices (e.g. on the real estate market) may exacerbate concerns about the repayment of debt, which – similarly to the developed markets – may result in a permanently weaker domestic demand environment. The financial market turbulences experienced recently have partially priced in these fears on the market, and the increasing outflow of financial resources from developed markets poses significant risks to potential growth.

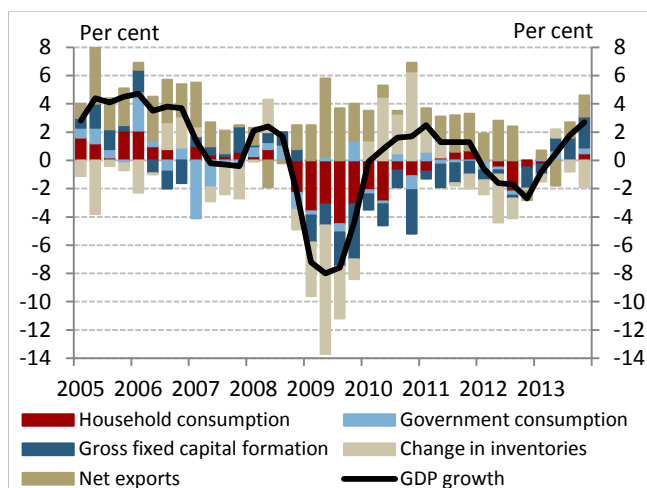
On the whole, these processes imply that over the medium term we cannot expect a return to the fast growth characterising the pre-crisis decades. The structure of the economies concerned may shift gradually from the previous rapid export growth towards domestic demand. This structural change may have a smaller effect on countries with large domestic markets, continuous current account surpluses in the last decade and large accumulated reserves (e.g. China), while it may have a stronger effect on economies relying more heavily on external finance (e.g. Brazil).

### 3.2. Aggregate demand

The real economy continued to accelerate in the fourth quarter. On the demand side, the rise in exports and investment both drove the upturn. In a low inflation environment and with increasing real income, household consumption grew modestly, but consumption growth dynamics were restrained due to households' strong precautionary motives.

In 2013 Q4, GDP increased in line with the baseline scenario from the December forecast. On an annual basis, GDP increased by 2.7 per cent. The economy grew by 0.5 per cent compared to third quarter, slightly lower than the 0.8 per cent growth rate from the previous quarter (Chart 3—12).

Chart 3—12 Structure of annual GDP changes in Hungary



Source: CSO

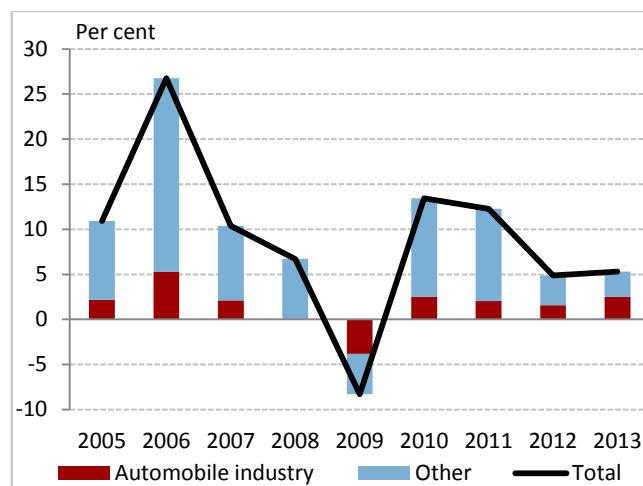
In recent quarters, the growth structure in Hungary has become more balanced. Net exports made a positive contribution to economic growth again in 2013. Meanwhile, domestic demand has also started to climb gradually since the beginning of the year. The post-crisis downward trend in investments reversed. The rise in investments was mainly driven by infrastructure developments carried out with EU funding. Improving consumer confidence may also have fuelled the rise in household consumption, along with growing real wages.

#### 3.2.1. Foreign trade

The fourth quarter saw further improvement in the trade balance, mainly driven by export sales in the automotive industry. Intermediate consumption by exporting firms and rising investments may have contributed to higher imports dynamics. Last year, automotive industry

production capacities continued to increase, which was also reflected in a rise in export market share. The rise in industrial export orders and further improvement in sentiment indicators recorded in early 2014 point to continued growth in exports (Chart 3—13).

Chart 3—13 Contribution of manufacture of vehicles to export growth

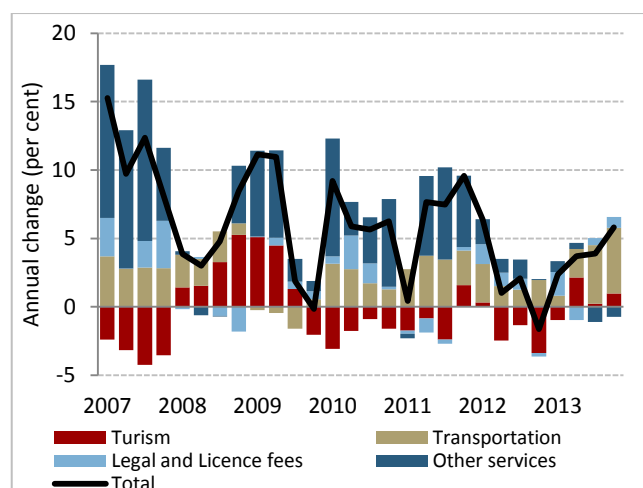


Note: Annual change, calculated from current price data.

Source: CSO

In the fourth quarter, exports of services continued to increase. The rise in exports of services is mainly driven by the further significant expansion of transportation exports. The performance of the tourism sector improved to a lesser degree, while other services were characterised by slight moderation (Chart 3—14).

Chart 3—14 Change in export of main sector of services

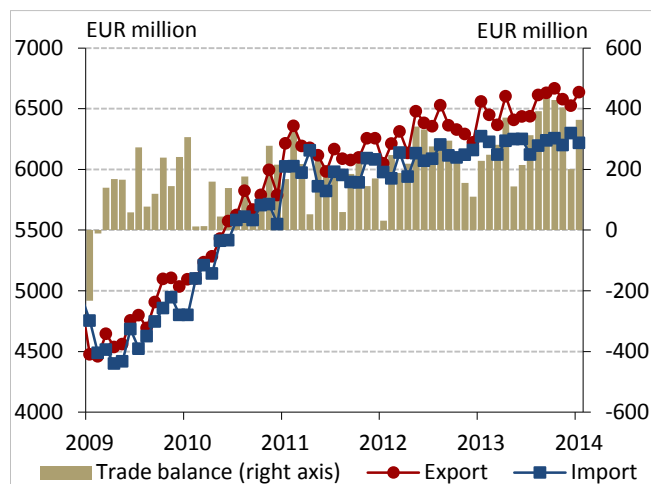


Source: CSO

In total after the slowdown in net exports in the first half of last year, the trade surplus began to increase at a

**faster pace**, which was fuelled by the rise in industrial export orders (Chart 3–15).

**Chart 3–15 Foreign trade and foreign trade balance\***



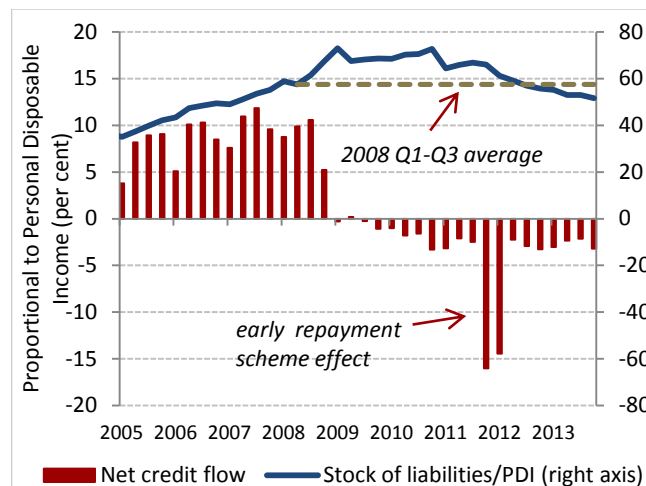
Note: The export of goods was adjusted for working day, missing data effects and distortions related to VAT registration. The import of goods was corrected by the Gripen jet and the Combino tram purchases besides the activity of the VAT residents. The seasonal adjustment of the trade balance was made directly.

Source: CSO

### 3.2.2. Household consumption

**Household consumption continued to improve in the final quarter of 2013, in parallel with rising real wages and improving consumer confidence.** Household consumption grew at a slower rate than real income. The reason for this is that the reduction of debt accumulated in the pre-crisis era may have continued. Although households' rate of indebtedness reached the pre-crisis level at the end of last year, the motivation to reach a healthier debt level may reinforce most of the affected households' propensity to save, and it is possible that the strong precautionary considerations will only ease slowly (Chart 3–16).

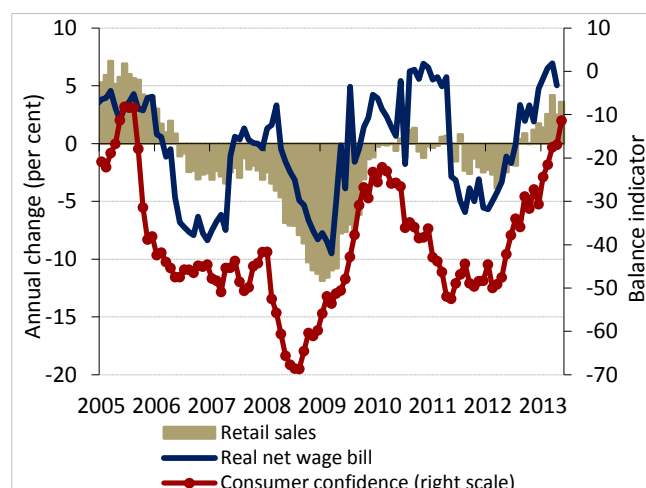
**Chart 3–16 Development of households' net financial wealth proportional to the personal disposable income (PDI)**



Source: MNB

**Consumer confidence increased considerably in recent quarters.** The rise in consumer confidence is partly driven by the developments of the macro foundations of the economy; the upcoming parliamentary elections also have a positive effect on sentiment (this phenomenon in consumer confidence was also observed before earlier elections). FX debt revaluation due to the weaker HUF exchange rate since early 2014 may curb households' propensity to consume in the quarters ahead. In addition, fluctuations in the exchange rate could also induce cautious behaviour by households (Chart 3–17).

**Chart 3–17 Developments in retail sales, income and the consumer confidence index**

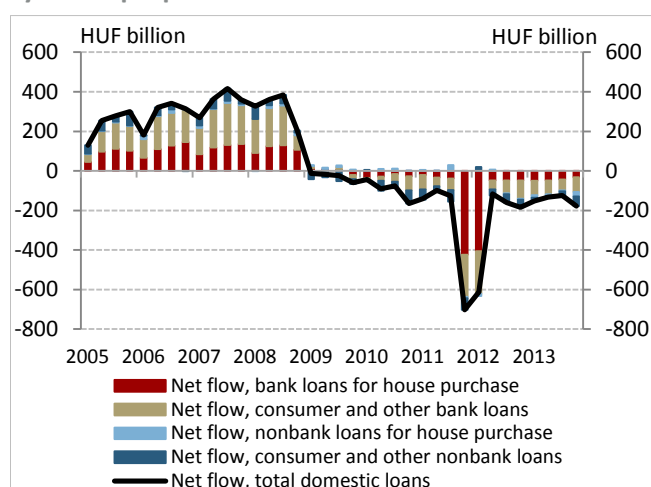


Source: CSO

**Loans to households within the entire financial intermediary system continued to fall in the fourth quarter (by roughly HUF 180 billion in total).** The decrease

affected all product types, with portfolio cleaning by banks also having a substantial impact. In addition to shrinking loan portfolios, the volume of newly placed loans also fell compared to the previous quarter, but household lending still shows an increase in year-on-year terms. Overall, any material upswing on the household loan market is impeded by households' cautious attitudes and continued balance sheet adjustment on the one hand, and the slow easing of credit conditions on the supply side on the other hand (Chart 3—18).

**Chart 3—18 Quarterly net increase in loans to households from domestic financial intermediaries by credit purpose**



Note: Loans granted by banks (without specialized institutions), foreign branches, cooperative credit institutions and other financial intermediaries. Seasonally unadjusted change in outstanding amounts, with rolling exchange rate adjustment.

Source: MNB.

### 3.2.3. Private investment

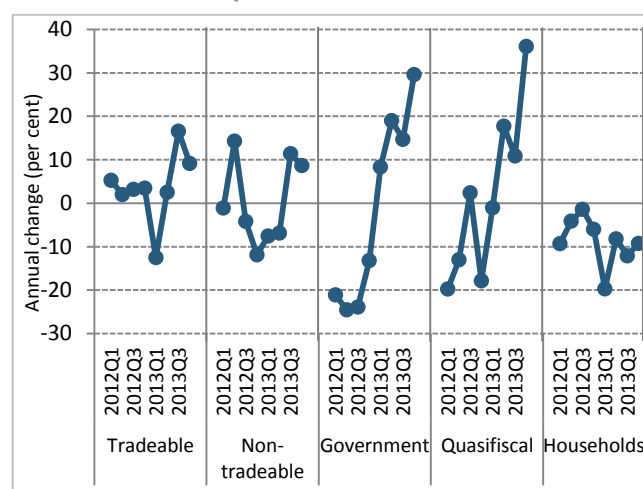
**Investments in the national economy increased by 14.9 per cent year-on-year in 2013 Q4.** The investment volume grew by 7.2 per cent overall for 2013 as a whole. Incoming data confirm that the downward trend which started in 2006 in the investment rate in the national economy reversed in 2013. The investment rate reached 18.5 percentage points in the fourth quarter of last year.

**The fourth quarter, which accounts for a large share of annual investment performance, saw an increase in investments across most sectors.** The increase in the absorption of EU funds significantly boosted the government's infrastructure investments. Corporate investments continue to rise at the end of 2013, driven mainly by the manufacturing industry's positive performance (Chart 3—19).

The FGS loans disbursed in the third quarter may have fostered investment activity primarily through machinery procurements in the fourth quarter. Firms that were provided with new credit in the FGS programme were more productive, have faster growth rates and have larger company size than those firms that were in the control group, which had new credit in 2011. Those firms that converted their foreign currency denominated loans into forints were mainly similar to those which were provided with new loans in 2011, but had faster growth rates and higher indebtedness levels. Companies that converted their loans in the FGS programme have weaker investment performance, higher indebtedness level and larger company size relative to those which were provided with new credit and those which had foreign currency denominated loans overall.

**Capacity utilisation increased at the beginning of the year, and with the pick-up in demand conditions and easing credit conditions this may point to a further rise in investment.**

**Chart 3—19 Development of sectoral investments**

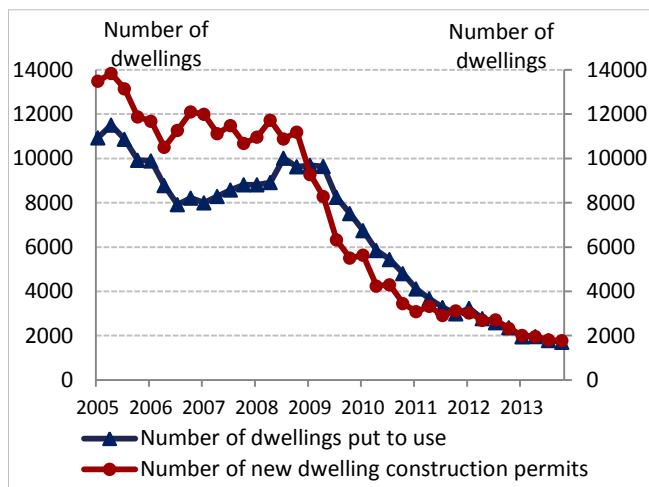


Source: CSO

The need for balance sheet adjustment due to the deleveraging of accumulated debt and strict credit conditions continued to constrain household investments. Although the housing market shrank at a slower pace in the fourth quarter, the number of new construction permits issued and the number of dwelling units built fell to a new historic low. The decline affected all regions in 2013, but the number of new dwellings occupied in Budapest started rising, thanks to several large-scale projects. Housing market developments show a more positive picture this year compared to the previous period, and the year-on-year rise in the number of new construction permits of residential buildings issued in

January may foreshadow stabilisation in this market (Chart 3—20).

**Chart 3—20 New dwelling construction permits, dwellings put to use quarterly**

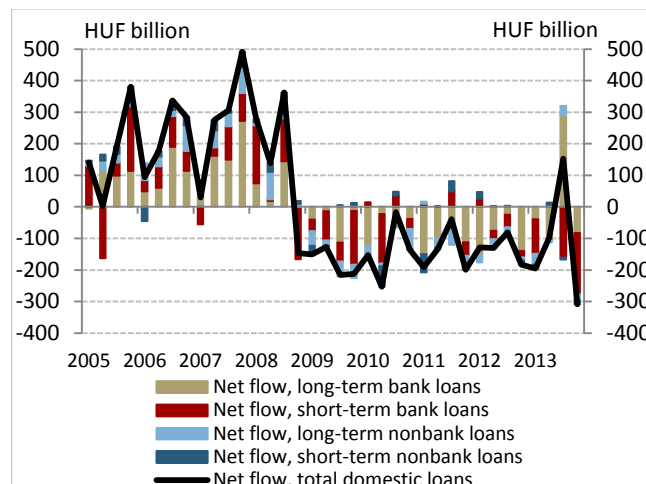


Source: CSO

While the corporate loan portfolio within the entire financial intermediary system shrank significantly, by HUF 300 billion in 2013 Q4, corporate lending improved in 2013 H2 with a much healthier structure, thanks to the spread of long-term, forint-denominated SME lending. The sharp dip was attributable to the year-end portfolio cleaning in the banking sector and the indirect impact of the FGS. The scheme led to a substantial change in the maturity structure of outstanding loans (with long-term loans replacing short-term ones, thus reducing the need for renewal), which may have been coupled with firms bringing forward their borrowing to the third quarter. This may have resulted in a higher number of non-renewed maturing loans in the fourth quarter. Thus, overall, 2013 Q4 was characterised by a marked decrease in short-term loans.

**Developments in corporate lending continued to be shaped by strict credit conditions.** The last quarter's Lending Survey revealed that the large majority of banks left their credit conditions unchanged. Accordingly, for the time being, credit supply constraints are tempered mainly by the central bank's ongoing credit scheme and the decrease in lending rates, in line with the reduction of the central bank base rate. Corporate credit demand may have remained subdued in the fourth quarter based on the slight increase in demand perceived by banks and the restrained increase in the sector's investment and output activity (Chart 3—21).

**Chart 3—21 Quarterly net increase in loans to non-financial corporations from domestic financial intermediaries**



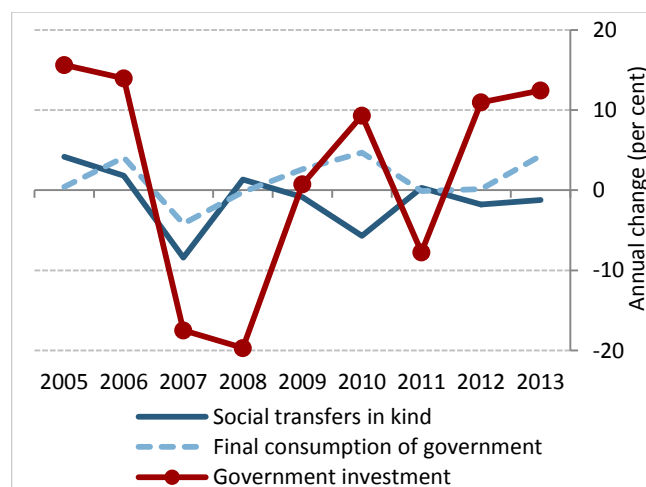
Note: Loans granted by banks (without specialized institutions), foreign branches, cooperative credit institutions and other financial intermediaries. Seasonally unadjusted change in outstanding amounts, with rolling exchange rate adjustment.

Source: MNB.

### 3.2.4. Government demand

**The dual trends prevailing in the past still characterise government demand: while state investments are rising substantially, fiscal policy aimed at achieving low government debt continued to hold back current expenditures (primarily in social transfers in-kind).** In the fourth quarter, investment demand from sectors linked to the state continued to increase significantly, due to the accelerating pace of EU funds utilisation. The mild weather in December allowed construction work to progress (Chart 3—22).

