



NÁRODNÁ BANKA SLOVENSKA  
EUROSYSTEM



# MEDIUM-TERM FORECAST

Q3  
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# 1 SUMMARY

The recovery of global economic activity slowed in the first half of the year due to the protracted resolution of the euro area sovereign debt crisis. The debt crisis continues to fuel uncertainty among investors and consumers. This uncertainty is having a dampening effect on economic growth in Slovakia's main trading partners, which in turn is expected to be reflected in domestic economic activity.

This NBS Medium-Term Forecast (MTF-2012Q3) continues to reckon on a gradual revival in external demand, proceeding on the assumption that the economies affected by the debt crisis will stabilise and that the climate of uncertainty will not become more pronounced.

The latest forecast is based on available national accounts data for the first half of 2012, on current monthly data, on short-term indicators, and on the ECB's technical assumptions.<sup>1</sup>

For the production of the Medium-Term Forecast, NBS took into account the following factors:

- weaker external demand;
- improvements in exports and current production statistics;
- worse domestic demand data and a further decline in sentiment;
- the increasingly adverse labour market situation;
- consolidation measures.

Based on assessments of these factors (particularly the real economy factors) and to some extent the effects of consolidation measures, the forecasts for key macroeconomic indicators for the next two years have been revised down considerably from the previous quarter.

While the national accounts data on the economy's quarterly growth were better than expected, the seasonally adjusted structure of GDP made it difficult to identify a clear source of economic growth. Therefore year-on-year developments as well as monthly indicators were also taken into account to some extent. With this information, it was easier to assess the baseline condition of the economy. Although the economy expanded

in the first half of the year, its growth was based entirely on the positive effect on export performance of a supply-side shock in the automotive industry, as is evident from industrial production data adjusted for the result from that industry. However, the signs from sentiment surveys and forward-looking indicators are for a worsening of the situation, even in the automotive industry. The labour market benefited only partially from the supply-side shock, and at the aggregate level no new jobs were created. Consumer demand therefore remained considerably subdued. As for investment demand, it declined amid persisting uncertainty, deteriorating sentiment, decelerating lending activity, and the tightening of credit standards.

Considering the current position of the economy, the long-running uncertainty and the slowdown in external demand, the outlook for economic growth over the projection horizon has been revised down substantially. The effect of consolidation measures caused a further lowering of the medium-term growth forecast. Thus the outlook for all components of growth is worse in this forecast than in the June forecast. Since the components of domestic demand have been revised down, the domestic part of the economy is not expected to make a significant contribution to overall growth. The labour market situation is also assumed to deteriorate, in terms of both employment and unemployment. Household income is assumed to be lower and this will be reflected in weaker household consumption. The inflation forecast has been revised up for 2012 and even more so for 2013, on the basis of new technical assumptions related to increases in energy and food inflation.

As regards the overall trend in the Slovak economy, the September forecast assumes that growth in 2012 will be moderately lower than in the previous year, with both domestic demand and external demand expected to make less positive contributions. With economic activity declining, weaker employment growth is anticipated. The adverse situation in the labour market is expected to result in stagnant real income, which should in turn be reflected in lower household

<sup>1</sup> ECB Staff Macroeconomic Projections for the Euro Area, September 2012. The projections are available at [www.ecb.int](http://www.ecb.int)



consumption. Although the inflation rate is projected to decelerate, it should remain at a relatively high level.

Economic growth is expected to continue slowing in 2013. As the effect of the supply-side impulse fades away, net exports are projected to make a zero contribution to growth. Domestic demand is expected to be the main, but moderate, driver of economic growth, as the gradual recovery of confidence both abroad and in Slovakia should gradually boost domestic demand, even while consumers remain cautious. Investment demand is assumed to stay subdued owing to a combination of persisting uncertainty and the effect of fiscal consolidation measures. The labour market situation is not expected to change significantly, and employment is projected to remain flat. Consolidation measures are assumed to only partially curb household disposable income growth. The expectation is that households will cover part of their lost income by dipping into savings. Inflation is assumed to continue decelerating with all of its components contributing to the slowdown. Not even commodity price inflation is expected to increase.

In 2014, economic growth is expected to rise moderately in line with a stronger recovery of global demand. The contribution of net exports to economic growth is assumed to rise due to lower import intensity (reflecting the inclusion

of new investment in the automotive industry). Growth in the domestic part of the economy is expected to continue rising gradually and therefore to contribute positively to an overall increase in economic activity. Domestic demand is assumed to be driven by consumer demand growth, as gains in labour productivity provide an impetus to income growth and subsequently to consumption. As for the investment activity of firms, it is expected to remain affected by the effects of fiscal consolidation measures taken in the previous year. The labour market should gradually begin to pick up in response to the upturn in economic activity. It is assumed that growth in employment and real compensation will translate into an increase in consumer demand. Price level developments are expected to be favourable, based on technical assumptions of lower inflation in commodity prices (especially oil prices).

The risks to the GDP forecast continue to be on the downside over the projection horizon. The most significant risk is that the sovereign debt crisis in Europe escalates and results in a more pronounced slowdown or decline in external demand. Another risk is that the economy's response to fiscal consolidation measures is different from that projected. The risks to the inflation forecast for 2013 and 2014 are mainly on the upside, with the principal risk being higher oil prices.



## 2 CURRENT DEVELOPMENTS IN THE EXTERNAL ENVIRONMENT AND SLOVAKIA

### SLOWDOWN IN GLOBAL ACTIVITY

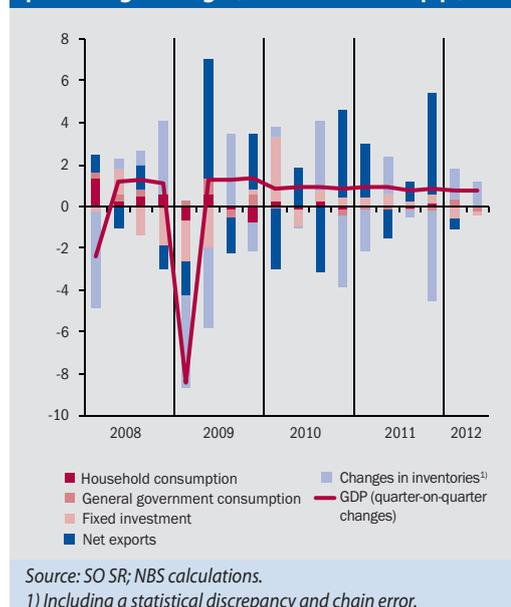
Global economic activity slowed moderately in the second quarter of 2012. This dampened the world economy's recovery, which became more volatile and vulnerable. The weak labour market, the financial situation of households and the need for fiscal consolidation measures remain the major obstacles to achieving stronger economic growth in advanced economies. The slowdown in economic activity is being exacerbated by tensions and uncertainty regarding the resolution of the euro area sovereign debt crisis in certain countries. Most emerging economies also saw a slackening of economic growth in the second quarter of the year. This was due to a combination of weakening global trade and the implementation of economic austerity measures. According to the OECD composite leading indicators (CLI),<sup>2</sup> economic confidence in the OECD declined slightly at the end of the second quarter, suggesting a weakening of economic activity.