**Chart 3—22 Changes in government consumption**

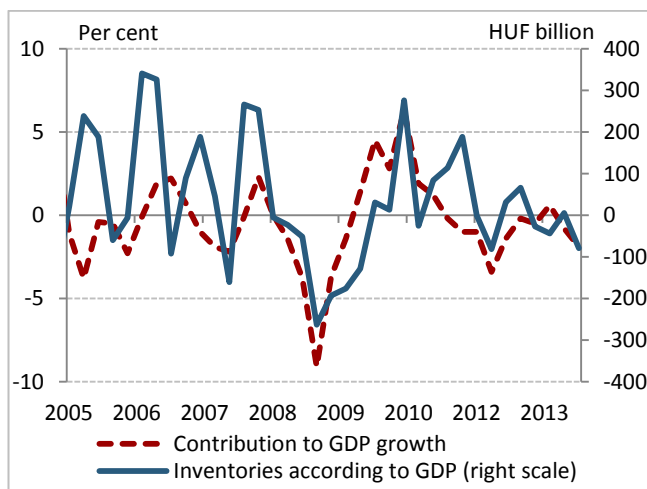


Source: CSO

### 3.2.5. Changes in inventories

**Inventory accumulation contributed negatively overall to GDP in 2013.** Changes in inventories were positive in the agricultural sector, as last year’s yield in agriculture was close to the historical average after the weak harvest in 2012. The level of inventories decreased significantly in the energy and manufacturing sectors. Within the manufacturing sector, the electronics sector made the largest negative contribution to the change in inventories, because of the continuing deterioration in the sector’s capacities (Chart 3—23).

**Chart 3—23 Changes in inventories and their contribution to GDP growth**



Note: National Accounts data.

Source: CSO

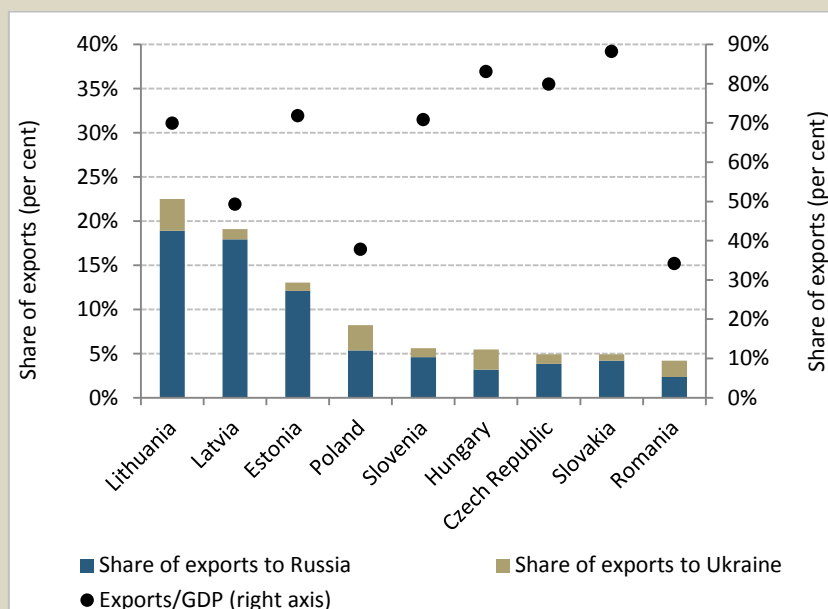
### Box 3–2 The exposure of Hungary and the Central and Eastern European region to Ukraine and Russia

With the escalation of tensions between Russia and Ukraine, more and more market analyses are focusing on the financial and economic exposure of the emerging region, and within in that specifically the exposure of Central and Eastern Europe to Ukraine and Russia, partly in the field of foreign trade and financial relations, and partly as far as dependency on Russian natural gas imports is concerned. The risks fall into three categories:

- foreign trade relations and the impact of related potential changes on economic growth in CEE countries,
- the energy dependency of Europe, and specifically that of Central and Eastern Europe (on Russian natural gas imports),
- risks of financial contagion.

Although the euro area is the primary foreign trade partner of CEE, foreign trade relations with Russia and Ukraine cannot be considered as negligible. As a proportion of GDP – taking into account the share of related countries in the total exports and the export to GDP ratio together –, a total of 4.3 per cent of Hungary’s annual exports go to Russia and Ukraine, while the exposure of the Czech Republic, Poland and Romania is lower. In terms of the import-to-GDP ratio, Hungary’s ratio of 7.6 per cent far outstrips the equivalent Czech and Polish figures (4.2 and 4.5 per cent, respectively). Based on the export-to-GDP ratio a 10 per cent fall in exports from the CEE to Russia and Ukraine would reduce economic growth in Hungary by 0.3-0.4 per cent (Chart 3–24).

Chart 3–24 Share of exports in the region towards Russia and Ukraine



Source: Eurostat

The majority of Central and Eastern European countries are highly dependent on Russian natural gas. In addition to Hungary, Poland and the Czech Republic also have high exposures in the region in this regard. Half of Hungary’s gas imports come directly from Russia, but its gas imports from Western European countries also partly originate from Russia. Analysts estimate that in the event of a temporary disruption of natural gas supply transiting Ukraine (the most probable scenario), countries in the region could offset the quantity of natural gas transiting the Ukrainian pipeline from their own national gas reserves (sufficient to cover a period of approximately 1-3 months across the various countries) or from alternative pipelines that do not transit Ukraine (such as the Nord Stream). Analysts see little chance of Russia completely cutting off gas exports to Europe as an instrument of political pressure.

Besides the possibility of Ukraine’s debt rescheduling, experts increasingly see financial contagion from Russia as a more and more probable risk. The emerging market turbulence experienced early on in the year and the conflict in Ukraine seriously impacted Russian asset prices: the rouble has fallen by 11 per cent since the beginning of the year despite foreign exchange market interventions and a subsequent interest rate hike, and the Russian stock market plunged by 20 per cent. These factors jointly worsened perceptions of the emerging region. The escalation of the political face-off between Western

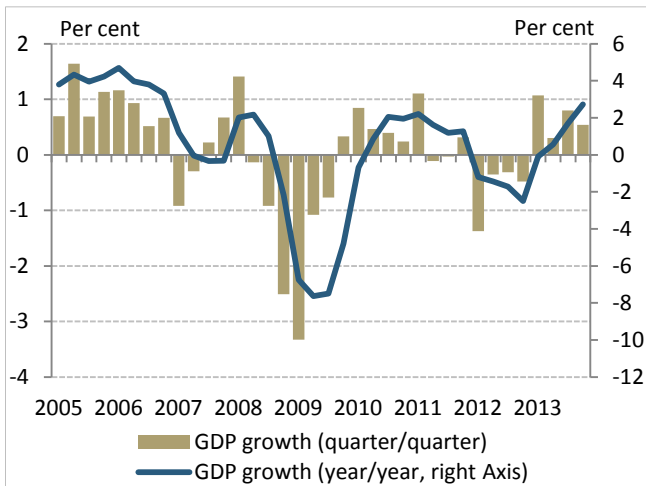
countries and Russia may trigger further outflows of capital and portfolio restructuring in emerging economies. The exposure towards Ukraine and Russia of some banking sector players in Hungary may exacerbate the risks of financial contagion.



### 3.3. Production and potential output

In 2013 Q4, economic activity picked up in a broad range of sectors. Economic output expanded not only in sectors producing for exports, but also in those producing for domestic demand (e.g. trade, construction). The slowdown in potential growth seen over the last ten years may have come to an end, thanks to a rebound in investments.

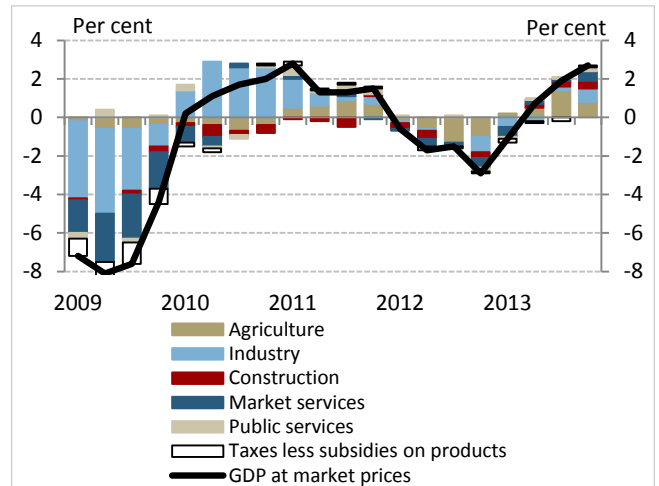
Chart 3–25 Rate in economic growth



Source: CSO

**At the end of last year, the economic output of the national economy continued to strengthen.** The economy grew by 0.5 per cent compared to the third quarter. Economic output rose continuously in the second half of the year in a broad range of sectors. In addition to construction and agriculture, positive contributions to GDP annual growth also came from industry and market services in the fourth quarter (Chart 3–25 and Chart 3–26).

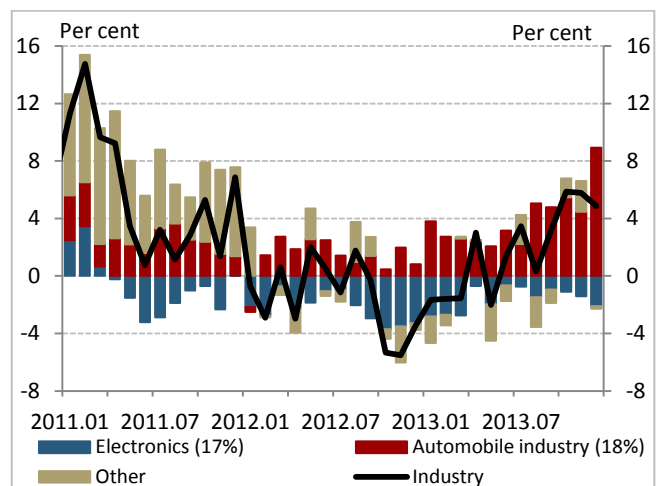
Chart 3–26 Contribution of the output of the main sectors of the national economy to GDP growth



Source: CSO

**Industrial output continued to rise in the fourth quarter.** Output in industrial sectors increased overall throughout 2013, mainly due to the exceptionally strong performance of the automotive industry. In addition to production expanding due to the activation of earlier individual investments, the output of suppliers may have also contributed to rising value added within the sector. However, output continued to decline in the electronics and optical sector. After stabilising again early in the year, the sector's output continued to drop in recent months, mainly due to the decline in one manufacturer's output in the telecommunications sector. Overall, industrial output was mainly driven by the automotive industry in 2013 (Chart 3–27).

Chart 3–27 Contribution of industrial subsectors, annual change



Source: CSO

**Preliminary output data for January and forward-looking indicators suggest steadily improving short-term prospects for the upcoming months.** Within Hungarian new industrial orders, there was a marked rise in automotive industry orders, and the ESI industrial sentiment indicator also improved in recent months (Chart 3—28).

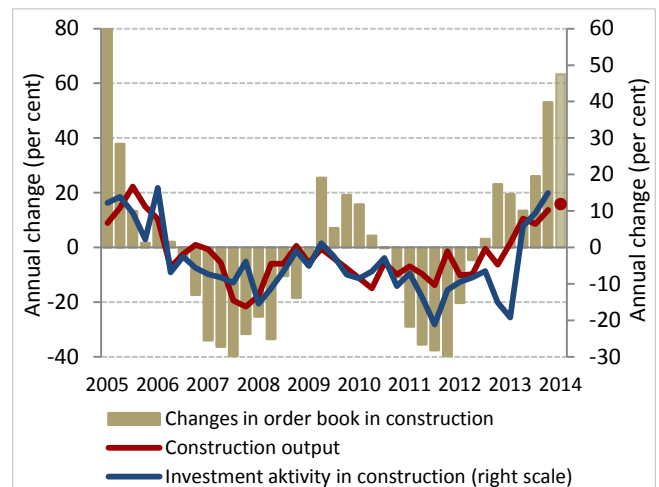
**Chart 3—28 New industrial orders and the confidence indices**



Source: CSO

**After many years of contraction, construction output grew by 9.6 per cent year-on-year in 2013, and thus reached the 2010 level.** The rise in output is mainly tied to infrastructure development implemented using EU funding. In addition, the construction of industrial facilities also rose. By contrast, housing construction remains at a historic low. Based on the number of orders and confidence indicators, the performance of the construction industry may continue to improve in the upcoming quarters, primarily driven by state construction activity of other types of facilities (Chart 3—29).

**Chart 3—29 Changes in construction output, orders and investment**

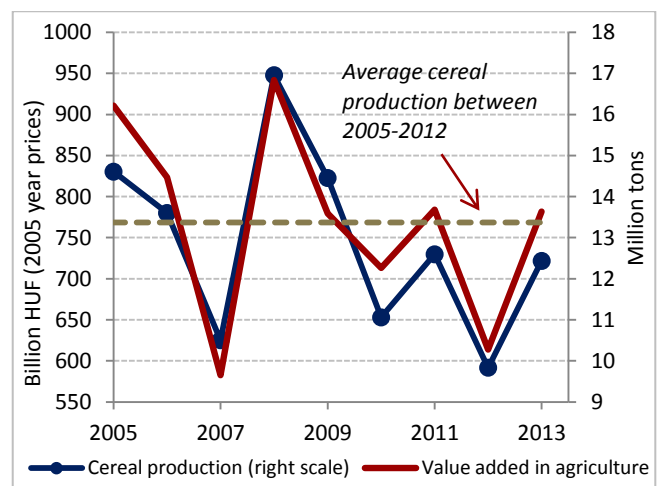


Note: The last datapoint shows the January 2014 data.

Source: CSO

**Agricultural output improved significantly in an annual comparison.** Following a weak 2012, agricultural yields significantly outperformed 2012 levels last year, and agricultural production neared the average of recent years. This put value added created by the agricultural sector at 22 per cent, contributing by 0.9 per cent to the rise in output for the entire year (Chart 3—30).

**Chart 3—30 Value added in agriculture and cereal production**



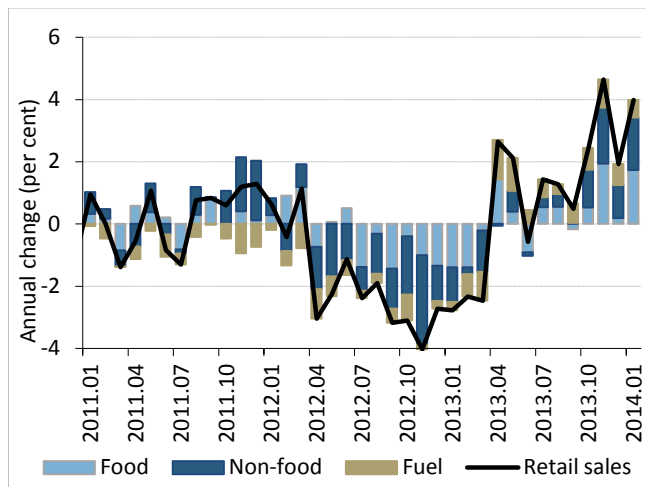
Source: CSO

Services showed restrained expansion in the fourth quarter, and with the exception of financial and property transactions, all service sectors experienced growth.

**Retail sales continued rising in the fourth quarter.** It was mostly sales of food and non-durable products that increased in recent quarters, which are more strongly correlated with current incomes. In line with the gradual

rise in household consumption, the turnover of consumer durables, which are more sensitive to longer-term income prospects, also stabilised (Chart 3—31).

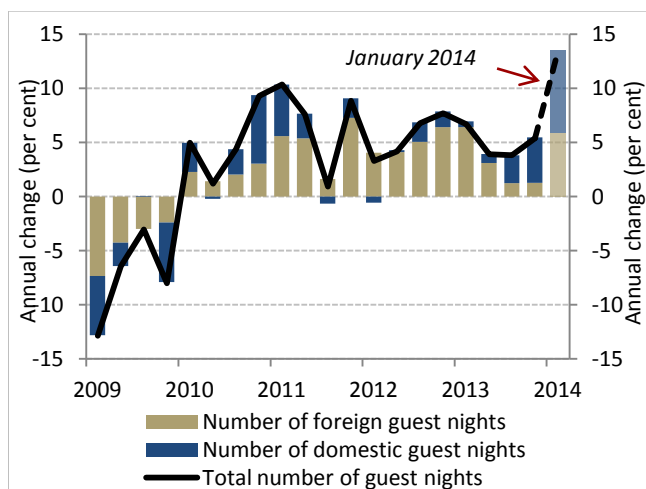
**Chart 3—31 Changes of retail sales**



Source: CSO

Turnover in the hospitality sector continued to increase in the final quarter of 2013. Growth in H2 was mainly attributable to an increase in reservations by domestic guests. The pick-up in domestic demand reflects the improving income position of households, and increased utilisation of non-wage benefits aimed at fostering domestic tourism. The sector's capacity enlargement in recent years and the weaker forint may have contributed to the continuing rise in overnight stays by non-domestic guests (Chart 3—32).

**Chart 3—32 Decomposition of the growth of the number of tourism nights in accommodation establishments**

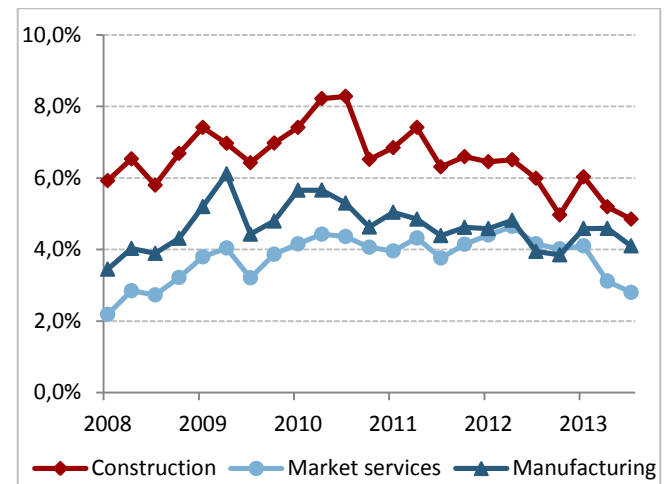


Source: CSO

**The performance of the financial and real estate sectors continued to be restrained.** Both household and corporate

borrowing remained subdued. The housing market kept shrinking in the fourth quarter and the number of new construction permits issued fell further following the marked decline in the previous quarter. Consequently, the number of new dwellings commissioned may remain at low levels in the upcoming quarters. Demand conditions and short-term prospects improved overall in other service sectors.

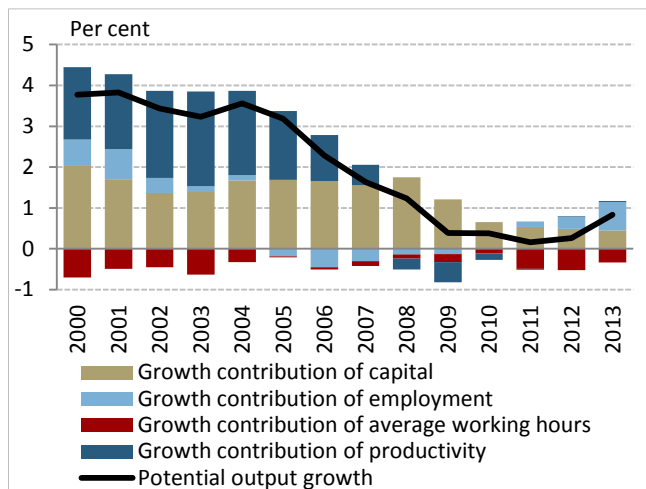
**Chart 3—33 Bankruptcy rate in different sectors**



Source: OPTEN Database

**Potential growth may rise considerably compared to its sluggish rate of recent years.** The growth rate of potential output may rise, as capital accumulation has passed its low point, thanks to the recovery in investment activity. The number of company bankruptcies and winding-up procedures also fell substantially in the main production sectors compared to previous years, which could lead to a reduction in the withdrawal of capital from production (Chart 3—33 and Chart 3—34).

**Chart 3–34 Potential output growth and growth contributions**



Source: MNB calculations

**Labour market activity continued to improve, and the rising employment rate may also drive potential growth.**

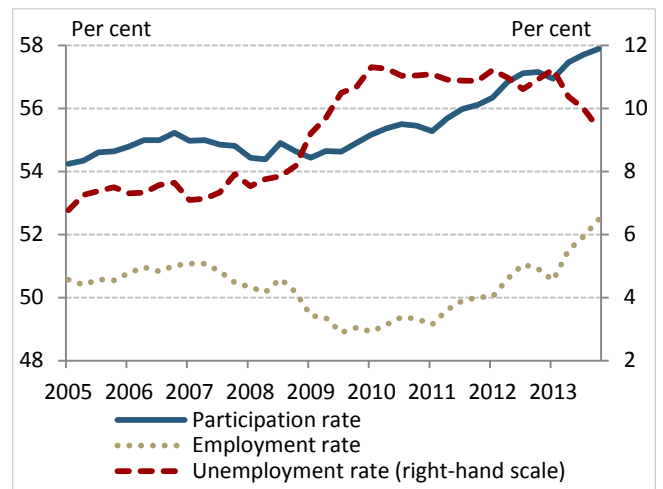
The move of the supply potential of the economy may also be driven by the improving demand conditions. The development in demand conditions on the one hand may reduce the frictions in the labour market; on the other hand the easing of credit conditions may fuel the growth of investment activity.

**3.4. Employment and labour market**

Labour market developments continued to improve at the end of last year. Along with growth in the participation rate, employment rose more strongly, driven mainly by the expansion of public work programmes. As a result of these developments, the unemployment rate fell below 9 percent. The labour market can still be considered slack, but to a smaller degree than previously. Labour demand indicators suggest a continued increase in demand for labour and thus employment.