Euro area GDP contracted by 0.2% in the second quarter of 2012 after remaining flat in the first quarter. The long-standing weakness of economic activity is largely attributable to fragile domestic demand, which is outweighing the positive contribution to growth from external demand. Activity was weighed down by the debt crisis and related low confidence among enterprises and consumers, by the tightening of credit standards, and also by the implementation of further fiscal consolidation measures in particular in euro area countries.

In the OECD, economic activity moderated in the second quarter. The euro area and British economies shrank, while Japan recorded the sharpest slowdown. US GDP growth was lower in the second quarter than in the first owing to a marked deceleration of growth in private consumption and private investment. GDP was also depressed by further government spending cuts, albeit less severe than those in the previous quarter. There were positive contributions to GDP growth from

exports and changes in inventories. The ISM<sup>3</sup> manufacturing index was declining during the second quarter, down to just below the threshold dividing expanding activity in the sector from a contraction. The index remained at this level in July and August. The situation in new orders and production was the main cause of mounting concern, while uncertainty remains high and, as it seems, the US economy could be threatened by stagnation. In China, economic activity in the second quarter remained largely unchanged from the previous quarter and lies below its long-run trend. The subdued level of industrial production is further confirmed by the PMI<sup>4</sup> manufacturing output index, an indicator of economic activity which fell markedly during the second quarter and dropped to below the expansion-contraction threshold in August. Other emerging economies also reported slower economic activity, but their growth remains relatively strong. Despite the slackening of domestic and external demand, the slowdown of growth in emerging economies is still expected to be only slight.

Chart 1 Composition of GDP growth (quarterly percentage changes; contributions in p.p.)



- 2 The CLI indicators are published by the OECD on a monthly basis – the latest available data, published in August 2012, are for June 2012.
- 3 The ISM (Institute for Supply Management) Purchasing Managers Index – the index is a barometer of business sentiment in US industry. Although the survey collects data only from the industry sector, it is treated as a key indicator of sentiment in the economy as a whole.
- 4 The China Manufacturing PMI: an indicator of economic sentiment in Chinese industry published by the National Bureau of Statistics of China.

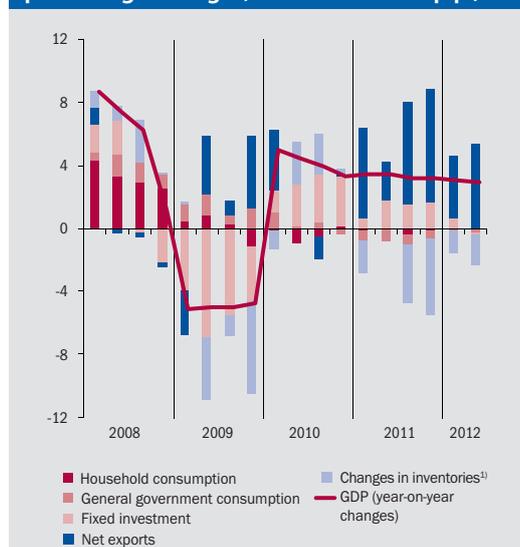
### RELATIVELY STRONG ECONOMIC GROWTH IN SLOVAKIA DUE TO CONTINUING SUPPLY-SIDE SHOCK

The adverse developments in the euro area have yet to impinge significantly on economic activity in Slovakia. The country's economic growth in the second quarter remained relatively high (0.7% quarter-on-quarter) and its economy was the second fastest growing in the euro area. Looking at the composition of quarterly economic growth, it is not possible to identify the source of growth since these data are probably distorted by the seasonal adjustment procedure. Consequently the latest data for the first half of 2012<sup>5</sup> cannot be compared with the assumptions used in the previous forecast,<sup>6</sup> which means that the baseline position of the economy cannot be analysed. Therefore, economic growth developments were assessed on a year-on-year basis.

### EXPORTS DRIVING ECONOMIC GROWTH, WHILE THE DOMESTIC PART OF THE ECONOMY IS HIGHLY SUBDUED

For the production of this forecast, it was necessary to analyse the current situation, i.e. to look for the source of economic growth. As is clear from the following chart on the composition of GDP growth in year-on-year terms, export performance was driving the economy in the first six months. This is evident from the net export contribution in the quarterly accounts, as well as

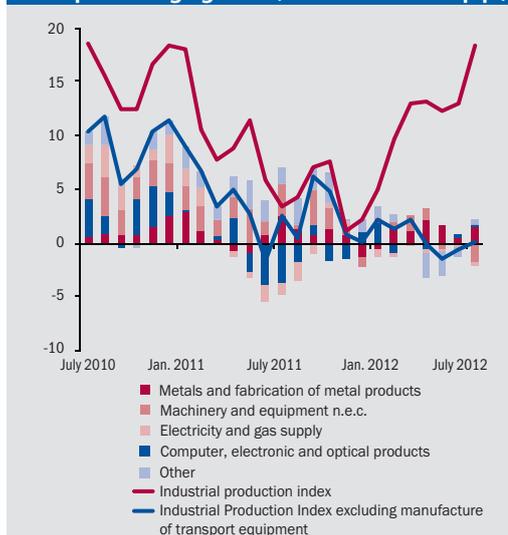
**Chart 2 Contributions to annual GDP (annual percentage changes; contributions in p.p.)**



Source: SO SR; NBS calculations.

1) Including a statistical discrepancy and chain error.

**Chart 3 Breakdown of contributions to industrial production growth, excluding the contribution of the automotive industry (annual percentage growth; contributions in p.p.)**



Source: SO SR; NBS calculations.

from the growth of value-added in industry on the supply-side of the economy.