**The participation rate continued to increase both in 2013 Q4 and early 2014.** Participation increased in an environment of declining unemployment and rising employment, which points to an inflow of inactive persons. According to labour force survey data, the activity rate stood at 58.7 per cent in January 2014 (Chart 3–35).

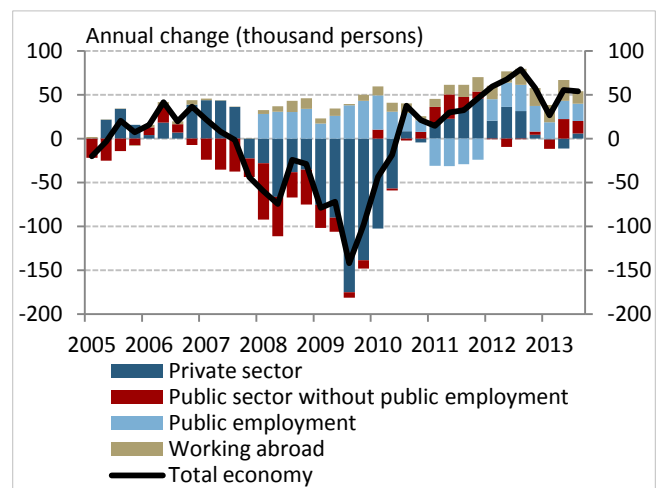
**Chart 3–35 Participation, employment and unemployment, total economy**



Source: CSO

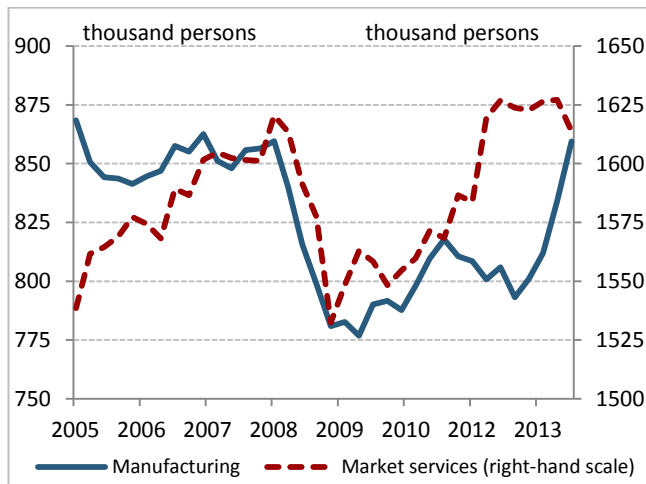
**The number of employed in the whole economy grew further in 2013 Q4.** The commencement of the winter public work programme contributed considerably to the increase in employment. Meanwhile, the expansion of employment observed since early 2013 in the domestic private sector also continued, albeit at a slower pace in Q4 than in previous quarters. The growing number of employed in the private sector can be attributed to the manufacturing sector, while employment in market services declined (Chart 3–36 and Chart 3–37).

**Chart 3–36 Decomposition of the cumulative change of employment**



Source: CSO

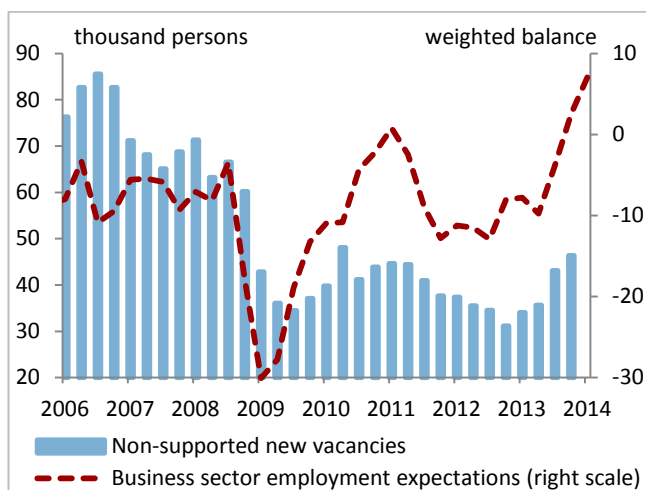
**Chart 3–37 Number of employees by sector**



Source: CSO

**In Q4, growth in non-supported new vacancies continued.** Based on the ESI indicators capturing employment expectations, the private sector’s labour demand may increase further in the coming quarter (Chart 3–38).

**Chart 3–38 Indicators of labour demand**



Note: The series of business sector employment expectations is the weighted average of the series for industry, construction, trade and services in the ESI survey.

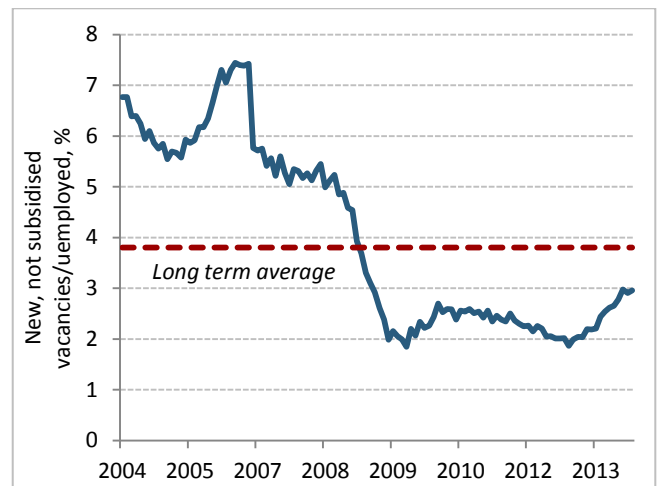
Source: National Employment Service (non-supported new vacancies), MNB calculation based on European Commission data (business sector employment expectations)

**The number of total hours worked remains lower than average.** The number of hours worked per capita has declined significantly in recent years, partly owing to the adjustment prompted by the subdued demand environment and the increase in part-time employment.

**Both the labour force survey data and data released by the National Employment Service indicate a significant decline in unemployment in 2013 Q4.** This decline can mainly be attributed to the winter public work

programme. In the context of a steep decline in the number of registered jobseekers, the number of non-supported new vacancies grew gradually. As a net result of these developments, the number of new vacancies per job seeker increased, but it remained below the historical average level. The labour market can still be considered slack, although to a smaller degree than in 2012 (Chart 3–39).

**Chart 3–39 Labour market tightness**



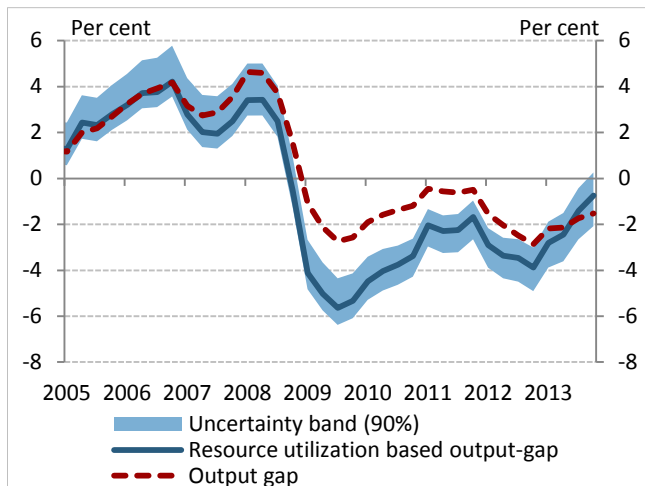
Source: MNB calculation based on National Employment Service data

### 3.5. The cyclical position of the economy

As demand picks up, indicators measuring the utilisation of resources are indicating a closing output gap. At the same time, significant surplus capacity remains in the economy, and thus demand-side inflationary pressure continues to be moderate. Output still falls short of its potential level.

**The real economy continued to grow at the end of 2013.** Accordingly, the indicators measuring capacity utilisation denote a closing output gap. However, no significant inflationary pressure was perceived from the economy, i.e. the underlying inflation indicators have remained moderate. **Accordingly, the output gap remained in negative domain during the past quarter** (Chart 3–40).

**Chart 3–40 Output-gap measures**

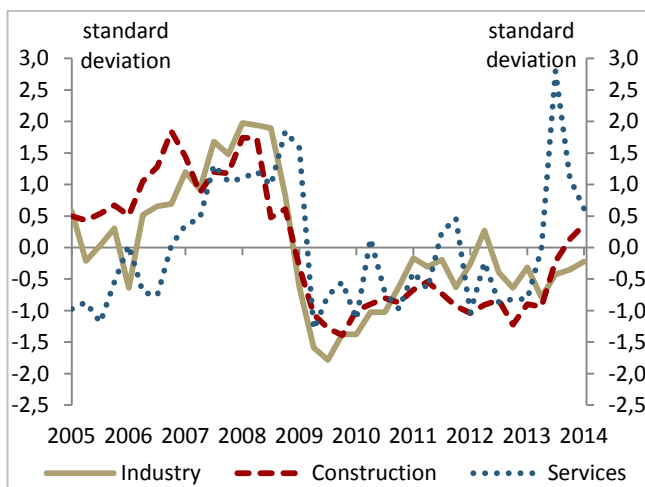


Note: The RU gap consolidates the information content of various corporate capacity utilisation indicators into a single indicator. The uncertainty band reflects the uncertainty of that estimate. For a detailed description of the methodology, see: Rácz O. M. (2012): Using confidence indicators for the assessment of the cyclical position of the economy, MNB Bulletin, June.

Source: MNB

Confidence indicators have improved steadily in recent months, potentially indicating that capacity utilisation may increase as demand picks up. Among production-limiting factors, an increasing number of firms have identified the shortage of labour, which is a phenomenon affecting all three sectors. Surveys indicate an improvement in employment intentions. Similarly, labour market indicators (declining unemployment rate and an increasing number of overtime hours) point toward a closing resource utilisation gap (Chart 3–41 and Chart 3–42).

**Chart 3–41 Labour as primary limiting factor of production in GKI survey**



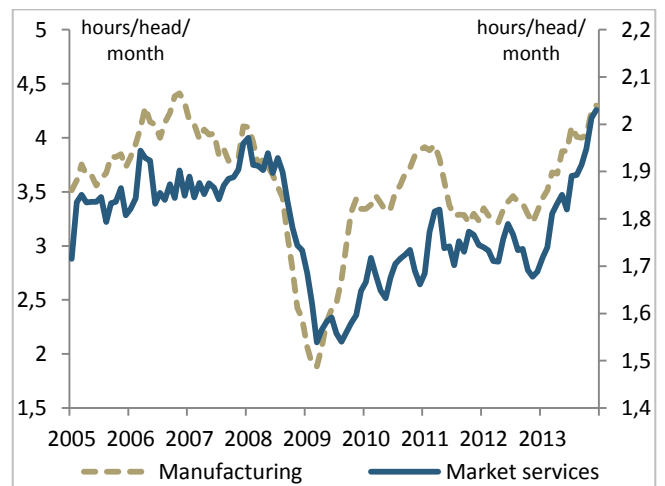
Note: Standardized data.

Source: GKI, ESI survey

From the point of view of domestic pricing decisions, both the extent and the structure of the output gap play a crucial role. While the output gap has been gradually closing with the improvement of capacity utilisation, **consumption expenditure, which is of primary importance in terms of inflation, has only shown signs of stabilisation.** The moderate pace of consumption may be the combined result of tight lending conditions, balance sheet adjustment and precautionary considerations.

End-of-year growth was in line with expectations, while the inflation rate was lower than our December forecast. Growth according to the expectations and the lower inflation rate are both indications of favourable cost-side effects (global energy prices and the decline in commodity prices).

**Chart 3–42 Changes in overtime in the private sector**



Note: Institutional survey, employees worked at least 60 hours per month, 3-month moving averages.

Source: CSO

### 3.6. Cost and inflation

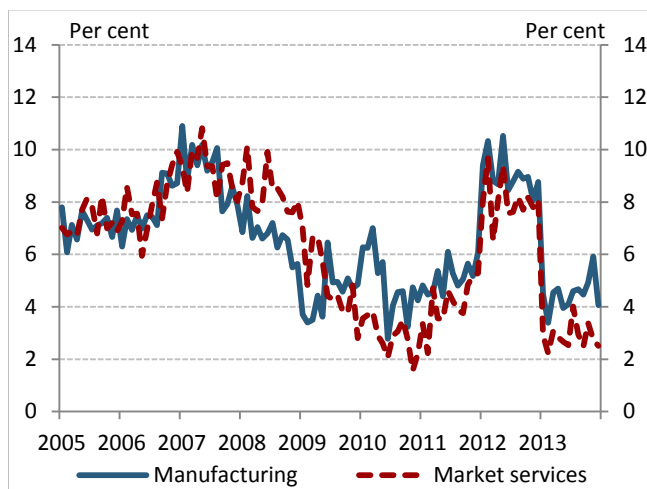
The nominal trends in the Hungarian economy have been characterised by a continued decline in the inflation rate and moderate wage dynamics in recent months. The inflation rate remained significantly below target, which was probably the result of the favourable cost pressure, restrained demand, the gradual adjustment of expectations and the cuts in regulated energy prices. The wage index of the private sector was restrained in the last months of 2013, mainly due to the moderate wage increase in market services.

#### 3.6.1. Wages

**Private sector wages continued to be restrained in 2013 Q4, which was reflected both in the evolution of regular wages and bonus payments.** Compared to previous years,

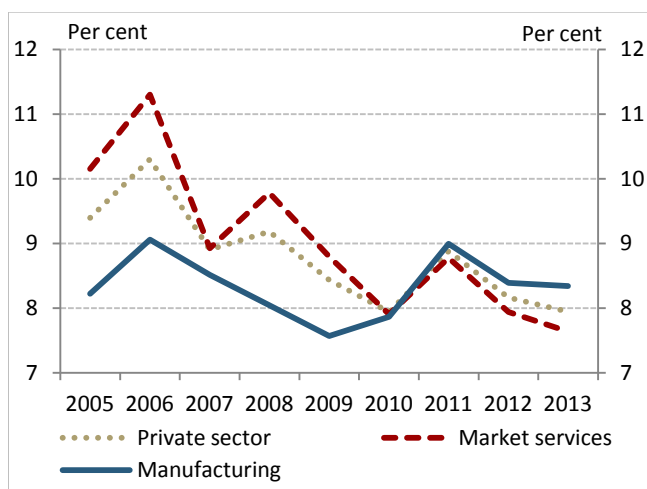
the ratio of end-of-year bonus payments to regular wages decreased significantly. Within the private sector, wage dynamics in the manufacturing sector continued to surpass the dynamics of market services, which is consistent with the more favourable economic conditions. In both sectors, premium payments were lower than the ratios observed in recent years. The ratio of other labour incomes to the gross wage bill remained restrained throughout 2013. Thus, overall no significant inflationary effects can be perceived from the cost side of the labour market (Chart 3—43 and Chart 3—44).

**Chart 3—43 Annual changes in regular gross monthly average wages (excluding premiums and one-month bonuses)**



Source: CSO

**Chart 3—44 Premiums and bonuses as a proportion of regular gross average wages (excluding premiums and one-month bonuses)**

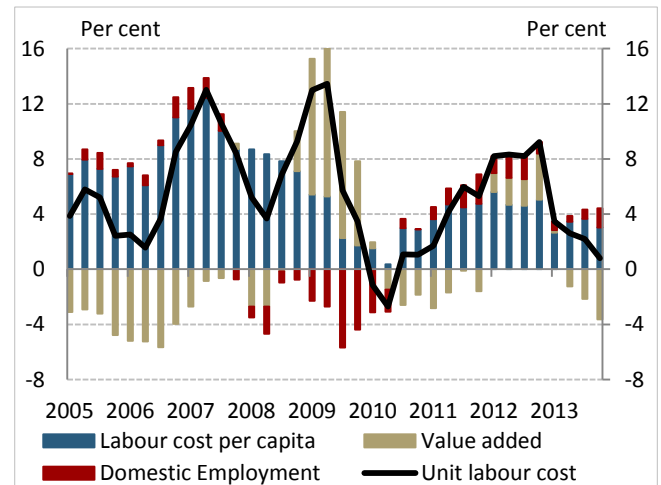


Source: MNB calculation based on CSO data

**After having remained subdued since the beginning of the year, growth in unit labour costs slowed significantly in**

**Q4 as a result of productivity growth.** Adjustment observed in wage setting continues to contribute to the gradual restoration of corporate profitability. Nevertheless, higher profitability will also require an additional increase in productivity, which may be supported by a further improvement in economic activity (Chart 3—45).

**Chart 3—45 Annual changes and components of unit labour cost in private sector**

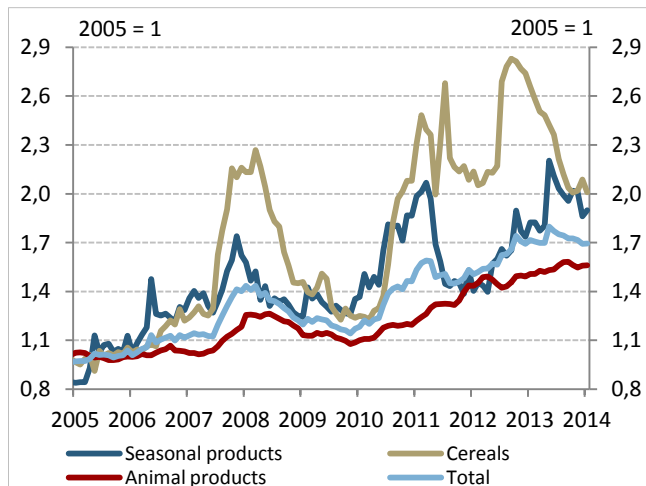


Source: MNB calculation based on CSO data

### 3.6.2. Producer prices

**Prices of raw materials have generally exerted restrained inflationary pressure in recent months.** Prices of agricultural products continued to fall, with seasonal products seeing the largest decline. Over the short term, the good harvest results continue to support moderate price dynamics. There were no significant changes in the prices of animal products during the past quarter. The rate of increase in the price of milk has declined from last year. In the upcoming quarters, lower fodder costs may result in a decline in the prices of animal products (Chart 3—46).

**Chart 3–46 Agricultural producer prices**



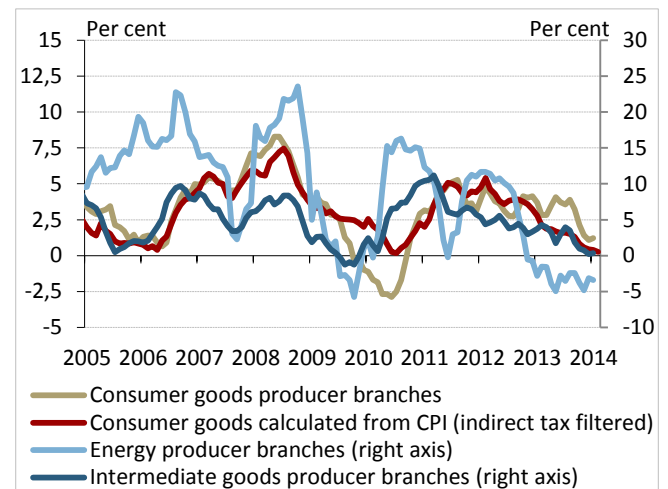
Note: Seasonal products: fruit, vegetables, potato, cereals: wheat, oil seeds; products of animal origin: pork, poultry meat, egg, milk; weighting was based on the estimated size of the effects on the consumer price index.

Source: MNB calculation based on CSO data

**USD-denominated crude oil prices fell compared to December.** The changes in the price of petroleum may be due to weakening growth outlook in emerging economies and the increase in supply. Looking forward, futures oil prices point to a continuing decline in the price level.

**Industrial producer prices were characterised by restrained price dynamics in recent months.** Favourable dynamics of producer prices were observed on a global basis. In terms of the breakdown by end-use groups of industrial prices, price changes in consumer goods producer branches remained moderate, which was also reflected in changes in consumer prices. The annual inflation rate of intermediate products fell, and prices of energy producer branches dropped in an annual comparison. The changes in the producer prices of the latter were due in part to the impact of declining households energy prices. The effect of a weaker exchange rate may gradually be reflected in producer prices in the coming months (Chart 3–47).

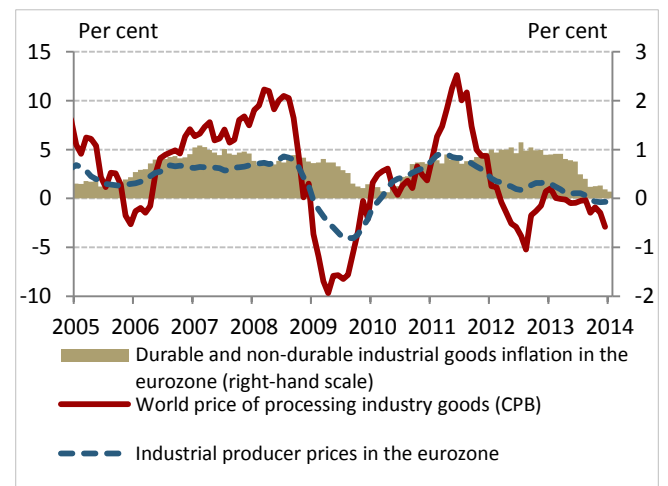
**Chart 3–47 Annual change of industrial producer prices**



Source: CSO and MNB calculation based on CSO data

Trends in Hungarian producer prices were broadly consistent with developments in the euro area. The changes in producer prices may be explained by restrained demand and favourable raw material prices. **Consequently, there has been a low imported inflationary pressure in terms of processed goods** (Chart 3–48).