The increase in export performance was largely attributable to the automotive industry, where the production increased in year-on-year terms due to an enhanced utilisation of capacities and the roll-out of new car models since the beginning of the year. The composition of production is relatively well matched to demand, which is found not only in euro area countries but increasingly in Asia, Russia and the United States, whose markets have not been significantly affected by the euro area sovereign debt crisis. As for production across the rest of industry (disregarding the automotive segment and its high output growth), it declined year-on-year in the second quarter but with its annual rate of change returning to zero in July. Weak domestic demand is dampening import growth to a significant extent, and therefore net exports are making a large contribution and pulling the Slovak economy into growth territory.

Domestic demand remains subdued owing to the decline in real government consumption, the climate of caution, and the adverse labour market situation. Household consumption has continued to decline, given the high unemployment rate and the negative income effect stemming from slow

5 At the cut-off date for the previous forecast, data on the composition of first-quarter GDP growth were not available; only the SO SR's flash estimate of GDP growth had been published.

6 Another reason why the composition of quarterly economic growth cannot be compared is the revision of the foreign trade data. The SO SR revised this data because one reporting entity erroneously reported the amount of imports. Imports increased only in the first quarter of 2012. The data for 2011 are expected to be revised at the end of 2012.

nominal income growth and high inflation. Contrary to indications at the end of 2011, household consumption did not rebound in the first half of 2012. Households cut down spending not only on durable goods – as is clear from the trend in new car registrations – but also on other goods.

Investment was hit hard by pessimistic expectations for economic activity in the near term. Non-financial corporations trimmed or postponed their investment activity, partly in response to the tightening of credit standards. A combination of stricter borrowing conditions and lower demand for loans among non-financial corporations caused lending growth to decelerate sharply. Another factor behind the drop in corporate investment was the negative income effect (declining profitability) in the first quarter of 2012. Looking at the composition of investment, the largest negative contribution to the overall decline came from investment in buildings (residential and other buildings). This trend was evident in the sectoral breakdown, with the slump in household investment.

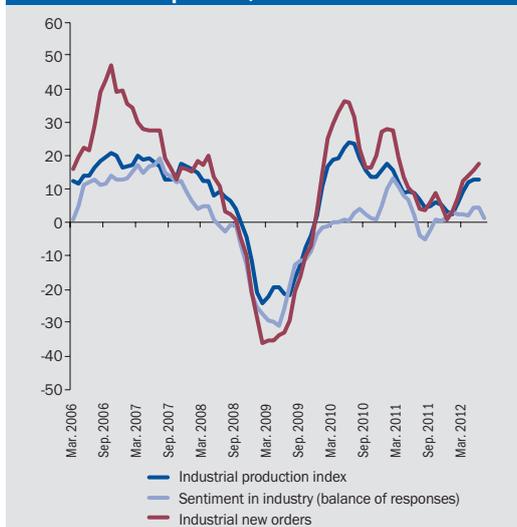
Despite the moderately optimistic sentiment in industry in the first half of 2012, the quarterly accounts data indicate adverse developments during the period. The positive sentiment in manufacturing industry in the first half of the year was confirmed by monthly data on production,

new orders and sales in industry. These monthly indicators implied favourable trends up to the end of June, but sentiment deteriorated markedly in July and August. It is assumed that while the latest available industrial data were generally favourable, developments across industry as a whole may not necessarily have been as benign as they appeared from the production statistics.

#### NEW JOB CREATION STAGNATED

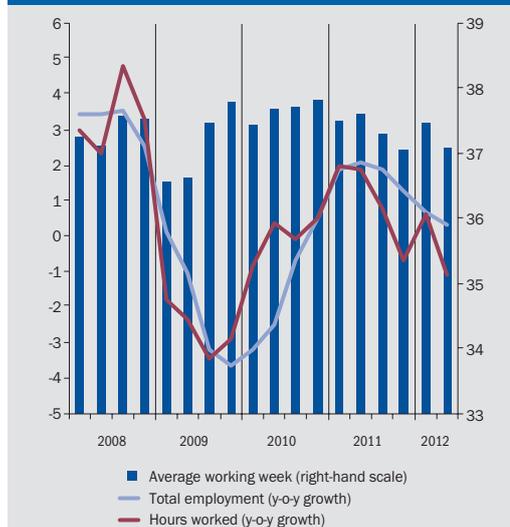
The labour market in the first half of 2012 did not reflect the growth in economic activity, which was largely concentrated among export-oriented firms and their sub-suppliers. Employment growth in the automotive industry was cancelled out by job losses in sectors reliant on the domestic part of the economy. Those most affected by adversities in the domestic market were self-employed people, whose number fell sharply in the first six months. As a result of the lower number of self-employed people, the labour market situation in the second quarter was moderately worse than projected in the previous forecast. The unemployment rate fell slightly in the first quarter, to 13.7%, and then edged up by 0.1 percentage point in the second quarter. The jobless rate reflected a slight increase in the number of employees and a change in the number of economically-inactive people. With employment remaining flat, the relatively strong

**Chart 4 Forward-looking indicators (3-month moving average; annual percentage growth; balance of responses)**



Source: SO SR.

**Chart 5 The labour market (annual percentage growth; levels in hours)**



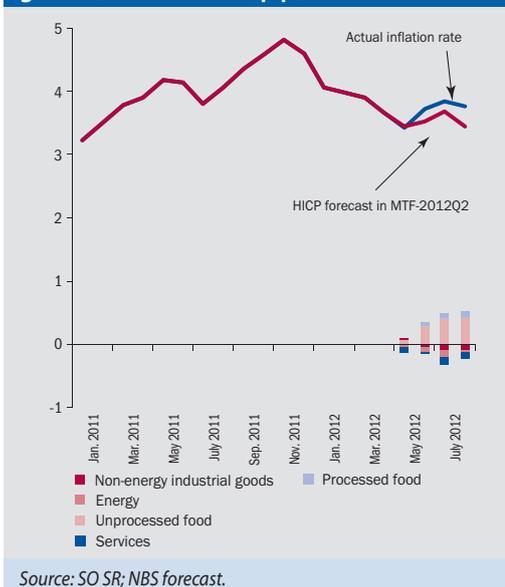
Source: SO SR.

economic growth accelerated labour productivity growth in the second quarter, creating scope for an increase in compensation. This rise was to a certain extent dampened by the lower number of hours worked (overtime).