**Chart 3–48 Developments in industrial producer prices and industrial goods inflation in the eurozone, and the world price of processing industry goods**



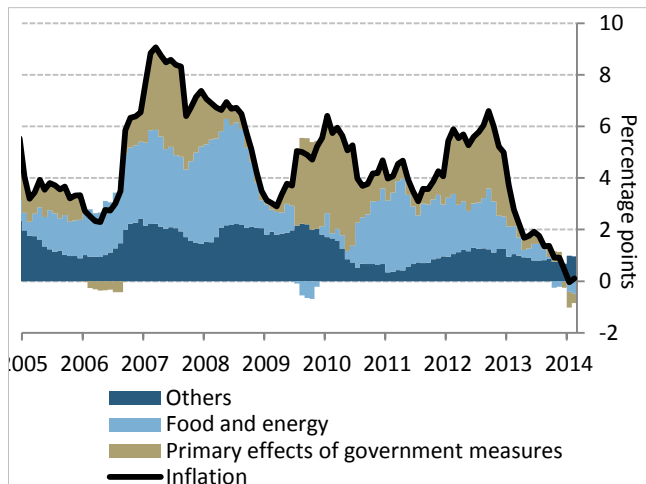
Source: Eurostat, CPB

### 3.6.3. Consumer prices

**Inflation continued to decelerate at the beginning of the year and it remains at a historical low far below the 3 per cent inflation target.** Favourable cost pressure, restrained demand, the gradual adjustment of expectations and the cuts in regulated energy prices all may have contributed to the moderate inflation (Chart 3–49).



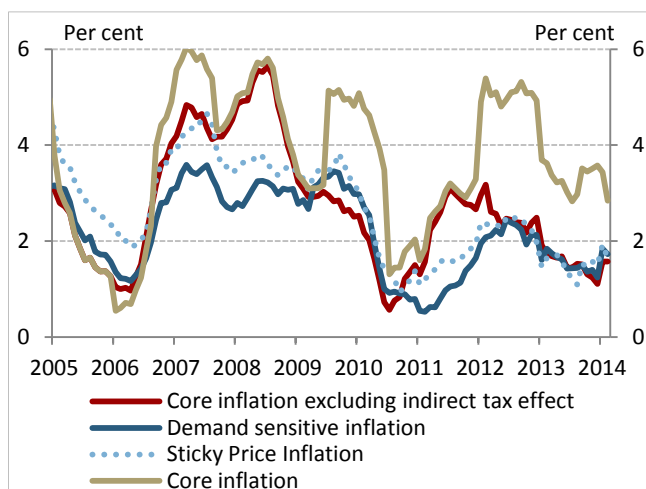
**Chart 3–49 Decomposition of inflation**



Source: MNB calculation based on CSO data

The underlying inflation indicators rose slightly at the beginning of the year, partly as a result of the base effect of the restrained price increases from last January. In accordance with the factors listed above, however, **the low level of the underlying indicators continues to indicate moderate inflation** (Chart 3–50).

**Chart 3–50 Developments of underlying inflation indicators**



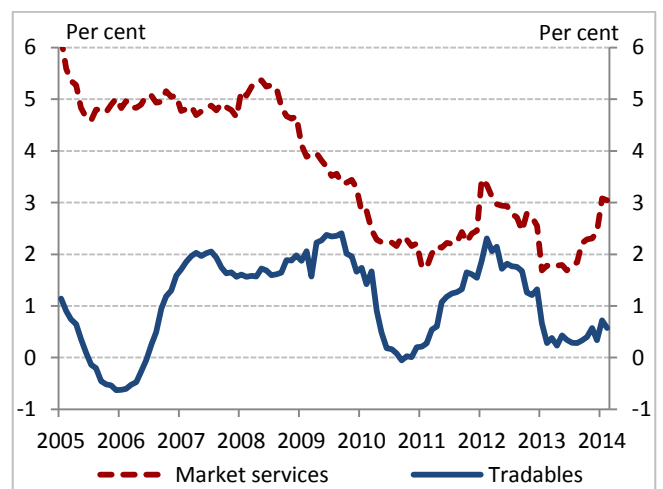
Source: CSO and MNB calculation based on CSO data

**Prices of tradable goods have changed moderately during recent months due to the favourable changes in import prices and slack demand.** Within tradable goods, the inflation of durable products continues to be negative, whereas the prices of non-durable consumer goods have shown restrained dynamics. The effect of a weaker exchange rate may gradually be reflected in the prices of tradable goods in the coming months.

**Repricing at the beginning of the year is crucial in terms of market services. Overall, at the beginning of the year,**

**the monthly price change of the product category remained moderate.** In January, the inflation of the product category was influenced by one-off factors, i.e. the increase in insurance premiums, while in February opportunity to withdraw cash from ATM free of charge twice a month moderated the price dynamics. Disregarding these effects, prices of other services increased at a more moderate rate. The annual inflation rate of services increased, which was due to a large extent to the base effect of the moderate price increases as seen last January (Chart 3–51).

**Chart 3–51 Market services and tradables excluding indirect taxes, annual change**



Source: MNB calculation based on CSO data

**In line with the changes in agricultural producer prices, food prices changed to a moderate extent.** Processed products were generally characterised by moderate price dynamics in recent months. The seasonally adjusted price level of unprocessed foods remained practically unchanged.

In the case of tobacco products, the increase in the retail margin continued to be reflected in consumer prices at the end of 2013. **The expected price increase due to the increase in the retail margin in July 2013 may have been reflected in the prices of tobacco products in accordance with previous estimates.** The slower-than-expected pass-through may have been due to the decline in legal tobacco sales, as a result of which the existing lower-priced stocks were sold at a slower rate.

Fuel prices declined at the beginning of the year, mainly as a result of the lower USD-denominated international oil prices. In February, however, **fuel prices rose as a result of the weakening exchange rate.**

**The inflation rate of administered prices was low in recent months.** The inflation rate of this category was significantly affected by the reduction of regulated energy prices at the end of last year and further energy price cuts later during the year. On the whole, however, price changes among other administered items have been moderate. Since the price cuts will be reflected in the CPI and HICP indices at different points in time, the two inflation indicators have showed a temporary gap at the beginning of the year as a result of the base effect of last January's price cut.

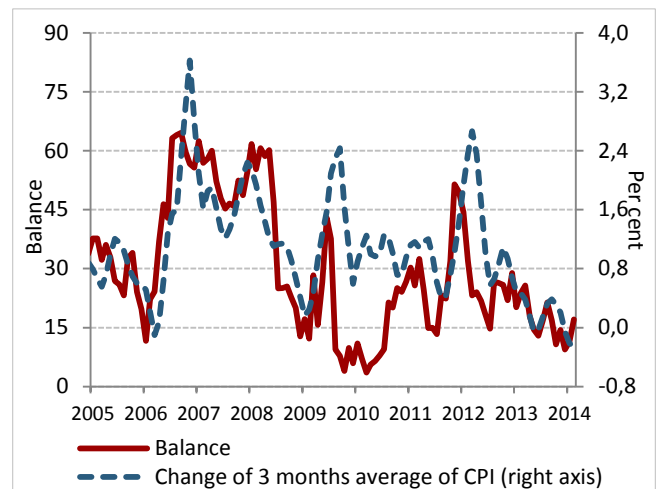
Data for the beginning of the year reflected lower inflation compared to the expectations of the central bank. Much of the difference can be attributed to cost-side factors, in particular the favourable change in raw material and crude oil prices. The moderate inflation rate of tradable goods also contributed to the difference.

**On the whole, a moderate inflation rate was observed at the beginning of the year.** Raw material prices and import prices may exert moderate inflationary pressure in the short term, while the weakening exchange rate and the expected pick-up in domestic demand will exert an opposite effect.

#### 3.6.4. Inflation expectation

**The expectations of the retail sector in respect of sales prices, which play a crucial role in short-term developments in consumer prices, remained low over the past quarter.** This is an indication that cost and demand factors do not warrant an increase in prices in the upcoming months (Chart 3—52).

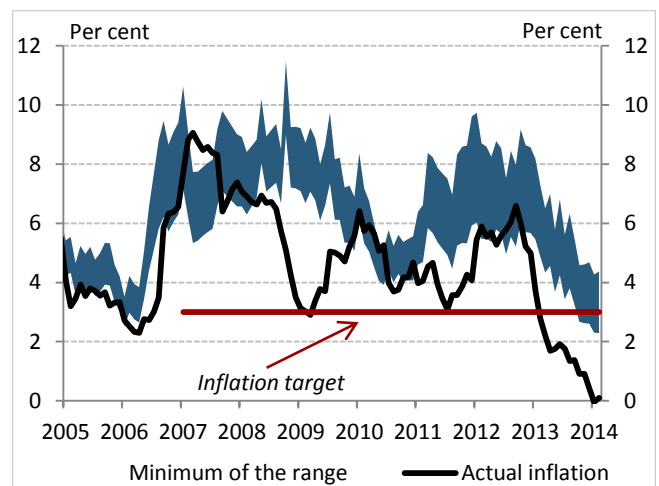
**Chart 3—52 Expected changes in retail sales prices in the next 3 months\* and actual inflation**



\* Balance is the difference between the proportion of corporations expecting price increase and price decrease.  
Source: GKI and MNB calculation based on CSO data

**Household inflation expectations steadily declined over the last year, as actual inflation continued to decrease. A further decline materialised at the beginning of the year.** The moderation of inflation expectations may contribute to pricing and wage-setting decisions of economic agents remaining consistent with the central bank's inflation target in the medium term (Chart 3—53).

**Chart 3—53 Households' inflation expectations**



Source: MNB calculations based on data from the EU Commission

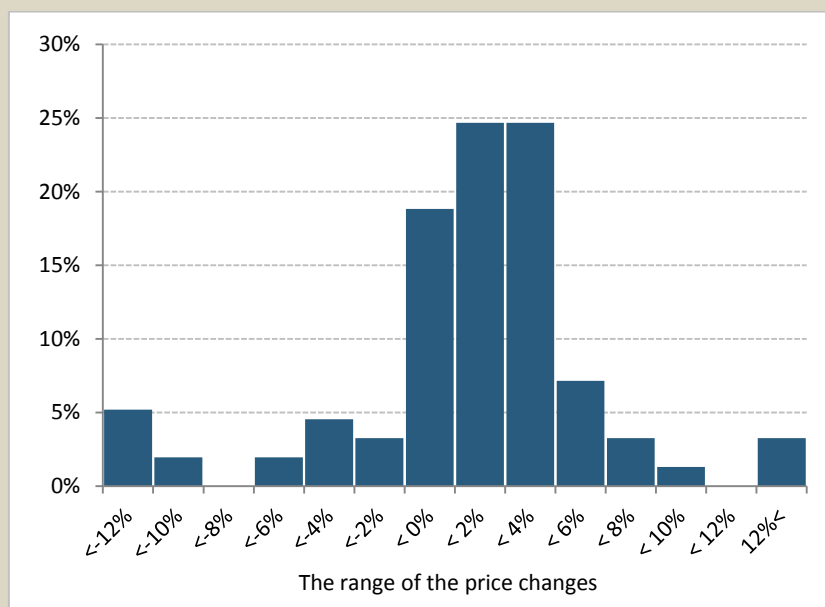
### Box 3–3 The effect of disinflation on the distribution of price changes: Are there deflationary risks?

The consumer price index is a general measure of inflation, designed to examine the price changes of a basket of consumer goods and services purchased by an average household. In Hungary, the index has dropped to historically low levels in recent months. In January 2014, inflation was 0.0 per cent, meaning that price level did not change in year-on-year terms. Subdued or even negative consumer price indices can be observed elsewhere in Europe too, although their level differs significantly among the Member States (HICP in January: –1.6 per cent in Cyprus; 1.9 per cent in Finland). Seeing the national consumer price index sank to a low level, some analyses have raised questions about the risk of the emergence of deflation. In our analysis, with the disaggregated examination of the national inflation processes, we assess the chances of the consumer price level dropping for a prolonged period.

Deflation is understood as a sustained, general fall in consumer prices (observable in broad-base of the consumer basket), persisting over a longer time horizon. The phenomenon occurs typically in recessionary economic conditions, when a prolonged fall in demand can make the reduction of consumer prices a self-fulfilling process, via the continuous decline in expectations.

In order to determine the persistence of the national inflation trends observed, we calculated the percentage of the consumer basket items subject to price declines (Chart 3–54).

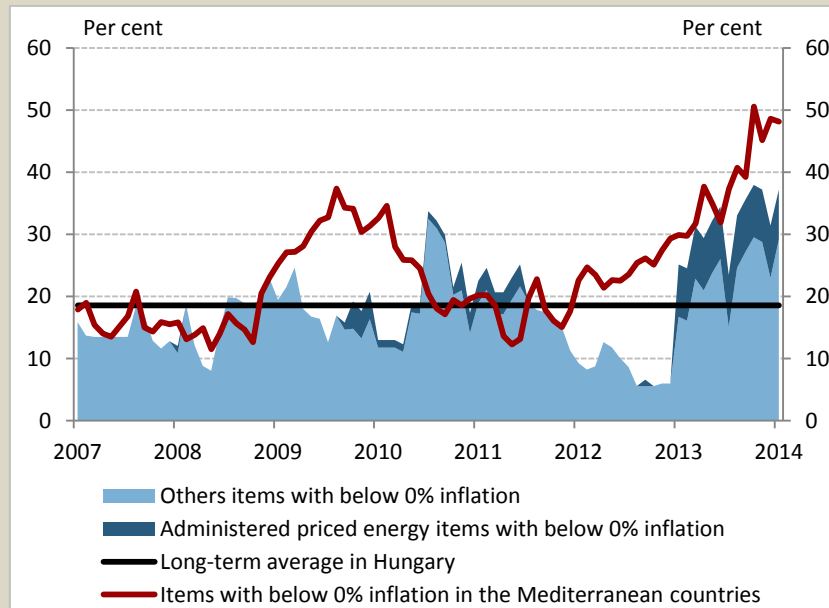
Chart 3–54 The consumer basket items' inflation distribution (COICOP)



Source: CSO, MNB

In Hungary, retail prices declined in January in the case of 42.9 per cent of the items (according to the COICOP classification). Due to the latest round of cuts in administered prices, the regulated prices items (electricity, natural gas, district heating, garbage collection, etc.) include a large share of products (13.2 per cent). Apart from this, price reductions typically affected durables (computers, cameras, telephones, used cars, etc.) and processed food products (vegetable oil, sugar, bread, etc.). In the historical analysis of the ratios, it is worth mentioning that even in a higher price level environment, one can find decreasing prices for 15-20 per cent of the consumer basket (Chart 3–55).

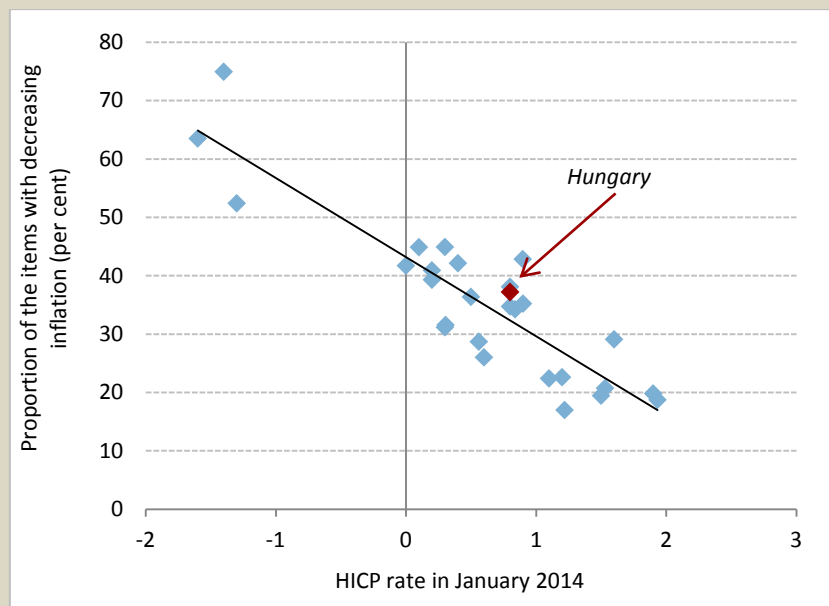
**Chart 3–55 The proportion of the HICP items and administered priced energy items with decreasing inflation in Hungary**



Source: Eurostat

Performing the same examination for the other EU Member States, we find that the share of reduced-price items is much larger in countries experiencing deflation (Cyprus: 63.49 per cent, Greece: 74.93 per cent), while this value is obviously much lower at the other end of the spectrum, i.e. in countries with relatively higher inflation rates (Finland: 18.72 per cent, United Kingdom: 21.3 per cent). In European countries, price reductions mainly affected products subject to market prices. The domestic value is close to the average of the EU and significantly lower than the average of the Mediterranean countries (Chart 3–56).

**Chart 3–56 The HICP in January and the distribution of the HICP items with decreasing inflation in the European Union**



Source: Eurostat

Overall, we can conclude that the ratio of deflationary items in the consumer basket has been increasing in parallel with the decline in inflation in Hungary as well. Nevertheless, the value of this ratio is not high. Inflation expectations are firmly in

positive territory, while the underlying inflationary processes can increase as well in the upcoming quarters in parallel with consumers' growing demand, and thus the chance of deflation emerging in Hungary is currently extremely small.

## 4. FINANCIAL MARKETS AND INTEREST RATES

### 4.1. Domestic financial market developments

**Over the past three months, global financial market sentiment was mainly shaped by developments related to the Fed tapering its asset purchase programme and the turbulence and wave of asset sales observed in the emerging markets.** Following the postponement of tapering, which the markets had expected to see in September 2013, market expectations shifted to March 2014; in a somewhat surprising move, however, the Fed then announced in December 2013 that it would begin to taper its asset purchase programme starting from January. The announcement in December had no significant effect on emerging markets at the time; in January, however, domestic policy tensions and uncertainties about monetary policy in certain emerging countries resulted in deterioration in the market perception of the emerging region overall, and the flight of capital from the region accelerated. Tensions in Ukraine and Russia during February-March and potential economic contagion risks exerted an adverse effect on the perception of emerging markets, including the Central and East European region.

**Investor sentiment was volatile in the previous quarter,** which can be attributed to the Fed's continued tapering of its asset purchase programme, the renewed focus on the vulnerability of certain emerging countries, and the intensification of the conflict between Ukraine and Russia. Hungary's risk premia have not changed significantly since the December issue of the Quarterly Report on Inflation. The CDS spread and FX bond spreads declined slightly, long-term yields increased moderately and, amid volatile fluctuations, the exchange rate weakened.

The forint fluctuated against the euro in a range of 296 to 315, depreciating by nearly 4.5 per cent by the end of the period. In the review period, the forint underperformed in regional comparison. The net FX-swap holdings of non-residents increased following a decline observed at the beginning of the period. By contrast, the forward holdings of domestic investors reached yet another historical peak in parallel with the weakening of the exchange rate.

**In the primary market of government bonds, short-term treasury bill auctions were characterised by 2–2.5 times coverage on average, and in most cases the volume of the government securities issued by the Government Debt Management Agency (ÁKK) exceeded the announced**

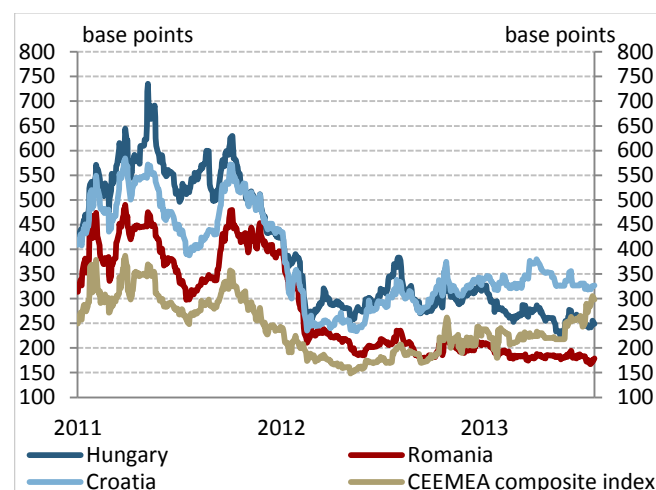
**quantity.** This situation, however, was also marked by low coverage and increasing yields observed during the most turbulent periods. Despite increased demand for 3-, 5- and 10-year bonds, average auction yields were highly volatile.

**According to analysts' average expectation, the interest rate path may reach its trough at around 2.5–2.6 per cent.** The picture emerging from money market yields is somewhat contradictory. This is because while analyst expectations foresee the most probable case, money market yields reflect different interest rate path scenarios, and the interest rate level reflected in money market quotes is derived from the weighted average of such scenarios.