#### PRICES RISES CURRENTLY HIGHER THAN EXPECTED

Price rises from May to August were moderately higher than projected in the previous forecast. The inflation rate slowed temporarily in May, when the annual rate of food and energy inflation declined, but consumer price growth accelerated again in the following months. Inflation was driven up by unprocessed food prices, which rose sharply due to the effect of a poor harvest on prices of potatoes and seasonal vegetables and to the new harvest reaching the market later than usual. Tropical fruit inflation also increased in year-on-year terms, probably because the euro depreciated vis-à-vis the US dollar. Inflation in services and in non-energy industrial goods remained relatively high. These prices were affected mainly by cost factors, given that consumer demand was still subdued. Only fuel

Chart 6 Inflation (annual percentage growth; deviations in p.p.)



Source: SO SR; NBS forecast.

inflation had a dampening effect on the headline rate during the period under review, as global oil prices fell temporarily.

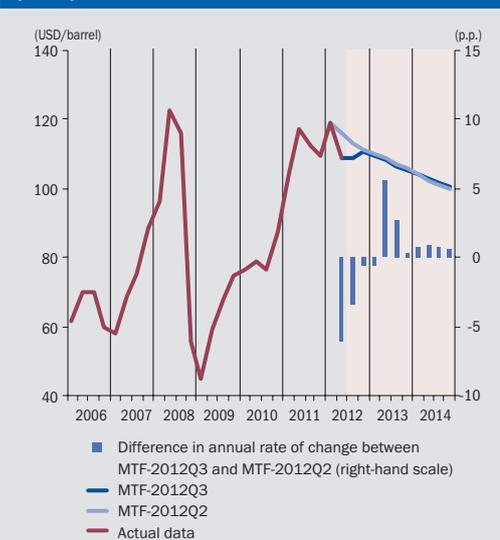
### 3 TECHNICAL ASSUMPTIONS<sup>7</sup>

Following the publication of the previous forecast in early June, the **exchange rate** of the euro against the US dollar remained volatile, depreciating markedly in July and then strengthening in August. Its movement was affected by developments in the euro area sovereign debt crisis. The current forecast assumes that the exchange rate of USD per EUR<sup>8</sup> will be 1.26 in 2012 and 1.23 in both 2013 and 2014.

The **price of oil** fell sharply in the second quarter amid fears about developments in the global economy, the euro area sovereign debt crises, declining demand and high oil inventories. The price of a barrel of Brent crude oil averaged USD 108 in the second quarter of 2012. In the following months, however, prices climbed again amid fears about geopolitical tensions in oil-exporting countries and also due to a drop in oil production. This forecast assumes that the average price per barrel will be USD 111.7 in 2012, falling to USD 107.3 in 2013 and USD 102.3 in 2014.

Prices of **non-energy commodities** declined in the second quarter of 2012, down to the level recorded at the beginning of the year. Metal prices

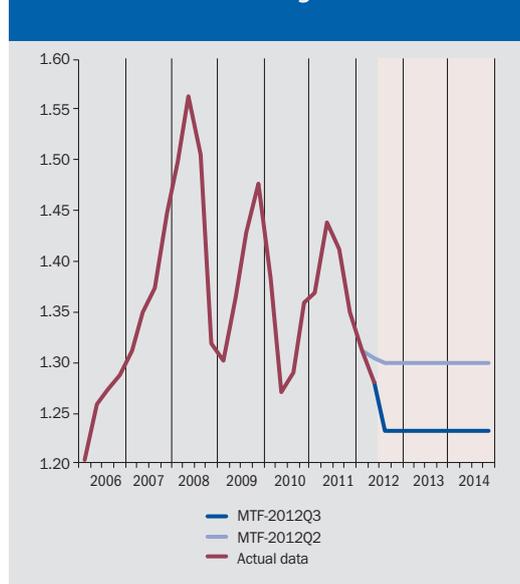
**Chart 8 Price per barrel of Brent crude oil (USD)**



Source: NBS, ECB.

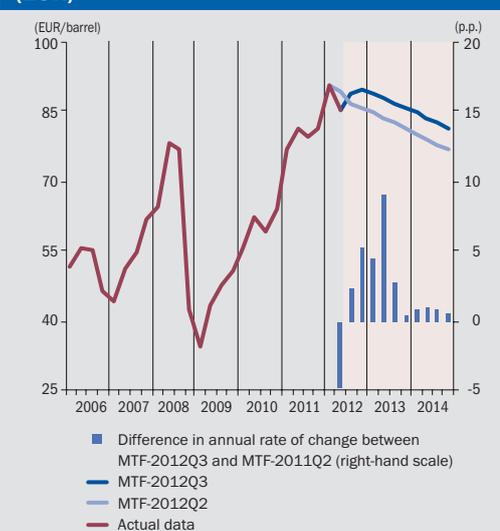
fell by the largest margin amid mounting fears about the global economic situation. Agricultural commodity prices also declined in the second

**Chart 7 USD/EUR exchange rate**



Source: NBS, ECB.

**Chart 9 Price per barrel of Brent crude oil (EUR)**

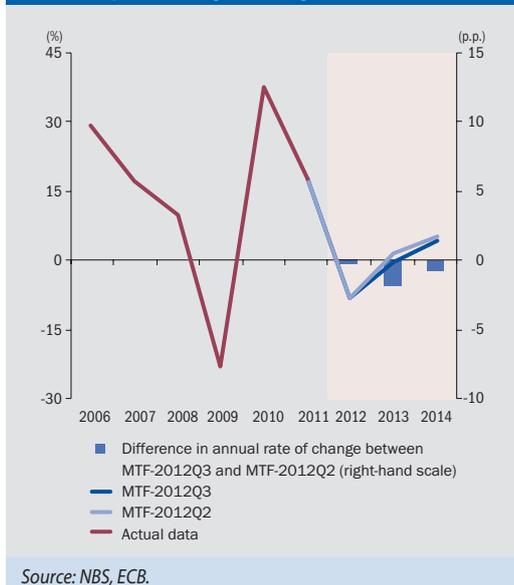


Source: NBS, ECB.

<sup>7</sup> The technical assumptions of the Medium-Term Forecast, as well as the assumptions for developments in the international economy, are based on the „ECB Staff Macroeconomic Projections for the Euro Area“ of September 2012, which are based on information available up to 16 August 2012.