#### 4.1.1. Risk assessment of Hungary

**Hungary's risk premia have not changed significantly since the December issue of the Quarterly Report on Inflation.** The CDS spread declined slightly, long-term yields increased moderately and, amid volatile fluctuations, the exchange rate weakened. At the beginning of the period, the Fed's unexpected announcement in December to start tapering its asset purchase programme from January was received calmly by the markets. As a result, risk premia on emerging market assets fell (Chart 4—1).

Chart 4—1 5 year sovereign CDS spreads in the region

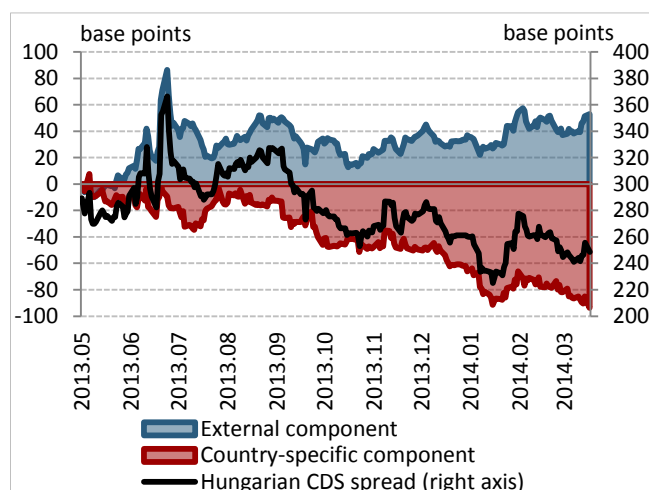


Source: Bloomberg

**Between mid-December and mid-January, the five-year Hungarian CDS spread decreased by 30 basis points to a level around 225.** From mid-January global market sentiment deteriorated significantly and, amid concerns regarding emerging markets (which peaked at the end of

January or early February) risk avoidance increased worldwide, driving up Hungary's CDS spread to a level of 275. After the easing of the market turbulence, a slow adjustment began, and in parallel with this, the Hungarian spread dropped to around 245 basis points by the beginning of March. The entire region saw similar spikes and drops during this period, and thus the Hungarian spread, for the most part, moved in line with other countries in the region (Chart 4—2).

**Chart 4—2 Components of 5-year Hungarian CDS spreads**

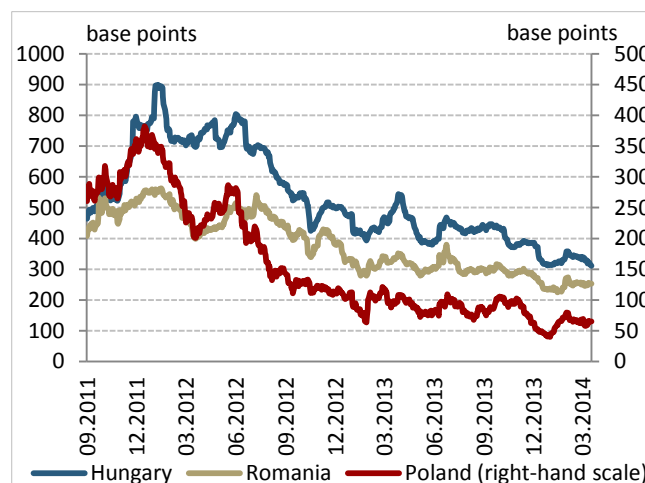


Note: The used decomposition method can be found in MNB Bulletin: Variance decomposition of sovereign CDS spreads, KOCSIS-NAGY (2011).

Source: Bloomberg

According to our CDS decomposition methodology, international factors tended to warrant an increase in Hungary's sovereign risk premium during the review period, but the decline in the premium triggered by country-specific factors was able to offset this trend. This improvement can be mainly attributed to the improved growth prospects of Hungary, its strict compliance with the fiscal deficit target, the significant net financing capacity of the country and its declining external debt. Both USD- and EUR-denominated bond yields decreased during the past 3 months. As regards spreads, EUR-denominated bond spreads decreased by 10–15 basis points on average, while bonds denominated in USD saw a 20–30 basis point decline (Chart 4—3).

**Chart 4—3 CEE 5-year FX bond spreads**



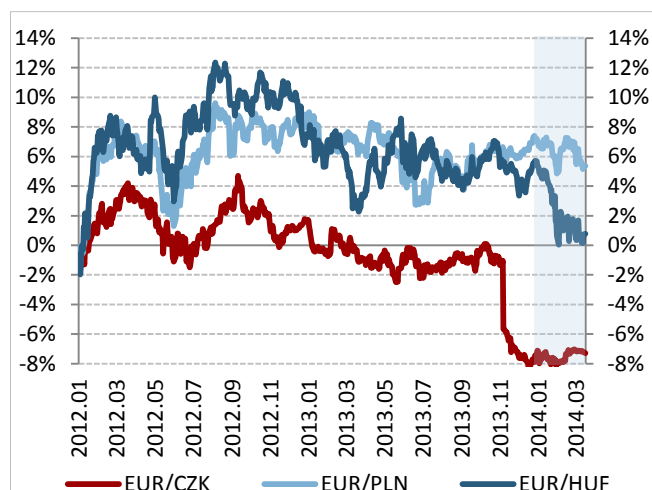
Source: Thomson Reuters

#### 4.1.2. Development in foreign exchange markets

**The forint fluctuated against the euro with a large degree of volatility during the review period, ranging between 296 and 315, and depreciating by nearly 4.5 per cent by the end of the period.** For the most part, the depreciation was related to the turbulence experienced at the end of January and early February. From the second half of February, with several swings, the exchange rate improved somewhat before deteriorating again to a level of 312–314 by the end of the period.

Overall, the forint was an underperformer in the region, mainly owing to the shift in the EUR/HUF fluctuation band observed at the end of January. Compared to mid-December levels, the Czech koruna appreciated slightly toward the end of the period, while the Polish zloty and the Romanian leu saw a negligible depreciation vis-à-vis the euro (Chart 4—4).

Chart 4–4 Exchange rates in the region

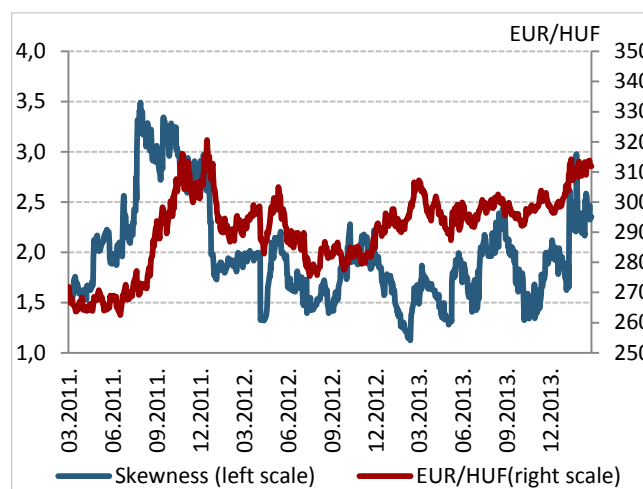


Note: Changes compared to beginning of 2012. Positive values mean an appreciation of the currency.

Source: Thomson Reuters

The skewness of the EUR/HUF exchange rate and the EUR/HUF volatility exhibited a steep increase during the period, reflecting a higher-than-usual devaluation risk. At the end of the period, this trend slowed, and the skewness indicator declined slightly. That notwithstanding, the indicator is still at higher levels than the average values observed in 2013, which suggests that market participants continue to expect depreciation of the forint exchange rate over the short term. According to Reuters and Bloomberg data on exchange rate expectations, short-term analyst expectations shifted towards a weaker exchange rate level; nevertheless, experts still envisage a gradually improving forint exchange rate over the 6-month, 1-year time horizon (Chart 4–5).

Chart 4–5 EUR/HUF exchange rate and 1 month skewness



Note: Skewness=Risk reversal/Volatility \*10.

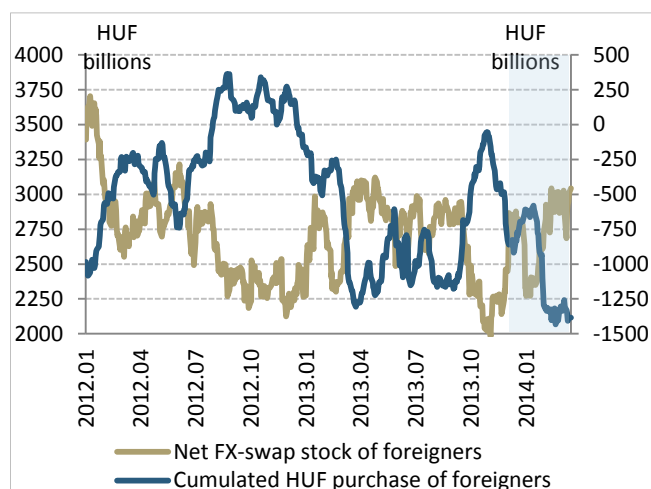
Source: Bloomberg

**The domestic FX swap market was basically characterised by calm trading.** The usual end-of-year tensions linked to the balance sheet clean-up of a few non-residents materialised only briefly at the end of December, and in the first few days of 2014 short-term spreads quickly normalised. While longer-term spreads were not affected by the end-of-year tensions, by the beginning of March a gradual, 15–30 basis point increase was observed for all long-term maturities.

Amidst substantial fluctuations, the net FX-swap holdings of non-residents showed an increase of HUF 115 billion compared to the beginning of the period. Non-residents began to take up strong positions against the forint from mid-January, as market tensions in emerging markets arose. By contrast, the forward holdings of domestic investors reached yet another historical peak in parallel with the depreciation of the exchange rate, which cushioned the weakening of the forint (Chart 4–6).



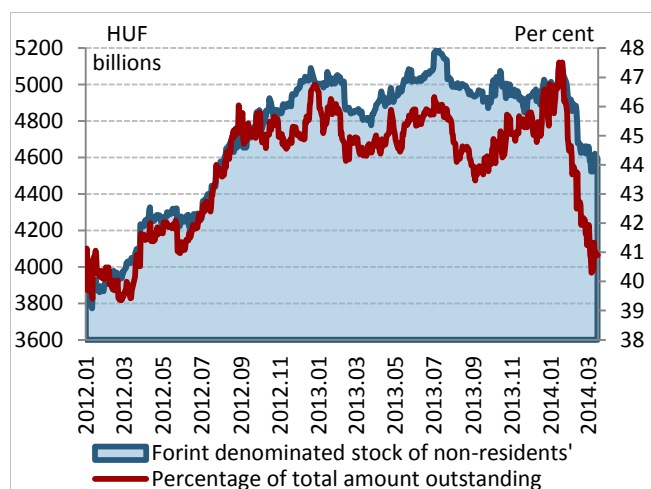
**Chart 4–6 HUF FX Swap stock, and cumulated HUF purchase of non-residents**



Note: Cumulated HUF purchase of foreigners: 4 January 2010=0.  
Source: MNB

At the same time, the government security holdings of non-residents started to decline significantly, falling from HUF 5,000 billion at the beginning of the period to around HUF 4,600 billion. Of the decline, HUF 210 billion can be linked to the maturing of a larger government bond. The share of non-residents in the market of HUF-denominated government securities declined to 41 per cent, down 4 percentage points. In parallel with this, non-residents' holdings of the MNB bill reached a historical peak. On balance, the decline in the government security holdings of non-residents was in line with the emerging market average observed since last May (Chart 4–7).

**Chart 4–7 Hungarian forint-denominated government securities held by non-residents**



Note: The chart shows the stock of T-bills and T-bonds and the amount of government securities held by non-residents; but retail securities are not included.

Source: MNB

#### 4.1.3. Government securities market and changes in yields

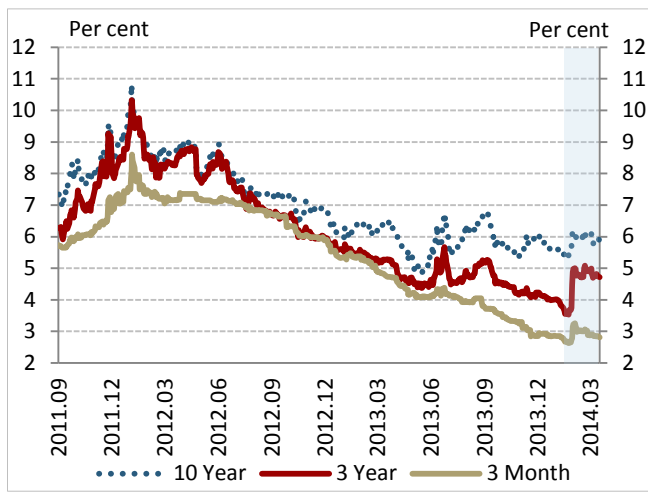
Short-term treasury bill auctions were characterised by 2–2.5 times coverage on average, and in most cases the volume of the government securities issued by the Government Debt Management Agency (ÁKK) exceeded the announced quantity. However, in the turbulent market environment seen at the end of January, coverage decreased at some auctions, and yields rose. On balance, after the stagnation observed at the beginning of the period, average auction yields rose in February, and then – following a gradual decline – yields dropped close to the levels seen at the beginning of the period (Chart 4–8).

Apart from a few exceptions, in the primary market of government securities there was increased demand for 3-, 5- and 10-year government bonds as well. At the same time, average auction yields exhibited significant volatility: compared to the beginning of the period, average yields rose by 40–70 basis points during the turbulent period in February, which was followed by a gradual decline. By the end of the period, yields on the 3-year and 5-year benchmark securities were up 60 and 10 basis points, respectively, while the yield on the 10-year paper essentially declined to the level observed at the beginning of the review period. At the same time, the switch in the benchmark security also contributed to the rise observed in the 3-year yield.

Overall, the government security market yield curve became steeper. Following the tensions in January and February, secondary market short-term yields declined and approached the level observed in mid-December, while long-term yields rose by 30–65 basis points. Breaking down the 5-year forint yield into its components reveals that, while Hungary's credit risk (as approximated by the CDS spread) has declined, the exchange rate risks reflected in the yield have recently increased significantly.

The average of analyst expectations suggests that the interest rate path may reach its trough at around 2.5–2.6 per cent. The picture emerging from money market yields is somewhat contradictory. This is because while analyst expectations foresee the most probable case, money market yields reflect different interest rate path scenarios, and the interest rate level reflected in money market quotes is derived from the weighted average of such scenarios.

Chart 4–8 Yields of benchmark government securities



Source: ÁKK

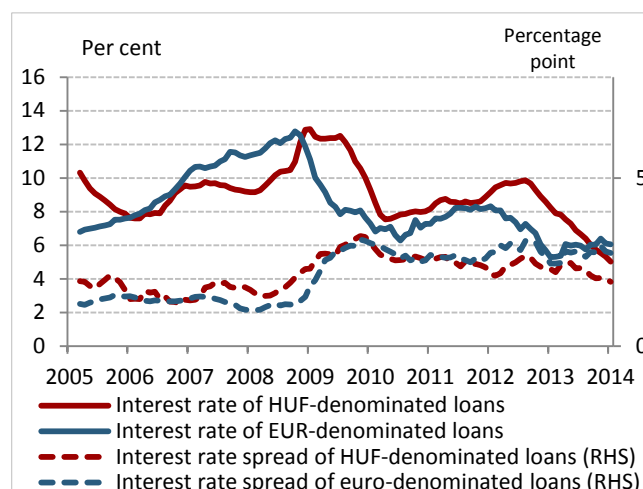
## 4.2. Credit conditions of the financial intermediary system

In 2013 Q4, corporate credit conditions eased in general. In parallel with the central bank base rate cuts, interest rates continued on the downward trend seen in recent quarters. According to respondents to the Lending Survey, non-price conditions eased somewhat overall during the period under review, but the vast majority of banks maintained their tight credit standards. In the household segment, conditions for consumer credit continued to ease, while those of housing loans remained practically unchanged. The APR declined in all segments, but interest rate spreads on housing loans remained high and exceeded 5 percentage points. As a result of falling inflation expectations, the 1-year real interest rate has increased since October, but in comparison with previous experiences, it is still considered to be historically low.

### 4.2.1. Corporate credit conditions

Based on new disbursements, corporate lending rates – smoothed by a three-month average – were at 5 per cent in January, down from 5.7 per cent in October. However, for SME clients, lending rates in the FGS are more favourable, as they are limited to 2.5 per cent. As a result, the decline in the average interest rate slightly exceeded the decline in the benchmark rate (3-month BUBOR) observed in the same period, bringing the spread down to 1.9 percentage points by the end of January. Nonetheless, significant heterogeneity can be seen in interest rate spreads: while loans up to 1 million euros had an average spread of 3 percentage points, those for amounts over 1 million euros exhibited a lower spread, amounting to 1.5 percentage points on average. Although spreads on corporate loans have not been this low since the onset of the crisis in September 2008, a very limited number of firms were able to benefit from the lower interest rates recently, owing to the persistently tight non-price credit conditions. At the same time, interest rates and spreads on EUR-denominated loans remained practically unchanged compared to October, at 3 and 2.8 per cent in January, respectively (Chart 4–9).

Chart 4–9 Smoothed interest rates and spreads on corporate loans by denomination

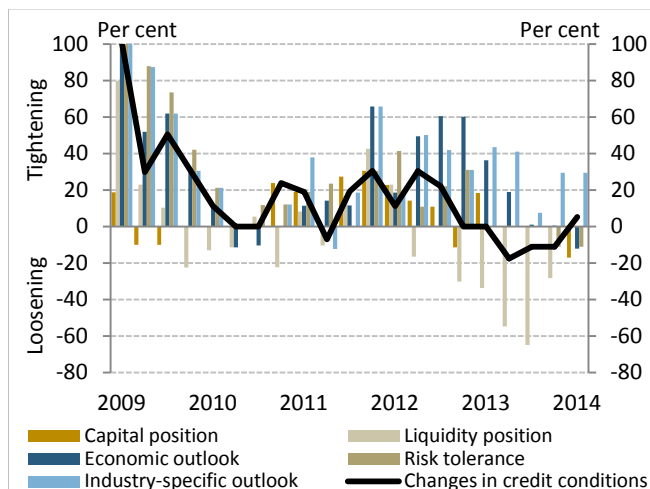


Note: Three-month moving average of monthly interest data. Spreads represent the three-month moving average of the premia over the 3-month EURIBOR and BUBOR interest. Variable interest or interest fixed for a period of less than 1 year (excluding FGS loans).

Source: MNB

**Based on the lending survey, despite the easing of credit conditions in 2013 Q4, the overwhelming majority of banks did not change their existing tight credit conditions.** According to responding banks, the more favourable liquidity position has been pointing to easing for several quarters and this remained the case in Q4 as well, and even the improved risk appetite warranted further easing. In Q4, the economic outlook did not influence credit conditions significantly, but industry-specific issues continued to hamper the easing of credit conditions. Despite the easing recorded in the past two quarters, corporate credit conditions still remain tight, and only firms with the best ratings have access to finance (Chart 4–10).

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



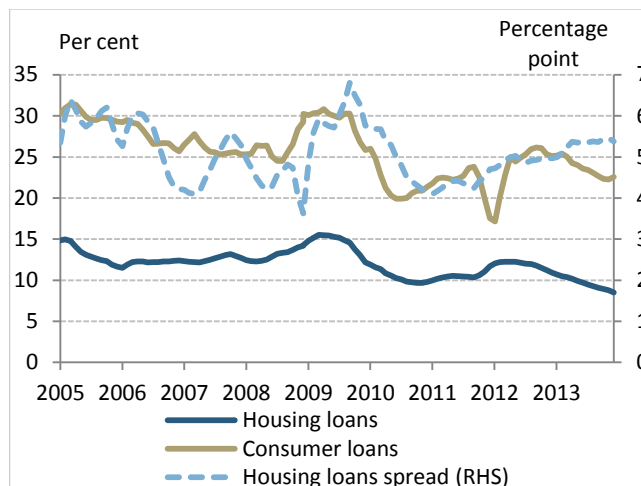
Note: Net percentage balance of respondents tightening and easing credit conditions weighted by market share.

Source: MNB Lending Survey, based on the responses by banks.

**4.2.2. Household credit conditions**

The APR on new housing loans disbursed fell by 0.6 percentage points between October and January to 8.5 per cent on a three-month average. The decline in lending rates was equivalent to that registered in the 3-month BUBOR, and thus the interest rate spread essentially remained unchanged at 5.4 per cent. The state interest subsidy may further lower the cost of credit to customers, decreasing the interest rate payable to a level as low as 6 per cent. In 2013 Q4, one third of new disbursements of housing loans were subsidised by the state (Chart 4–11).

**Chart 4–11 The smoothed annual percentage rate of charge (APRC) and spreads of housing and consumer loans**



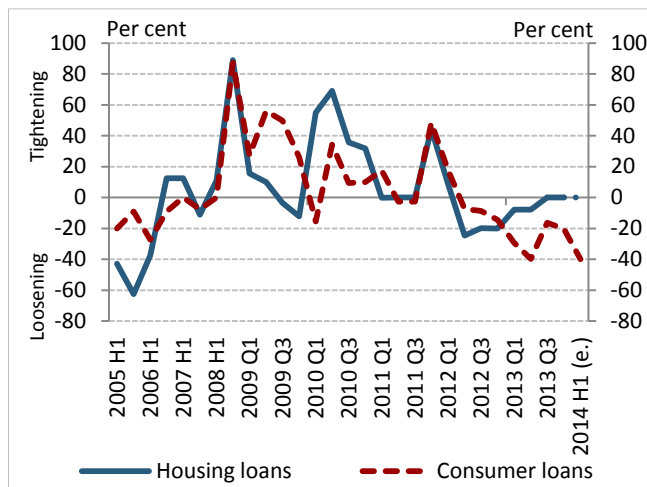
Note: Interest rates and spread smoothed by the 3-month moving average. Prior to 2009 HUF denominated mortgage lending was marginal.

Source: MNB

The APR on consumer loans continued on its downward trend observed in recent months, and following a slight increase, it reached a level of around 23.6 per cent in January. This decline affected both home equity loans and unsecured consumer loans, with the APR on the latter falling to 25.1 per cent from 25.8 per cent, and to 10.8 per cent from 11.2 per cent on the former.

**The findings of the Lending Survey revealed that banks left conditions on housing loans unchanged in Q4**, while a net 20 per cent of them reported a loosening of conditions on unsecured consumer loans. Credit standards are still tight: the average LTV of newly disbursed housing loans was around 55 per cent in Q4, which was coupled with an elevated interest rate spread of over 5 percentage points. LTVs were typically higher than 60 per cent prior to the early repayment scheme, while the recent regulation allows the ratio to rise as high as 80 per cent (Chart 4–12).

**Chart 4–12 Changes in credit conditions to the household sector**



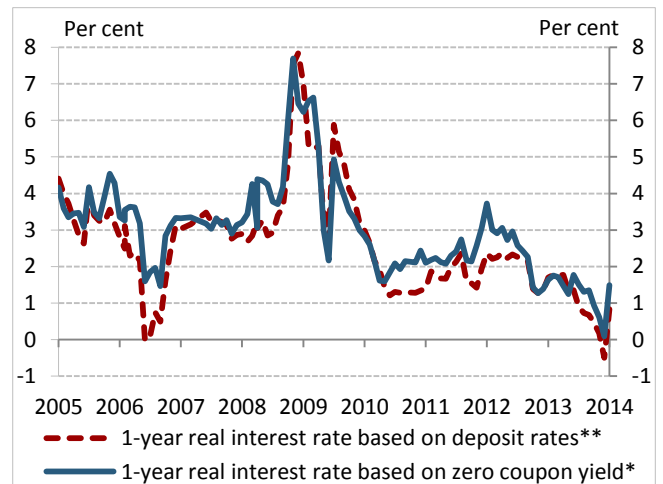
Note: Difference between the banks reporting tightening and easing weighted by market share.

Source: MNB Lending Survey, based on the responses given by banks

#### 4.2.3. Changes in real interest rates

**Between October 2013 and January 2014, 1-year forward looking real interest rates increased overall,** based on both the 1-year government bond yield and short-term deposit rates. The change in real interest rates is primarily due to developments in inflation expectations. In parallel with increasing inflation expectations, real interest rates declined until December, while this trend was offset by the opposite change in expectations seen in January. Although the January figure for the real interest rate exceeded the values recorded in previous months, it is still considered low historically, standing at 1.5 per cent based on 1-year government bond yields and at 0.8 per cent based on short-term deposit rates (Chart 4–13).

**Chart 4–13 Forward-looking real interest rates**



\* Calculated from the 1-year zero coupon yield and MNB analysts' corresponding 1-year forward inflation expectations from the Reuters poll.

\*\* Based on MNB analysts' 1-year forward inflation expectations using bank deposit rates with maturities of up to 1 year (corporate and household weighted) and the Reuters poll

Source: MNB, Reuters

## 5. THE BALANCE POSITION OF THE ECONOMY

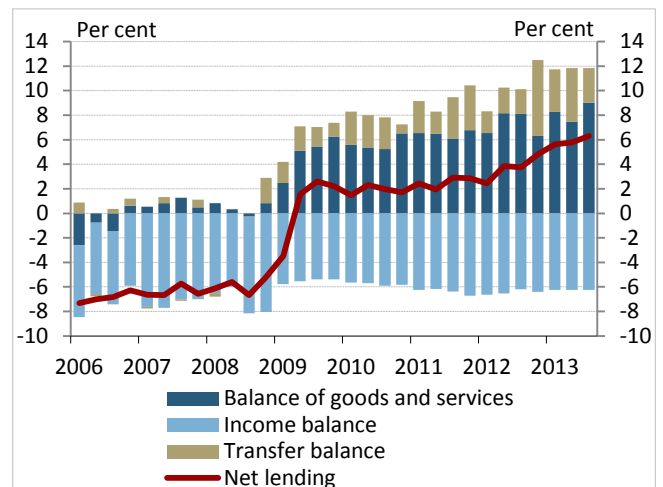
### 5.1. External balance and financing

**Hungary's external financing capacity rose above 6 per cent of GDP in 2013 Q3.** The growth was connected to the rise in the foreign trade surplus which was slightly offset by the decline in the still relatively high transfer balance surplus. Compared to the previous quarters, the repayment of foreign loans played a smaller role in the withdrawals that entailed an external financing surplus, while Hungarian working capital shrank further in Q3 as a result of a one-off factor. External debt ratios continued to decline in Q3.

#### 5.1.1. Developments in Hungary's external balance position

**The financing capacity calculated from the side of the real economy rose to above 6 per cent of GDP in 2013 Q3, thereby reaching yet another historical record (Chart 5—1).** The significant external balance position reflected the unprecedented high level of foreign trade surplus and the relatively high transfer balance. Net exports of goods and services as a percentage of GDP reached 9 per cent of GDP, which was supported by gradually improving external demand and the fact that the new capacities of the automobile industry went into production. Foreign trade data for Q4 suggest that net exports declined to a lesser degree than a year earlier. The transfer balance surplus decreased in Q3 compared to previous quarters but it well exceeds the figure recorded a year earlier. No major change was observed in the income balance deficit.

**Chart 5—1 Changes in external financing capacity (seasonally adjusted values; as a proportion of GDP)**



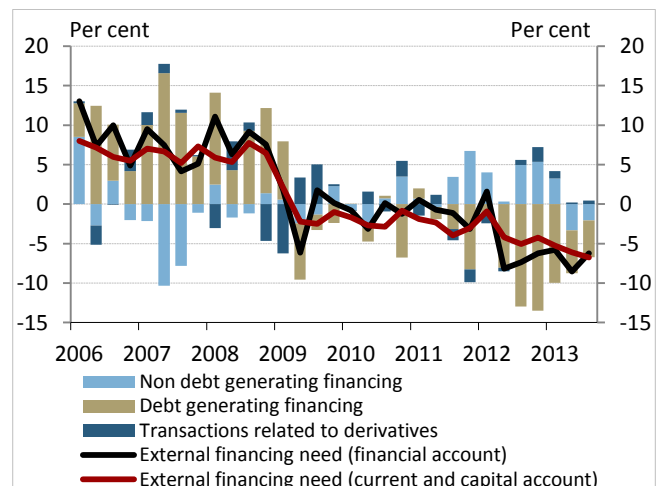
Note: Time series are adjusted directly for seasonal effects, thus the sum total of external financing capacity does not necessarily correspond to the adjusted values of the external financing capacity.

Source: MNB

#### 5.1.2. Developments in financing

**Based on the financing data, the bulk of the external financing capacity was related to the repayment of foreign loans while non-debt type liabilities fell again after the previous quarter (Chart 5—2).**

**Chart 5—2 Structure of external financing (transactions as a proportion of GDP)**



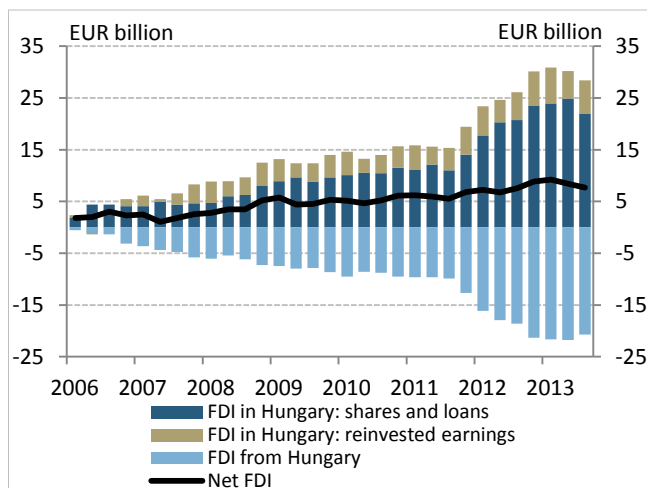
Note: The financing requirement calculated by a bottom-up method corresponds to the total of the external financing requirement and the BOP balance of statistical errors and residuals.

Source: MNB

The volume of net direct capital investment decreased in Q2 and Q3 (Chart 5—3), but based on the contributing one-off and seasonal factors, we do not anticipate this

trend to continue in future. On the one hand, at Hungarian companies in foreign ownership dividends are typically recognised for Q2, which results in the outflow of working capital. On the other hand, the state acquired E.ON for nearly EUR 0.9 billion at the end of Q3, which decreased the presence of foreign working capital in Hungary i.e. it implied an outflow of FDI.

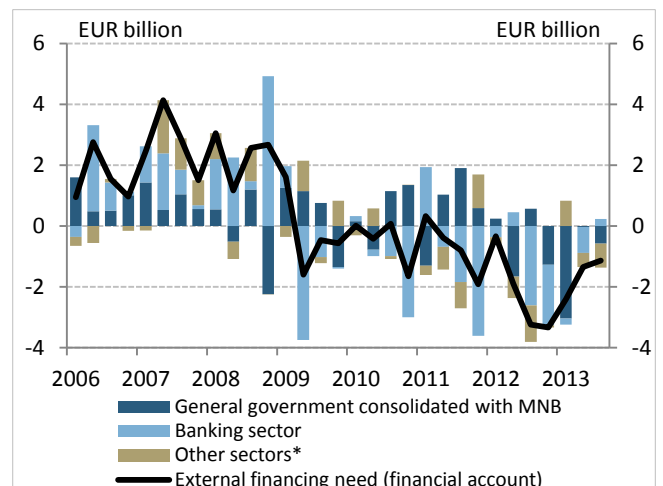
**Chart 5–3 Changes in composition of foreign direct investment (cumulated transactions)**



Source: MNB

**The outflow of debt-type net external liabilities continued in 2013 Q3, exceeding EUR 1 billion (Chart 5–4).** Broken down by sector, this meant that companies and the consolidated general government decreased their net external debt to the greatest extent, while the banking sector slightly increased it. The loans outstanding to IMF were also repaid in this quarter, but since this transaction reduced gross external debt and the FX reserve to an equal degree, it left net external debts unchanged. Thus the slight fall in the net external debt of the general government is mainly the result of the shrinking government security holdings of non-residents. The decline in corporations’ net external debt is attributed both to the repayment of foreign loans and the increasing portfolio of foreign assets.

**Chart 5–4 Sectoral breakdown of debt inflow**

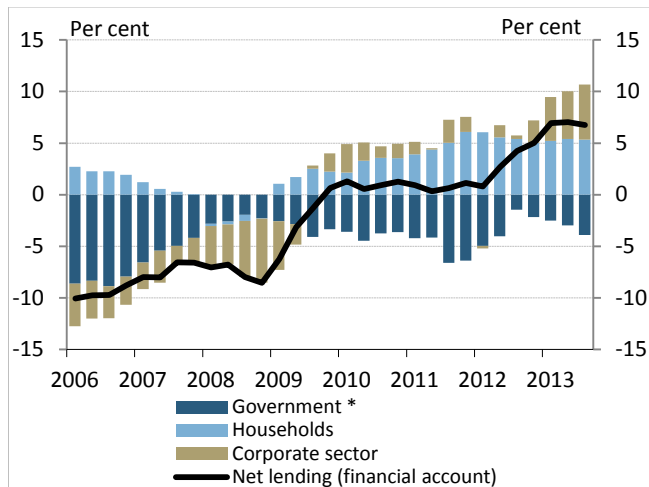


\* Non-financial corporations, other financial corporations, households.

Source: MNB

The four-quarter value of external financing capacity calculated on the basis of the financial account was around 7 per cent of GDP in 2013 so far (Chart 5–5). The financial savings of companies continued to rise in Q3, despite the fact that the bank loans of companies increased for the first time since the crisis as a result of the FGS. Net household savings remained at a high level while real incomes grew. The low financing need of the government also contributed to the favourable external balance position of the economy: the average financing need of the past four quarters was 3 per cent of GDP, showing a slight increase compared to the previous quarter as a result of the base effect.

**Chart 5–5 The breakdown of external financing capacity by sectors (four quarter cumulation as proportion of GDP)**



\* Government data have been calculated on SNA basis data of the government.

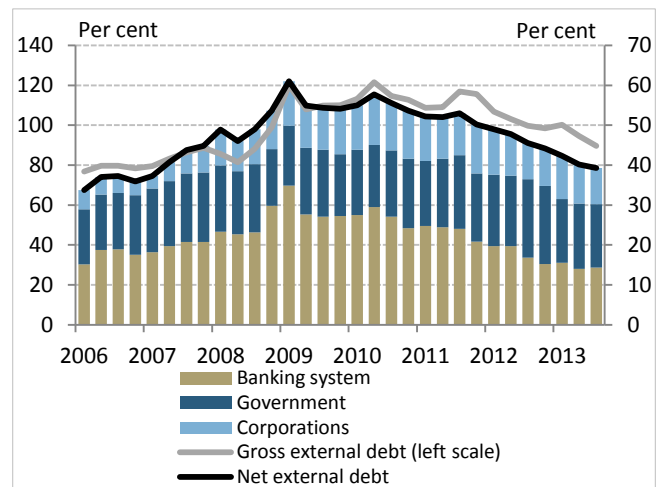
Source: MNB

**The decline in external debt ratios continued in Q3:**

external debt fell below 40 and 90 per cent of GDP in net and gross terms, respectively (Chart 5–6). In line with the changes in debt-type liabilities, the net external debt of the government and companies also decreased. The fall in the net external debt of the consolidated general government can be attributed to the decline in the government security holdings of non-residents. After a further decline, the net external debt of companies dropped to one of its lowest levels recorded in recent years.

The fall in gross external debts was more extensive than in net debts which can be explained by the early repayment of the IMF loans. Although it does not influence changes in the level of net external debt, it affects the gross values.

**Chart 5–6 Breakdown of net external debt by sectors (values as a proportion of GDP)**



Source: MNB



## 5.2. Forecast for Hungary's external balance position

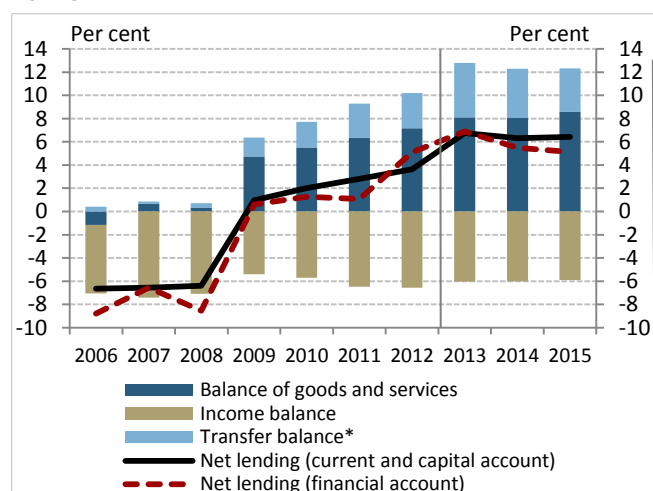
The developments observed throughout the year may become stronger at the end of 2013. The foreign trade surplus is expected to remain at high levels, while after the temporary suspension of EU transfers the transfer account may significantly improve Hungary's external financing capacity. In our forecast for 2014–2015, we expect net lending to stabilise at high levels. Despite the accelerating growth in consumption and investment, the surplus of the balance of goods and services may even increase in the context of improved terms of trade stemming in part from a decrease in oil prices. Owing to the European Union's new budget period, the transfer balance may decrease slightly, but it is still expected to exceed the levels from previous years. The significant improvement in Hungary's net lending throughout the year may be the result of an increase in net corporate sector savings, supported partly by the EU transfers. Corporate savings may contract in the coming years, owing to increased investment activity, while the net financial savings of households may stabilise at high levels. The financing requirement of the state is expected to remain subdued over the entire forecast horizon.

**Net lending may remain high in 2013 Q4.** Based on foreign trade data, the surplus of the balance of goods and services may have decreased in the last quarter, but it is still higher than the value recorded a year earlier. The resumption of EU transfers following their temporary mid-year suspension may have increased the value of the transfer account to relatively high levels in Q4. Thus, on balance, following steep growth, **net lending may have approached 7 per cent of GDP in 2013.** Besides EU transfers, annual growth was supported by the rising foreign trade surplus stemming from improved terms of trade and a slight decline in the income balance deficit (Chart 5–7).

**Hungary's net lending position may remain high in 2014–2015.** Stabilisation of the foreign trade surplus at high levels will be the net result of opposing effects. On the one hand, albeit to a lesser-than-expected degree, external demand is expected to put upward pressure on exports, while the improving terms of trade and the weaker forint exchange rate will also contribute to the increase in net exports. On the other hand, accelerating consumption and investment will reduce the foreign trade surplus. Compared to the expected extremely high levels in 2013, the transfer account may decline slightly in 2014 and 2015, but will still be at high levels, as amounts within the limits

pertaining to the EU budget period ending in 2013 will be still payable in the next two years.

**Chart 5–7 Changes in external financing capacity (as a proportion of GDP)**



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

Source: MNB

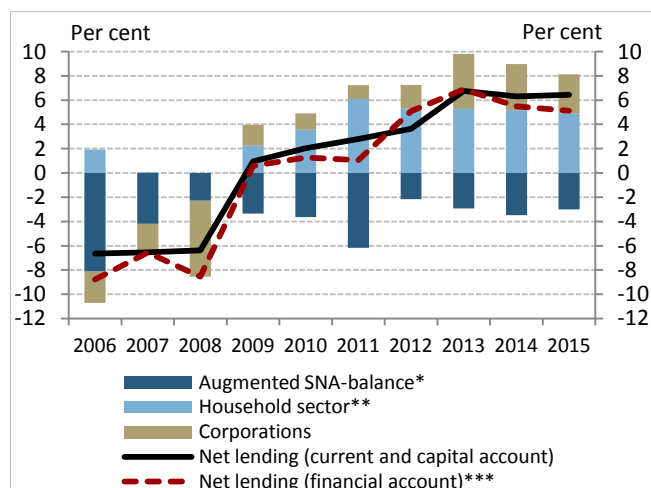
**Looking at the improvement in net lending from the perspective of different sectors' financial savings, the growth in the net savings of the corporate sector is striking.** Besides the presumed increase in the profitability of corporations, rising EU transfers improve the financing capacity as well, while corporate investment is expected to increase only slightly in 2013. Financial savings of the sector may decrease in 2014–2015, since corporate investments may increase materially, partly as a result of the continuation of the Funding for Growth Scheme (Chart 5–8).

**According to our forecast, in the next few years, households' net savings will remain at the high levels seen in previous years.** In line with increasing real wages, over the next few years households are expected to increase their consumption gradually. At the same time, in the context of a lax labour market environment and balance sheet adjustments, precautionary motives will ease very slowly; thus household savings may remain high for years to come.

**The financing requirement of the extended general government may remain low thanks to the disciplined fiscal policy.** In 2014 the career model of teachers, higher participation in public work programmes and the job protection action plan will put upward pressure on the deficit, while tax revenues are likely to increase after the mandatory instalment of online cash registers and due to

increasing consumption. Later on in 2015, the accrual-based deficit may decline due to increased consumption resulting from higher inflation and the expected shrinkage of the public work programme.

**Chart 5–8 Changes in financing capacities of sectors (as a proportion of GDP)**



\* In addition to the central government, the augmented general government includes local governments, MNV Inc., institutions discharging quasi-fiscal duties (MÁV, BKK), the MNB. The augmented SNA deficit takes into account private pension savings.

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

\*\*\* We expect that 'Net errors and omissions' (NEO) returns to historical average.

Source: MNB

### 5.3. Fiscal developments

According to our forecast, the ESA deficit of the budget will not exceed 3 per cent of GDP and may be near the government target in 2014. On the basis of the fiscal developments in recent months and other new information, our deficit forecast has been increased to some extent for both years. Our forecast is based on the assumption that the utilisation of the job protection action plan will be lower than both our earlier estimate and the projection in the 2014 budget. It was also assumed that the efficiency of VAT collection will only improve moderately and more funds will need to be spent on certain expenditures than originally planned by the government. In 2014, a demand-increasing effect of around 1 per cent of GDP may be generated within the economy by fiscal policy in the form of wage increases, contribution allowances, the increase in investment and moderate corporate tax payments. By contrast, fiscal policy is expected to result in a slight decline in aggregate demand in 2015. While the gross government debt-to-GDP ratio, calculated at a constant forint exchange rate, is expected to steadily fall over the forecast horizon, i.e. the government debt rule will be complied with, the actual debt ratio will be significantly affected by changes in the forint exchange rate.