<sup>8</sup> The bilateral USD/EUR exchange rate is assumed to remain unchanged over the projection horizon at the average level prevailing in the ten-working day period ending on the cut-off date.

**Chart 10 Non-energy commodity prices  
(annual percentage changes)**



quarter, to where they had been at the start of they year, but then rose sharply in July due to a weak harvest. This forecast assumes that non-energy commodity prices will decline by 8.3% in

2012, and then rise in the next two years, by 0.3% in 2013 and 4.3% in 2014.

The average level of **short-term interest rates**<sup>9</sup> (three-month EURIBOR) is expected to reach 0.6% in 2012, 0.3% in 2013, and 0.6 % in 2014.

This forecast takes into account fiscal consolidation measures set out for this year and next year. The aim of these measures is to reduce Slovakia's general government deficit, to below 3% of GDP in 2013. The main scenario of the forecast incorporates the consolidation effort as a technical assumption that has translated into the real economy through various transmission channels. The table below lists the consolidation measures which at the cut-off date<sup>10</sup> for this forecast were known (i.e. approved or at the stage of the inter-ministerial review procedure) and taken into account. The additional funds raised from these measures are estimated to be €0.3 billion in 2012 and €1.6 billion in 2013.<sup>11</sup> Since nothing is so far known about the consolidation measures to be implemented in 2014, this forecast does not take into account the further consolidation effort. The following table summarises the planned consolidation measures.

**Table 1 List of consolidation measures**

1.	Changes to Pillar II of the pension saving system (opening of Pillar II; reduction of contribution from 9% to 4%).
2.	Increase in the contribution burden (unifying maximum assessment bases; raising the contributions payable under agreements to work outside the scope of employment and by self-employed people)
3.	Imposition of special levies on selected entities (under laws on the special levying of selected financial institutions and of business in regulated industries).
4.	Increase in the corporate tax rate to 23%.
5.	Changes to the income taxation of natural persons (raising the tax rate; broadening the tax base; introducing a special tax on senior public servants; taxing of service pensions) and to administrative fees.

Source: NBS.

<sup>9</sup> The technical assumptions about interest rates and commodity prices are based on market expectations, with a cut-off date of 16 August 2012. The assumption for short-term interest rates is of a purely technical nature.

<sup>10</sup> The forecast takes account of the consolidation measures known as at 6 September 2012.

<sup>11</sup> The impact of the consolidation measures was quantified on the basis of information from draft laws and own calculations. The contribution of additional funds raised is estimated at 0.4% of GDP in 2012 and 2.1% of GDP in 2013 (using the nominal GDP projection from MTF-2012Q2).



## 4 FORECAST FOR THE EXTERNAL ENVIRONMENT

Global economic growth is expected to be 3.2% in 2012, rising gradually to 3.5% in 2013 and 4.1% in 2014. The main risks to the growth forecast remain uncertainty surrounding the sovereign debt crisis in certain euro area countries, the intensification of financial market tensions, and any halt in the global economic recovery.

Euro area GDP is assumed to contract slightly in the second half of 2012 owing to the adverse effect of high commodity prices, the tightening of fiscal policies, weak confidence, and difficult lending conditions in certain euro area countries. Over the projection horizon GDP is expected to grow moderately, supported by an upturn in the external environment as well as by improvements in competitiveness that will provide a boost to exports. Domestic demand is expected to benefit from very low short-term interest rates and from the effect of lower energy and food prices on the real disposable income of households. Demand should also be stimulated by measures to restore the functioning of the financial system. In general, however, economic recovery over the projection horizon will be dampened by the continuing need to repair balance sheets and the difficult financing conditions in several euro area countries. The annual rate of change in euro area GDP is estimated to

be in the range -0.6% to -0.2% in 2012 and -0.4% to 1.4% in 2013.

The average HICP inflation rate in 2012 is expected to be between 2.4% and 2.6%, with key influences including high energy prices, depreciation of the euro, and indirect tax hikes in certain euro area countries. Inflation in 2013 is expected to fall to between 1.3% and 2.5%. With oil prices assumed to rise gradually over the projection horizon, energy inflation is projected to make a negative contribution. Food inflation is also assumed to fall in 2013. Excluding the food and energy components, the HICP rate should be more or less stable over the projection horizon. Inflation pressures associated with euro depreciation and with hikes in indirect taxes and administrative prices in certain countries are expected to be offset by weak domestic demand and high unemployment.

**Global trade growth** is expected to slow to 3.6% in 2012, from 6.2% in 2011, and then to accelerate in each of the next two years, to 5.8% in 2013 and 7.3% in 2014. The rate of growth in **Slovakia's export markets** is expected to continue decelerating in 2012, down to 2.2% (from 6.3% in 2011), and should then increase in 2013 and 2014, to 5.0% and 6.4% respectively.

## 5 ECONOMIC GROWTH FORECAST FOR SLOVAKIA

### 5.1 ECONOMIC GROWTH

#### SLOVAKIA'S EXPORT MARKETS TO RECORD MARKED SLOWDOWN IN 2012 AND ACCELERATION THEREAFTER

The slowdown in global trade and particularly in the growth of export markets will affect the export performance of the Slovak economy in second half of 2012. The current strong export growth is largely attributable to the latest developments in the automotive industry, which has seen the launch of new production lines and increased utilisation of production capacities. Nevertheless, this positive supply-side shock will gradually fade away, and, when assuming almost full utilisation of production capacities, the automotive industry is not expected to continue making a positive contribution to export performance. Because of the positive supply-side shock, Slovakia made substantial gains in market share, particularly in the car market. Across the rest of the economy, excluding the automotive industry, production remained flat and exports is not expected to provide any contribution to overall export growth. The adverse situation in the rest of the economy was evident in expectations for exports in the following quarter, which entered negative territory for the first time since the crisis in 2009. Firms are increasingly pessimistic about their competitiveness, despite the benefit of a weak real exchange rate. This forecast assumes a gradual acceleration in Slovakia's export markets, which should put upward pressure on exports of Slovak goods and services.