#### 5.3.1. Changes in general government balance indicators

**Based on preliminary financial accounts data, the 2013 ESA deficit of the general government is estimated to amount to 2.5 per cent of GDP,** which is better than our December forecast by 0.1 percentage point of GDP. The difference stems from the improved balance of local governments according to preliminary data, which was only partly offset by the changes in the accrual-based adjustments of cash-flow data which had a general deteriorating effect on the balance. Our forecast concerning the cash-flow balance of the central government has proven accurate (Table 5—1).

Table 5-1 General government balance indicators (as a percentage of GDP)

	2013	2014	2015
ESA-deficit*	-2.5	-2.9	-3.0
Augmented (SNA) balance*	-2.9	-3.5	-3.0
Cyclical component (MNB)	-0.4	-0.2	0.0
Cyclically-adjusted augmented (SNA)	-2.5	-3.3	-3.0
Fiscal impulse**	0.7	1.0	-0.3

\* Complete cancellation of the available free reserves (National Protection Fund) was assumed upon the calculation of the balance indicators.

\*\* Change in the augmented (SNA) primary balance.

Source: CSO, MNB

**According to our forecast, the 2014 ESA deficit may be around 2.9 per cent of GDP, 0.4 per cent higher compared to the forecast in the December issue of the *Quarterly Report on Inflation*. At the same time, our latest forecast is identical to the target deficit set out in the 2014 budget.** Our deficit expectation was adjusted upwards based on the changes in our forecasts concerning both the revenues and expenditure of the central government. Revenues from consumption taxes are expected to be lower-than-earlier expectations by 0.2 per cent of GDP. Two-thirds of that difference is due to the fact that part of the high net cash-flow VAT revenue in 2013 was related to VAT refunds that had been spread out over a longer period of time. In other words, the underlying developments in accrual terms were less favourable than previously expected. The remaining one-third is explained by the stronger-than-expected decline in sales of tobacco products. In all of our forecasts published last year, it was assumed that the job protection action plan would exert its impact at a gradually slower pace. On the basis of the latest data, we decreased anticipated utilisation even further, primarily in the case of the small business tax, which had an overall effect of improving the balance forecast by 0.2 per cent of GDP (Table 5—2).

**Table 5-2 Decomposition of the change in the 2014 ESA balance forecast (compared to the December issue of the Quarterly Report on Inflation; as a percentage of GDP)**

	Change
<b>I. Revenues of the central government</b>	<b>-0.2</b>
Consumption-type tax revenues (VAT, excise duties)	-0.2
Net revenue effect of the job protection action plan	0.2
Other tax revenues	-0.2
<b>II. Expenditures of the central government</b>	<b>-0.3</b>
co-financing of EU transfers	-0.1
Klebsberg Institution Maintenance Centre (KLIK)	-0.1
Public work programme	-0.1
Other expenditures	0.0
<b>III. Other effects</b>	<b>0.1</b>
Balance of local governments	0.1
Other items	0.0
<b>Total (I.+II.+III.)</b>	<b>-0.4</b>

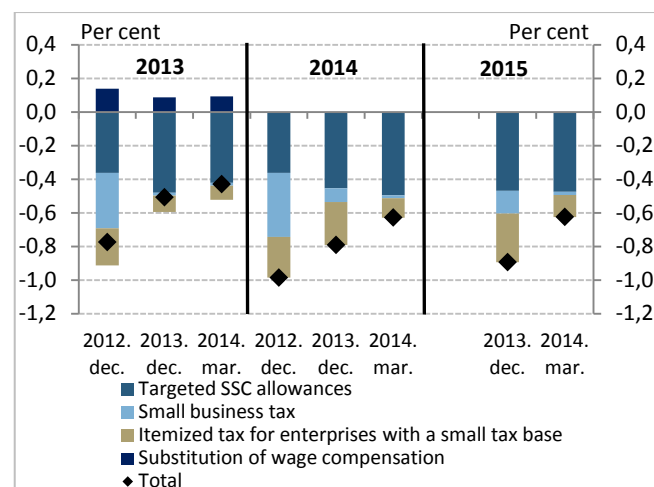
Note: The positive and negative prefixes indicate deficit-reducing and deficit-increasing effects, respectively.

Source: MNB

According to incoming data, in 2014 a higher amount of EU funds can be drawn down than previously forecasted, which will increase the deficit by 0.1 per cent of GDP via Hungary's share of co-financing. Higher EU transfers will, however, induce higher economic growth, which will generate extra revenues via several items. The expenditures of the Klebsberg Institution Maintenance Centre (KLIK) not covered by funding, identified by an audit carried out by the ministerial commissioner, and wage-related public expenditures implied by the higher-than-expected number of public workers, warrant an increase in our deficit forecast by approx. 0.1 per cent of GDP each (Chart 5—9).<sup>3</sup>

<sup>3</sup> While our forecast takes into consideration the announcement by the government on the increase of the funding of basic health care by HUF 10 billion (primarily for wage increase), since that measure is financed from the re-arrangement of the appropriations, it does not affect our deficit forecast for 2014.

**Chart 5—9 Change in the estimated balance effect of the job protection action plan through our different forecasts (as a percentage of GDP)**



Source: MNB

In addition to the central government, it is assumed that local governments will continue to manage their finances with greater discipline than previously expected, but similarly to what we experienced in 2013. This is expected to improve the budgetary position by 0.1 per cent of GDP.

**Corresponding to our forecast, the ESA deficit target set by the government in the 2014 Budget Act is 2.9 per cent of GDP.** However, contrary to the Budget Act, we have assumed that the total amount of the National Protection Fund will be cancelled, which alone would improve the budgetary position by 0.3 per cent of GDP compared to the target. Moreover, according to our forecast, utilisation of the job protection action plan will be lower than the government assumption. Partly on account of that, revenues from social contributions are expected to be higher by 0.6 per cent of GDP, while the revenues from small business taxes (small business tax and the itemised tax for enterprises with a small tax base) to be lower by 0.1 per cent of GDP. While our forecast has been increased, lower utilisation of EU funds is assumed compared to the expectation of the government by way of precaution, requiring lower state co-financing and thus improving the balance (Table 5—3).

The deficit is increased by the fact that revenues from consumption taxes are expected to be substantially lower than the appropriations. The difference, on accrual basis, in VAT revenues is expected to amount to 0.5 per cent of GDP. This is partly attributed to the fact that that we expect a smaller degree of improvement in the efficiency of VAT collection in 2014 than the amount in the budget.

Another source of difference is that based on the number of public sector workers in recent months our forecast sets the cost of the public work programme higher by 0.2 per cent of GDP.

**Table 5-3 Differences between our forecast and the appropriations set out in the 2014 Budget Act (as a percentage of GDP)**

	Difference from appropriation
I. Revenues of the central government	-0.4
Consumption-type tax revenues (VAT, excise	-0.7
Small business tax (KIVA), itemized tax for	-0.1
Contributions	0.6
Other tax revenues	-0.2
II. Expenditures of the central government	-0.1
co-financing of EU transfers	0.3
Klebsberg Institution Maintenance Centre	-0.1
Public work programme	-0.2
Net interest expenditures	-0.1
Other expenditures	0.0
III. Other effects	0.5
Balance of local governments	0.2
Cancellation of the reserves	0.3
Other	0.0
<b>Total (I.+II.+III.)</b>	<b>0.0</b>

Note: The positive and negative prefixes indicate deficit-reducing and deficit-increasing effects, respectively, compared to appropriations.

Source: MNB

**At 3 per cent, our ESA deficit-to-GDP ratio forecast for 2015 is 0.1 percentage points worse compared to our December forecast.** Similarly to 2014, the lower-than-expected accruals-based VAT revenues and the decline in excise tax revenues on tobacco products increased our deficit expectation by 0.2 percentage points in 2015. In our latest forecast, we calculate the consequences of the slower unfolding of job protection action plan in 2015 as well, improving the budgetary position by 0.3 percentage points (Table 5—4).

**Table 5-4 Decomposition of the change in the 2015 ESA balance forecast (compared to the December issue of the Report on Inflation; as a percentage of GDP)**

	Change
I. Revenues of the central government	-0.1
Consumption-type tax revenues (VAT, excise duties)	-0.2
Net revenue effect of the job protection action plan	0.3
Other tax revenues	-0.2
II. Expenditures of the central government	0.1
co-financing of EU transfers	0.4
Klebsberg Institution Maintenance Centre (KLIK)	-0.1
Public work programme	-0.1
Other expenditures	0.0
III. Other items	-0.1
<b>Total (I.+II.+III.)</b>	<b>-0.1</b>

Note: The positive and negative prefixes indicate deficit-reducing and deficit-increasing effects, respectively.

Source: MNB

We decreased EU transfers-related public expenditures by 0.4 per cent of GDP on an accruals basis compared to our previous forecast. While we maintain our earlier forecast of increasing Hungarian co-financing linked to EU transfers in 2015, the share of advance payment not increasing the accruals-based deficit is expected to be higher within the co-financing than assumed earlier. The final 5 per cent instalment of the EU transfers is advanced by the government and its ratio in all co-financing expenditures concerned may be higher than assumed earlier. In addition, similarly to 2014, higher-than-expected expenditure is assumed for the Klebsberg Institution Maintenance Centre in 2015 compared to the appropriated figure. Due to the 2014 basis, a higher number of workers and wage expenditure are anticipated in the public sector in 2015.

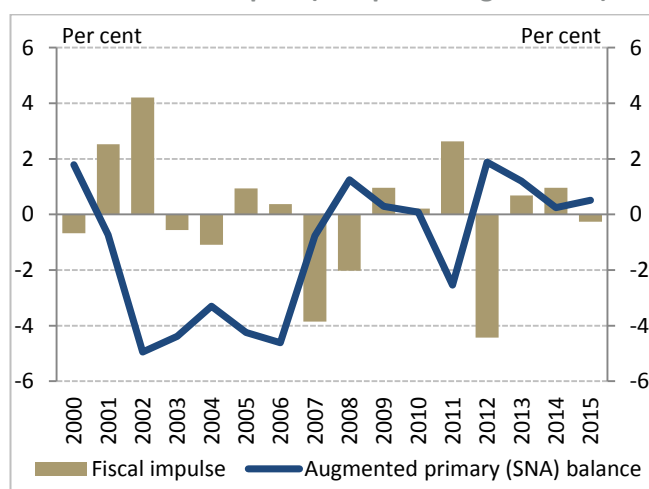
### 5.3.2. Fiscal demand effect

Fiscal demand expansion corresponding to 0.7 per cent of GDP in 2013 mainly increased household income and was mostly due to the social contribution allowance granted under the job protection action plan. To a lesser extent, the increase in investment and intermediate consumption of government, calculated net of EU funding, has also contributed to the increase in fiscal demand. In 2014, the positive fiscal impact may amount to 1 per cent of GDP,<sup>4</sup> as

<sup>4</sup> While ESA-deficit increases only moderately from 2013 to 2014, the fiscal impulse may be rather significant in 2014. The reason is, on the one hand, that the fiscal impulse is calculated from augmented (SNA) deficit,

the result of three roughly equal factors. First, in addition to the increase in social contribution allowance, the effect of the public wage increase intensifies (particularly in education), and all of these will only partly be offset by restrained household transfers. Second, the net increase in investment expenditures and intermediate consumption of the government will continue, which corresponds to the usual investment cycle of local governments. Finally, the tax payments of businesses will be moderate, i.e. their share of GDP will decline. In 2015, the fiscal impact will turn negative, and the demand restraint amounting to 0.3 per cent of GDP is associated with the decline in net investment and intermediate consumption of the government, which is partly due to the usual cycle of expenditures of local governments (Chart 5—10).

Chart 5—10 Fiscal impact (as a percentage of GDP)



Note: 1) The fiscal impact corresponds to the change in the augmented (SNA) primary balance. 2) The positive prefix indicates demand expansion, while the negative prefix implies demand restraint. 3) Assuming the cancellation of the available free reserves in 2014–2015.

Source: MNB

in which one-off revenue from concessions this year is spread over the whole concession period, therefore in 2014, the fiscal impulse increases to a larger extent than the ESA-deficit. On the other hand, the fiscal impulse is calculated from the change in the primary balance, and therefore the improvement in interest balance does not affect it.

### 5.3.3. Risks surrounding the baseline scenario

On the revenue side of the budget, in addition to the inevitable uncertainty of the macroeconomic scenario, considerable positive risks may stem from the faster improvement of the efficiency of tax collection to an extent up to around 0.4 per cent of GDP. Similarly significant but negative revenue risks may include a faster improvement in the utilisation of the job protection action plan compared to the rate expected on the basis of current data; the total upper limit of that risk is 0.3 per cent of GDP.

On the expenditure side, the main risk is that the consolidation of the debt of local governments has not been accompanied by a reform of the regulation of funds. Thus, while the interest expenditures accounted by the central government has increased, local governments are not compelled not to respond to their improved financial position by increasing their expenditures. On the expenditure side, however, the central government has its means for intervention during the course of the year.

The utilisation and structure of EU transfers are particularly difficult to estimate accurately. If a higher amount than our estimate in the baseline scenario is drawn down, while it will increase the expenditures of the budget through co-financing, it would also result in higher economic growth, and therefore increase tax revenues, i.e. it may exert a more or less neutral impact on the budget balance.

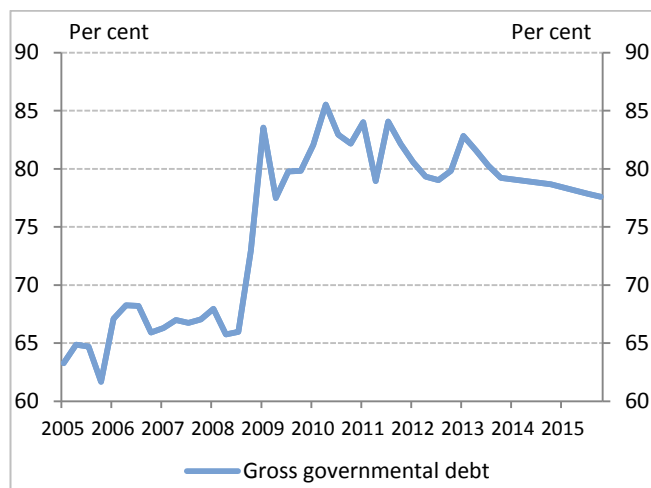
### 5.3.4. Expected developments in public debt

Based on the MNB's preliminary financial accounts data, **gross consolidated general government debt amounted to 79.0 per cent of GDP at the end of the fourth quarter of 2013**, i.e. the debt ratio decreased by 0.8 percentage points compared to the level prevailing at the end of 2012.<sup>5</sup> While the decline in the debt ratio was made possible by the low budget deficit, debt management processes and the utilisation of the Pension Reform and Debt Reduction Fund also played a part. By contrast, the devaluation of the exchange rate of the forint alone would have increased the debt ratio by approx. 0.6 per cent of GDP compared to the end of 2012. While the liabilities

<sup>5</sup> The quarterly figures on preliminary financial accounts as a proportion of GDP do not yet include the effect of the retroactive downward adjustment of nominal GDP by the Central Statistical Office. On the basis of our calculation using the GDP data revised by the Central Statistical Office, the debt indicator was 79.2 per cent at the end of 2013.

taken over from local governments during 2013 added to the debt of the central government, this did not increase the consolidated debt stock. The end-of-the-year debt ratio decreased by 1.2 percentage points compared to the third quarter, due primarily to the expiry and the early repayment of government securities (Chart 5—11).

**Chart 5—11 Gross governmental debt forecast - from 2013 Q4 at a constant, end-2013 exchange rate (as a percentage of GDP)**



Source: MNB

**Assuming an unchanged exchange rate compared to end-2013, the debt ratio is expected to decline over the entire forecast horizon, i.e. the government debt rule is expected to be complied with.**<sup>6</sup> In both 2014 and 2015, the reduction of the government debt as a ratio of GDP may be facilitated by the recovering economy and the fact that, according to our forecast, the government deficit may comply with the Maastricht criteria. Consequently, the government debt-to-GDP-ratio may fall to 78.7 per cent by the end of this year, and to 77.6 per cent in 2015.

**The change of the debt ratio is significantly influenced by the forint exchange rate.** A depreciation of the exchange rate by 10 HUF/EUR, for example, increases the debt ratio by 1.1 percentage points through revaluation of foreign currency debt. As our forecast is based on the assumption of an unchanged exchange rate prevailing at the end of 2013, it is affected by a significant exchange rate risk.

<sup>6</sup> In our 2014 and 2015 forecasts we calculated the debt indicator based on the revised GDP.

## 6. SPECIAL TOPICS

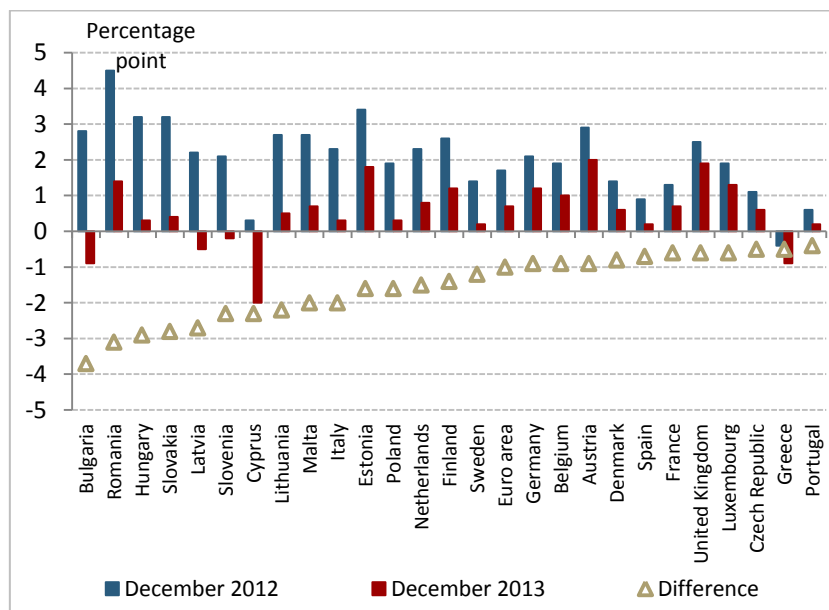
### 6.1. Global factors in the domestic disinflation

Global inflation was moderate in 2013. During the post-crisis period, global inflation peaked in 2011. This was followed by a substantial decrease and the inflation rate has been low ever since. In the European countries that play an important role in the Hungarian inflation trends based on the country's foreign trade structure, inflation continued falling last year. Chart 6—1 shows that in December 2013, the inflation rate was lower than at the end of the previous year in every EU27 member state.

The low European inflation was the combined result of external and internal factors. During the period under review, European economies were characterised by low imported inflationary effects. Restrained global economic growth and slowdown in emerging economies dampened the price of imported raw materials and final goods. The strengthening of the euro further reduced the price of imported goods expressed in euro terms.

European economies continued to be characterised by a disinflationary real economy environment. A slack labour market has resulted in moderate wage dynamics. Balance sheet adjustment has remained a dominant factor in the behaviour of households, i.e. they are holding back consumption expenditure in order to reduce accumulated debt, which in turn slows inflation. Moreover, the fading out of earlier inflation-increasing measures aimed at improving the government budgets (by increasing administered prices and indirect taxes) has also contributed to the moderation of the inflation rate.

Chart 6—1 HICP at constant tax rates in the EU countries



Source: Eurostat

#### Hungary: decomposing the change in inflation into external and country-specific components

Chart 6—1 shows that, compared to other EU member states, Hungary experienced a significant decrease in inflation last year.

In addition to the above factors also characterising other European countries, various country-specific effects can also be identified in the case of Hungary. They include the significant reduction of administered prices and the marked adaptation of inflationary expectations (as these expectations had already been anchored by the inflation targets of central banks in most European countries, they were probably less affected by the low inflation rate).

This study seeks to identify the potential role in reducing inflation of the external factors that also resulted in a lower inflation rate in other European countries. The changes in inflation have therefore been decomposed into an external component and a country-specific component. The external component focuses on effects having simultaneously influenced



inflation in the same direction in several countries. For example, the effect of international oil prices is primarily reflected by the external component, as the increase (decrease) in oil prices will typically accelerate (slow down) inflation in every country. By contrast, the country-specific component only includes effects that are specific to the given country. Changes in indirect taxes, for instance, normally fall into this category.