#### MINIMAL INVESTMENT ACTIVITY OVER THE PROJECTION HORIZON

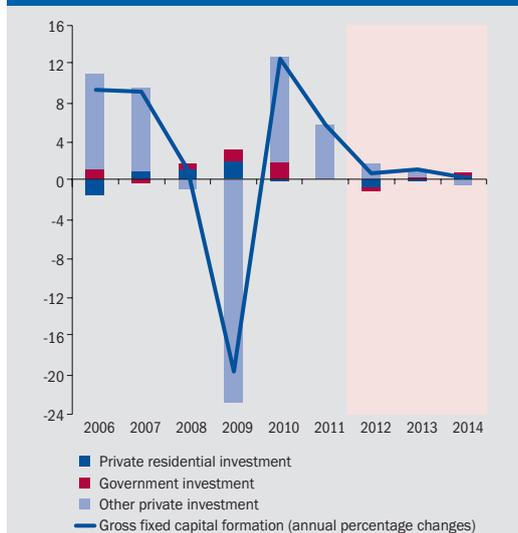
Current developments indicate that investment activity is extremely subdued. This situation is expected to continue in the second half of 2012, based on forward-looking indicators pointing to the persistence of investor uncertainty, the decline in lending activity, the tightening of credit standards, and the downward trend in firms' profits. The investment growth forecast is positively affected by the incorporation of new information on investment in the automotive industry from the third quarter of 2012 to the

Chart 11 Forecast for external demand and for Slovak exports (annual percentage changes)



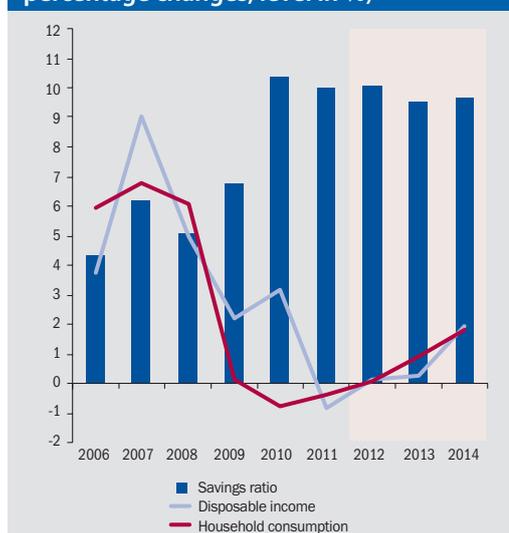
end of 2013, the full effect of which will be seen mainly in 2014. Investment growth is therefore expected to pick up temporarily in 2013. The baseline scenario of this forecast assumes that fiscal consolidation measures will have an adverse effect on corporate investment activity. With the business environment made less attractive by income tax hikes, new levies on regulated industries and financial institutions, rising fees, and mounting labour costs, there may be further declines in corporate investment. Looking at the composition of investment, the component of other private investment is expected to make a moderately positive contribution in 2012 and 2013 (through the automotive industry). The adverse situation in residential investment is assumed to continue and to become more pronounced in 2012, as the climate of uncertainty and weakness of the labour market persists into the next period. Over the projection horizon, the decline in investment in residential real estate is not expected to intensify. Given the need for fiscal consolidation measures, government investment is not assumed to contribute positively to overall investment growth.

**Chart 12 Composition of investment (annual percentage growth; contributions in p.p.)**



Source: SO SR; NBS forecast.

**Chart 13 Household income, consumption and savings ratio (annual percentage changes; level in %)**



Source: SO SR; NBS forecast.

#### HOUSEHOLD CONSUMPTION TO PICK UP SLOWLY OVER THE PROJECTION HORIZON

Considering developments in the first half of 2012 and short-term indicators, consumption is assumed to remain subdued in subsequent quarters. There is as yet no significant stimulus to consumption, with real income expected to remain flat both this year and next year. The latest short-term indicators show that consumer expectations are still pessimistic. Consumer confidence is deteriorating, while sentiment in services and retail trade is stagnating and the downturn in sales observed in recent months is accelerating. Household consumption is expected to come under further downward pressure from the effect of fiscal consolidation measures. Some of the measures should begin to have an impact from the last quarter of 2012, but most of them are planned for 2013 and are taken into account in the forecast for that year. Disposable income will be reduced by higher contributions for employees and self-employed people and by higher taxes on higher earners. The negative income effect of such consolidation measures will not be fully translated into lower consumption, since many households will be able to dip into savings to fund consumption. Household consumption is not expected to pick up until the end of 2013 and beginning of 2014, as gradual

gains in labour productivity create scope for growth in disposable income and consequently in consumption.

#### GENERAL GOVERNMENT FINAL CONSUMPTION TO DECLINE IN 2013

This forecast takes account of the fiscal consolidation scenario for 2012 and 2013. The projections for these years incorporate the expenditure-side measures specified in the general government budget proposal for 2012–2014, namely the freezing of wages in the public administration and reductions in government intermediate consumption. Since these measures are confined to the central government, their impact is expected to be limited. In 2013, general government consumption is expected to fall in real terms as a result of higher inflation, and to increase in nominal terms; in 2014 it should rise moderately.

#### IMPORT GROWTH AFFECTED MAINLY BY INVESTMENT IN THE AUTOMOTIVE INDUSTRY

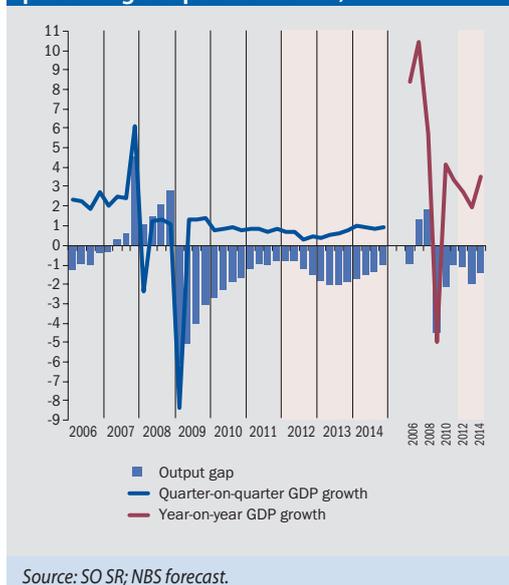
Import growth is expected to increase in 2012 due largely to current developments, including an upward revision of data for the first quarter. Next year's import growth forecast is around the same as this year's. However, the 2013 projection takes into account the positive contribution on imports