The external component may also be perceived as if there is a common factor affecting the inflation rate in every country. From this perspective, the country-specific component is that part of inflation which the former is unable to explain. On the basis of the above, inflation can be formulated as follows:

$$\pi_t = \beta f_t + \varepsilon_t \quad (1)$$

In that formula,  $\pi_t$  is the inflation indicator of a given country, which is to be decomposed. The common factor is denoted by  $f_t$ , while the size of the effect of the common factor on inflation is denoted by  $\beta$ . It should be noted that the latter may differ by country. Finally, the country-specific component is denoted by  $\varepsilon_t$ .

That equation, however, cannot be directly estimated as the common factor is an unobservable variable. Therefore, a two-step process is applied, i.e. an estimate is first given for the common factor and, based on that result, equation (1) is then estimated.

### **Step 1: determining the common factor**

The common factor can be consistently estimated from the inflation time series of the various countries by principal component analysis<sup>7</sup>. HICP data were used for the analysis as they are easily accessible and are generated by the same methodology in each country. The sample includes the monthly frequency, year-on-year inflation time series of the EU-27 countries, available since 1998 for all EU-27 countries.

It should be noted that by the end of the millennium, the inflation trends of the CEE region were different from those of former EU member states. During that period, most CEE countries were struggling with high, often double-digit inflation. Subsequently, however, the importance of factors also affecting inflation in other EU member states gradually increased, resulting in closer co-movement between the national inflation rates. Therefore, we need to take this observation into account in order to accurately estimate the common factor and its impact. Several different estimates have been made, depending on the method applied.

In the first specification, the estimation was restricted to the sample period January 2005 – December 2013, disregarding the period in question. Robustness tests were carried out in order to accurately determine the start of the sample period. We found that approximately after 2004, the results obtained are not sensitive to the choice of starting period, i.e. following the EU accession of CEE countries, there were no more significant changes in the co-movement of the inflation rates across EU member states.

In the second case, however, the (almost) entire available sample was used. The period of March 1998 to December 2013 was taken into consideration for the analysis since, as during the first two months of 1998, there was triple-digit inflation in Bulgaria, which would have considerably distorted the results. The disinflation period characteristic of CEE countries was taken into account by estimating a regional factor in addition to the common one.<sup>8</sup>

The analysis was finally repeated using inflation data at constant tax rates. In the latter case, it was assumed that indirect tax changes are always country-specific. Since HICP figures at constant tax rates are only available from 2002, this could only be

---

<sup>7</sup> Stock, James H. – Watson, Mark W. (2002): Macroeconomic Forecasting with Diffusion Indexes, *Journal of Business & Economic Statistics*, 20 (2) April, 147-62.

<sup>8</sup> For more information on the procedure, see: Balázs Krusper (2012): The role of external and country specific factors in Hungarian inflation developments, MNB Working Papers, 2012/5, Magyar Nemzeti Bank.

done for the first specification. It must be noted that rather than their estimated impact, only the technical impact of indirect tax changes are filtered out from the data by Eurostat.<sup>9</sup>

## Step 2: determining the external and the country-specific components

Once the common factor has been estimated, its impact on the Hungarian inflation rate can be determined by running a simple regression. In the cases where only post-2005 data were used, we estimated equation (1). On the basis of the results obtained, the external component ( $\beta f_t$ ) and the country-specific component ( $\varepsilon_t$ ) can be calculated.

In the case where the entire sample period was taken into consideration, the external component is determined by the joint effect of the common factor ( $f_t$ ) and the regional factor ( $g_t$ ). In other words, the following equation was estimated:

$$\pi_t = \beta^f f_t + \beta^g g_t + \varepsilon_t \quad (2)$$

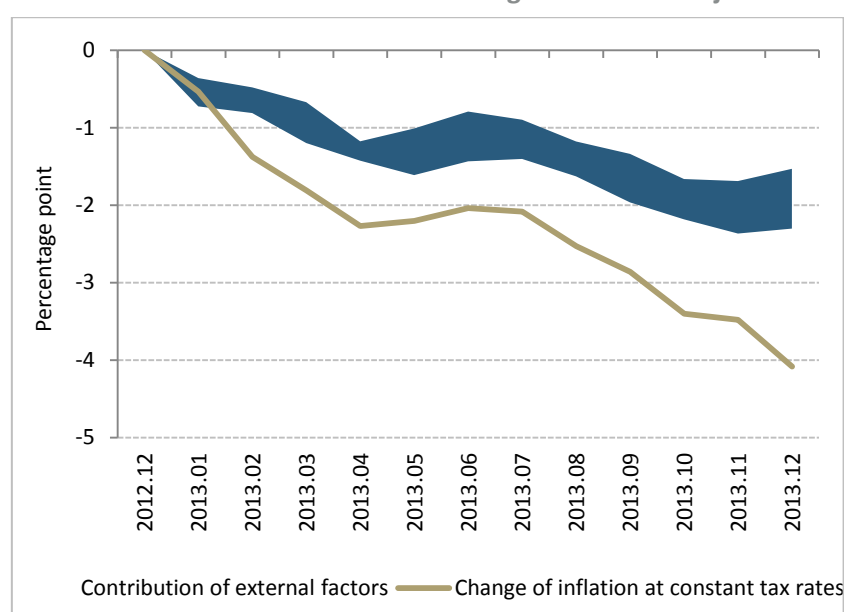
Therefore, in that case, the external component is defined as  $\beta^f f_t + \beta^g g_t$ , while the country-specific component is again given by  $\varepsilon_t$ .

## Results

Altogether, three different estimates were thus given for the effect of the external component. The difference in the estimates stems first off from the method of controlling for the disinflation period having played out in CEE countries. In the first case, only post-2005 data were used, while a regional factor was also estimated in the second case. Finally, the first analysis was repeated on inflation data at constant tax rates. As the results obtained outline a similar picture, our analysis is considered to be robust in terms of controlling for the disinflation period and whether the analysis is based on inflation indicators adjusted for tax changes or headline inflation indicators.

The results are shown in Chart 6–2, where the change in the Hungarian inflation at constant tax rates between December 2012 and December 2013 is decomposed into external and country-specific components. As far as the external component is concerned, the chart shows the band formed by the results obtained from the three different specifications.

Chart 6–2 Contribution of external factors to the change of inflation adjusted for indirect taxes



The difference between the inflation adjusted for indirect taxes calculated by the MNB and the HICP at constant tax rates stems from the fact that the indirect tax effect estimated by the MNB differs from the technical effect applied by the Eurostat.

Source: MNB

<sup>9</sup> The tax filtering method applied by the MNB is described in Box 1–2.

Inflation at constant tax rates declined by 4.1 percentage points in Hungary during the period under review (between December 2012 and December 2013). Of that change, the external component may account for between 1.5 and 2.3 percentage points, i.e. roughly half of the decline. Therefore, on the whole, the favourable external inflation environment played a significant role in the decline of Hungarian inflation last year.

For the interpretation of the results, it is worth pointing out that rather than being based on a structural model, our method is based solely on the analysis of the co-movement of the inflation rates of various countries. Consequently, the factors influencing the changes in the external and the country-specific components cannot be accurately identified. For example, the reduction of administered energy prices may intuitively be considered a country-specific factor. However, regulated inflation slowed down in other countries, too, and thus its effect could, due to the characteristics of the method, also be reflected in the external component.

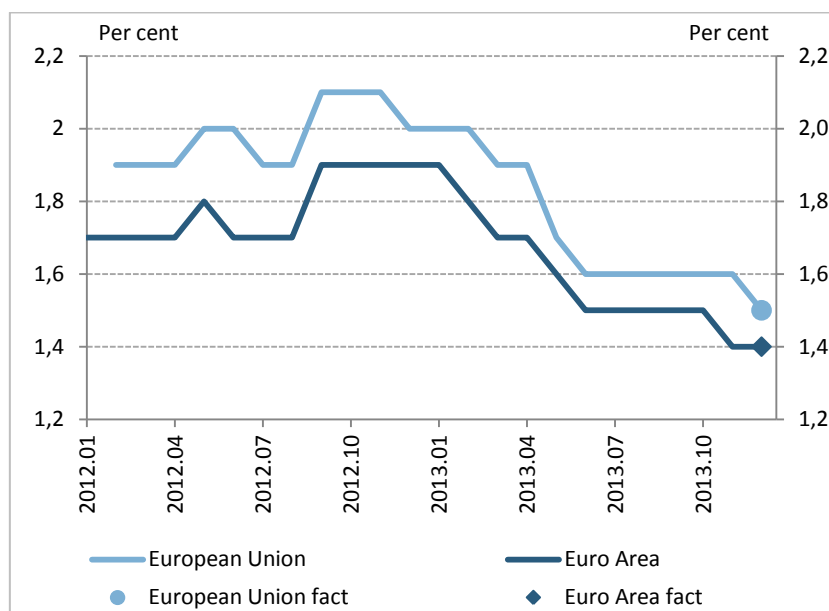
## 6.2. Evaluation of central bank's forecasts for 2013

The aim of our analysis is to present the accuracy our forecasts prepared for the previous year. In addition, we also compare the Bank's forecasting performance with that of market analysts.

### Inflation forecasts

We prepared our first forecast for the 2013 consumer price index in December 2011. Until the middle of 2012, we expected that the level of inflation would be broadly consistent with the target. The increase of the forecast in September 2012 can be explained by the announced government measures. In accordance with our forecasting rules, due to the during the summer announced government measures, such as the increase in excise duties, the rationalisation of price subsidies, the introduction of the telephone tax, the standard insurance tax, the financial transaction tax and electronic tolls, we substantially increased our prognosis. In the December 2012 issue of the *Quarterly Report on Inflation*, we first took into account (before the market analysts) the decrease in administered energy prices and the modification of excise duty rules (Previously we included significant excise duty hike for alcohol and tobacco in January and May 2013), as a result of which our inflation forecast fell. The figures for 2013 can be explained by the administered price decreases announced in the new rounds. The inflation in 2013 was moderated by the favourable oil prices and the moderate imported inflation. The inflation expectations for the Eurozone and for the European union decreased as well during the previous year (Chart 6—3).

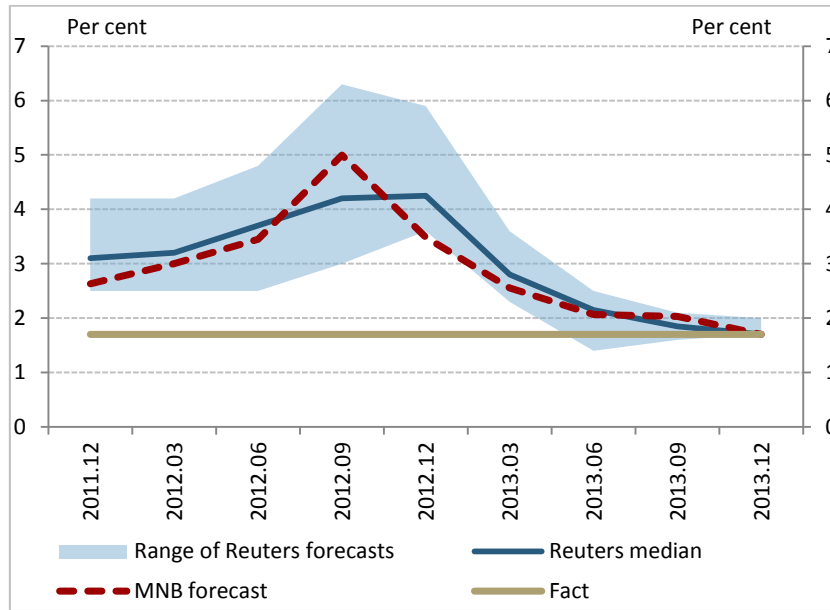
Chart 6—3 Market forecast for 2013 inflation of the European union and Euro Area



Source: Eurostat

Overall, from the end of 2012 our inflation forecast for 2013 was at the bottom of the forecast range of the market analysts who participated in the Reuters survey. The Bank's forecast without the modification in September 2012 has smaller difference to the actual data, than the market expectations (Chart 6—4).

Chart 6–4 MNB and market forecasts for 2013 inflation



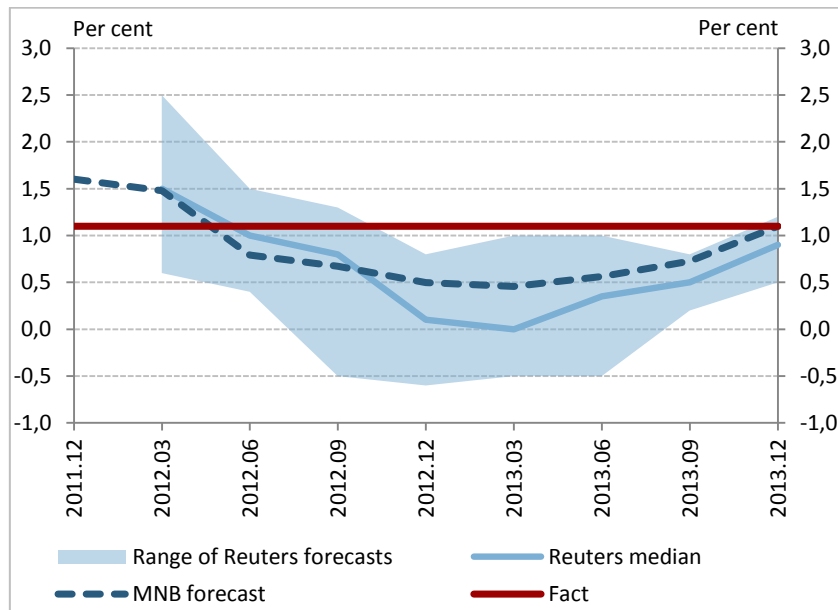
Source: CSO, MNB

**Projections for economic growth**

In the last three years, the central bank and market forecasts for economic growth in 2013 were lower than the actual outcomes for GDP. The average forecast error of the MNB’s staff was 0.4 percentage points, as opposed to the 0.7 percentage point forecasting error of the median of market analysts. We prepared our first forecast for 2013 in our December 2011 Report on Inflation. Due to the significant slowdown in international economic activity caused by the prolonged debt crisis in the euro area and the problems in the European banking system, we reduced our GDP forecast in the middle of 2012. From June 2013, due to the agricultural harvest results, which were substantially more favourable than in 2012, and the new capacity created in the automobile industry, we collectively improved our growth expectations for 2013 along with the increasing government investment activity, driven by the higher utilisation of EU funds and rising private investment activity fuelled by the Funding for Growth Scheme and the slowly improving domestic demand.

Overall, our prognosis was more optimistic than market expectations and the mean absolute error of the central bank’s forecast was smaller. In total, a considerable portion of the forecast error is explained by the more favourable agricultural value added and the stronger domestic demand fuelled by the accelerating utilisation of EU funds (Chart 6—5).

Chart 6–5 MNB and market forecasts for GDP growth in 2013



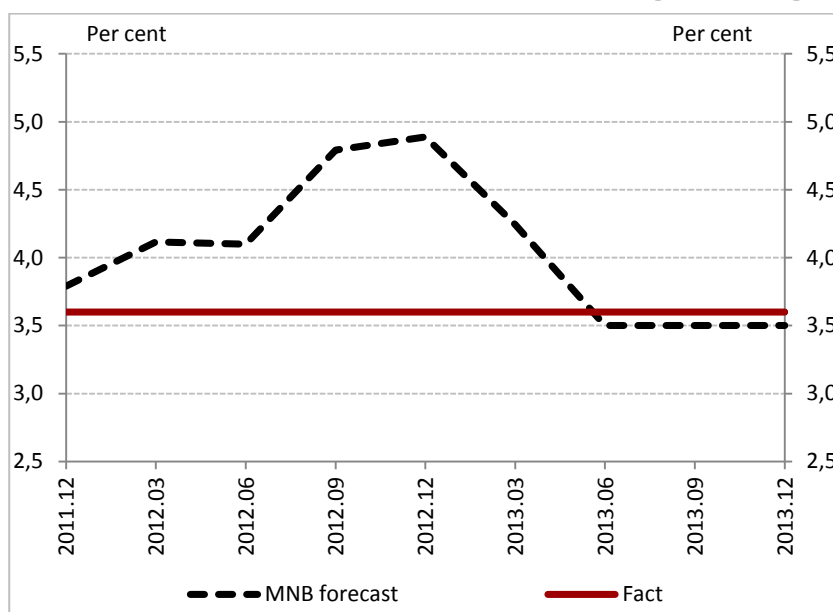
Source: CSO, MNB

### Projections for the labour market

Our labour market indices (the index of the private sector gross average earnings and private sector employment) were first forecast in our December 2011 *Report on Inflation*. The accuracy of the MNB forecasts differed in terms of the gross average earnings and private sector employment.

From the beginning of 2012, we projected a higher earnings index as a result of the increase in minimum wages, the guaranteed wage minimum and the mandatory wage increases, which we moderated in March and June 2013 in line with the decrease in the inflation forecast. From June 2013, we projected a wage index for the private sector gross average earnings that was almost similar to the actual outcomes for the data (3.5 per cent), which we did not modify despite the incoming volatile earnings data. We deemed that the volatility of the index was the consequence of the changes in seasonality, which does not affect the basic processes of wage-setting (Chart 6–6).

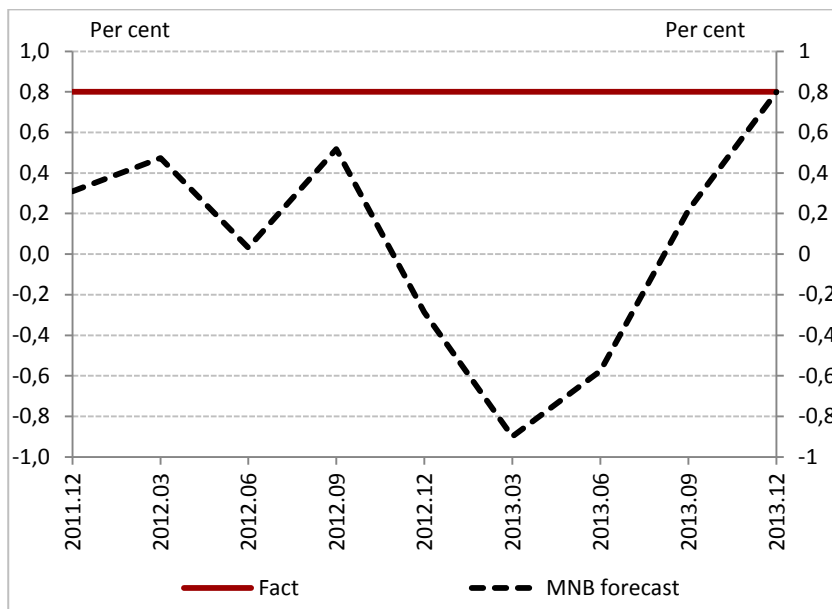
Chart 6–6 MNB and market forecasts for 2013 Private sector gross average earnings



Source: CSO, MNB

The private sector employment forecast is closely related to our view of corporate sector profitability. Due to the subdued outlook for the real economy and rising production costs, we expected stagnation followed by a slight downturn in employment for the period between December 2011 and the first half of 2013. From June 2013, as a result partly of the more favourable incoming data and partly of the ratio of part-time workers, we changed our assumptions regarding the ratio of part-time workers; consequently, we gradually raised our employment forecast (Chart 6—7).

Chart 6—7 MNB and market forecasts for 2013 Private sector employment



Source: CSO, MNB

## 7. BREAKDOWN OF THE AVERAGE CONSUMER PRICE INDEX FOR 2014

**Table 7-1 Decomposition of the inflation to carry over and incoming effect (2014)**

	Effect on CPI in 2014		
	Carry over effect	Incoming effect	Yearly index
Administered prices	-1.0	-0.2	-1.2
Administered prices	-0.2	1.5	1.3
Indirect taxes and government measures	0.7	-0.1	0.6
<b>CPI</b>	<b>-0.6</b>	<b>1.3</b>	<b>0.7</b>

Note: 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 carry over and incoming effects. The carry over 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).

Source: MNB

**Table 7-2 Detailed decomposition of our inflation forecast to carry over and incoming effects (2014)**

	2014				
	Average carry over effect	Carry over indirect tax effect	Average incoming effect	Incoming indirect tax effect	Yearly index
Food	-1.8	0.0	2.4	0.0	0.5
non-processed	-6.0	0.0	4.2	0.0	-2.0
processed	0.2	0.0	1.5	0.0	1.7
Traded goods	0.1	0.0	1.3	0.0	1.3
durables	-0.6	0.0	0.8	0.0	0.2
non-durables	0.3	0.0	1.5	0.0	1.8
Market services	1.1	1.0	1.9	-0.6	3.5
Market energy	-0.6	0.0	1.1	0.0	0.6
Alcohol and Tobacco	0.0	4.9	2.3	0.3	7.6
Fuel	-1.8	0.0	2.3	0.0	0.5
Administered prices	-5.4	0.0	-0.8	0.0	-6.2
<b>Inflation</b>	<b>-1.2</b>	<b>0.7</b>	<b>1.4</b>	<b>-0.1</b>	<b>0.7</b>
Core inflation	0.4	1.0	1.7	-0.2	3.0

Note: 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 carry over and incoming effects. The carry over 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).

Source: MNB



**QUARTERLY REPORT ON INFLATION**

March 2014