of investments in the automotive industry (expected imports of technology); it would otherwise be lower than import growth in 2012 due to low consumer and investment demand. Import growth is expected to decelerate in 2014 as the effect of technology imports for the automotive industry fades. When these investments are used in the production process there will be a marked drop in sub-supplies (imports) in this sector and consequently a moderate decline in import intensity. This factor will more than outweigh the effect on imports of a modest increase in domestic demand. Since export growth was higher than import growth in the first half of 2012, the forecast for this year assumes that foreign trade will make a positive contribution to economic growth. Price developments are expected to benefit foreign trade in both real and nominal terms. Export prices are assumed to rise more slowly than import prices throughout the projection horizon, thereby increasing the competitiveness of the Slovak economy. The nominal current account surplus for 2012 is expected to be far higher than that for 2011; the main reasons for this are positive revenue developments in the services balance and a growing surplus in the trade balance (based largely on higher imports for the automotive industry). The current transfers balance is also assumed to contribute to the current account surplus (through projected higher revenues from the EU budget), and so, to a lesser extent, is the projected moderate decline in the income balance deficit. In subsequent years, trade balance developments are expected to have the largest effect on the current account balance. In 2013 the trade surplus is assumed to record a temporary and moderate decline owing to higher imports, while in 2014 it should improve again on the basis of export developments and the waning effect of investment imports.

#### ECONOMIC GROWTH TO SLOW, WITH NO PICKUP PROJECTED UNTIL 2014

In line with both the projected development of external demand over the projection horizon and with data on the current state of the economy, economic growth is expected to slow to 2.7% in 2012 and to 2.0% in 2013. The impact of fiscal consolidation on GDP growth in 2013 is estimated at around -0.4 percentage point. As for 2014, it is expected that growth will increase to 3.5% as external demand and domestic demand recover;

**Chart 14 GDP growth and the output gap (annual and quarterly percentage changes; percentage of potential GDP)**



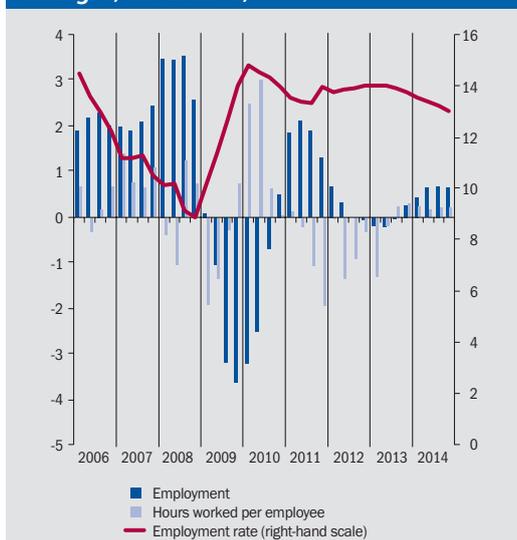
nevertheless, this positive effect should be dampened to some extent by the impact of consolidation measures. The output gap is expected to widen in 2013 as a result of the economic slowdown, and its gradual narrowing is projected for 2014.

## 5.2 LABOUR MARKET

### THE LABOUR MARKET IS STAGNANT WITH NO RECOVERY EXPECTED UNTIL 2014

The labour market situation is unfavourable, according to the latest quarterly national accounts data. The fact that employment has remained flat despite economic growth is largely explained by subdued domestic demand. Furthermore, the positive supply-side shock in one industry failed to generate sufficient scope for employment growth in the economy as a whole. Business tendency surveys indicate that labour market trends will remain negative in coming quarters; expectations for job creation have slumped and particularly so in industry, where for the first time since 2009 respondents expect employment to fall. Similarly in retail trade, estimates for employment growth are gradually being trimmed. In the sectors most severely affected by muted domestic demand (services and construction), the employment situation is

**Chart 15 Employment, hours worked and the unemployment rate (annual percentage changes; levels in %)**



Source: SO SR; NBS forecast.

still expected to deteriorate further. In the light of this information and the gradual slowdown in economic activity, the number of employed people is assumed to fall slightly in coming quarters. But although a deterioration in the economy is forecast, firms are not expected to make redundancies in the near term, but rather to offset production declines by putting workers on short time. It is assumed that job creation will also be restricted by the newly adopted Labour Code Amendment (which is expected to exacerbate labour market rigidities) and by fiscal consolidation measures (as they lead to lower investment activity among firms and higher labour costs). The projected recovery of domestic demand and marked rise in external demand will not create conditions for employment growth until the second half of 2013. In line with these developments, the unemployment rate is expected to decline very gradually and slowly, to stand at around 13% by the end of the projection horizon.

### 5.3 LABOUR COSTS AND PRICE DEVELOPMENTS

#### MODERATE RISE IN LABOUR COSTS IN 2013 NOT EXPECTED TO REFLECT IN PRICES

While labour costs have fallen in the past two years as a result of higher labour productivity

growth, compensation per employee has not increased significantly. Labour productivity gains from the previous period could put upward pressure on labour cost growth in 2012 and 2013. Fiscal consolidation measures are expected to contribute to the acceleration of labour costs in 2013. Labour productivity in 2014 is assumed to be boosted by accelerating demand in both domestic and external markets. These developments, however, are not assumed to be fully reflected in employee compensation, and therefore the assumption that profits from capital are historically higher than those from labour is expected to be maintained. Labour cost growth is not expected to bring inflationary pressure to the economy.

#### SLOWER PRICE INFLATION

Demand-pull inflation pressures are absent due to the high unemployment rate, low disposable income and negative output gap. The cost-push side is expected to be influenced mainly by autonomous factors as well as by higher prices of imports, oil and agricultural commodities. With consumer demand subdued, the adopted consolidation measures that could elevate labour costs are not projected to have a significant bearing on consumer prices. The inflation rate is expected to decelerate over the projection horizon, from 3.7% in 2012, to 2.4% in 2013 and 1.9% in 2014.

Looking at the inflation components, annual inflation in services and energy prices is assumed to be declining until the end of 2012. As regards services inflation, its slowdown at the end of 2012 is expected to reflect the base effect of a sharp rise in rail transport prices at the end of 2011. Energy inflation should be similarly affected by a base effect, in this case a rise in heat prices in the same period of the previous year. Food inflation is assumed to reflect rising global prices for agricultural commodities as well as increased excise taxes on cigarettes. Upward pressure on non-energy industrial goods inflation is expected to come from higher administered prices of pharmaceuticals as well as from an acceleration of import price growth.

The annual rate of increase in inflation is assumed to slow in 2013. After rising at the end of 2012 and beginning of 2013, annual food infla-



tion is projected to decline next year in line with the technical assumption for commodity price developments in 2013. The headline rate should be further slowed in 2013 as administered energy prices are projected to rise by less than they did at the beginning of 2012. Next year is also expected to see an end to the trend increase

in non-energy industrial goods inflation, which may in fact decelerate gradually in the second half of the year. The headline inflation rate is assumed to continue falling in 2013, with all the core components assumed to decelerate; the largest contribution is expected to come from a decline in energy inflation.

## Box 1

### FISCAL CONSOLIDATION MEASURES AND THEIR ESTIMATED IMPACT ON THE REAL ECONOMY

The measures adopted for the consolidation of public finances are all on the revenue side of the budget, and their primary impact is on household income and on firms' expenses and/or after-tax profits. It is assumed that declines in household income and after-tax corporate profits will dampen economic growth in Slovakia as well as other indicators of the national economy. **The overall impact of fiscal consolidation on GDP growth is expected to be around -0.41 percentage point in 2013 and -0.25 p.p. in 2014. Price developments are expected to be only slightly affected, since the elevated wage costs and tax burden of legal entities are assumed to be dampened by projected lower demand. The impact of these measures on the inflation rate (measured by the HICP) is estimated to be 0.01 p.p. in 2013 and 0.09 p.p. in 2014.** Looking at the measures adopted, those related to retirement pension contributions (the opening of, and reduction of the contribution to, Pillar II of the pension system) are not expected to affect the Slovak economy over the projection horizon.

Most of the consolidation measures are planned to be implemented from the beginning of 2013. According to their impact on the economy, the measures are listed under categories 1 to 5 below:

- 1. Changes to Pillar II of the pension system** – no impact on the real economy.
- 2. Increase in the contribution burden** – This measure will partly result in higher wage costs. Employers' profits will be reduced, which may also adversely affect future investment activity. Another impact of this measure, however, will

be to reduce household disposable income and consequently household consumption. It is assumed that households will partly compensate this negative income effect by using savings, and may thereby mitigate the impact on household final consumption.

- 3. Imposition of special levies on selected entities** – The impact of these measures on the economy will be seen in lower profits of the firms affected and a consequent slowdown in their investment activity. Given the high import intensity of investments, this measure is also assumed to act as a drag on import growth.
- 4. Increase in the corporate tax rate to 23%** – This measure is expected to increase pressure on firms to cut wage costs and reduce investment activity. In seeking to protect after-tax profit levels, firms will create fewer jobs and moderate wage growth. As firms look to offset profit losses by gradually increasing sales revenue, it is expected that producer prices, and eventually consumer prices, will rise.
- 5. Changes to the income taxation of natural persons and to administrative fees** – Changes in the taxation of natural persons are expected to have a primary negative effect on household disposable income and subsequently to reduce household consumption growth. As with their response to the Social Insurance Amendment Act, households are expected to use savings to partly offset these negative measures, thereby mitigating the adverse impact on GDP. Administrative fees are assumed to cause a moderate rise in inflation and thus to adversely affect real disposable income and therefore household consumption.

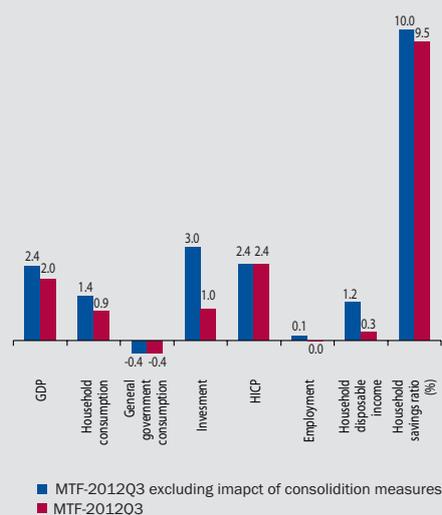


**Table A Impact of fiscal consolidation measures on the economy in 2013 and 2014 (p.p.)**

Category	GDP		HICP	
	2013	2014	2013	2014
1. Changes to Pillar II of the pension system	0.00	0.00	0.00	0.00
2. Increase in the contribution burden	-0.08	-0.10	0.02	0.04
3. Imposition of special levies on selected entities	-0.11	-0.01	-0.01	-0.02
4. Increase in the corporate tax rate to 23%	-0.16	-0.14	-0.01	0.08
5. Changes to the taxation of natural persons and to administrative fees	-0.06	0.00	0.02	-0.01
<b>Impact of measures in total</b>	<b>-0.41</b>	<b>-0.25</b>	<b>0.01</b>	<b>0.09</b>

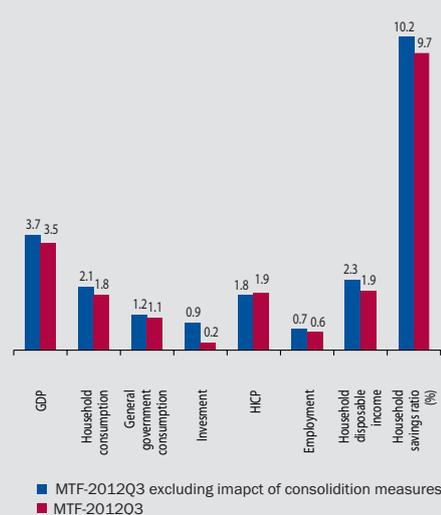
Source: NBS.

**Chart A Forecast for selected macroeconomic indicators in 2013 (annual percentage changes)**



Source: NBS.

**Chart B Forecast for selected macroeconomic indicators in 2014 (annual percentage changes)**



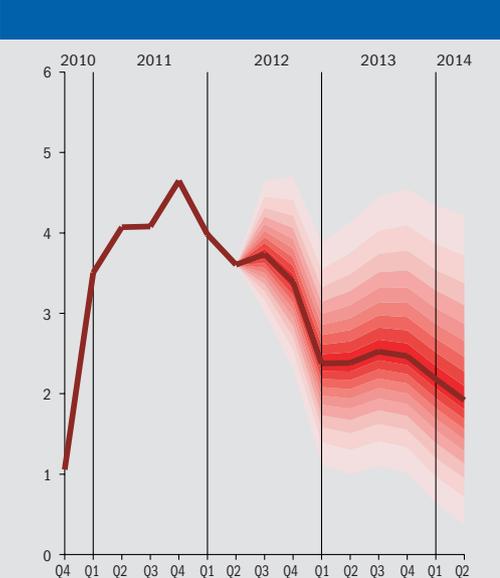
Source: NBS.

## 6 RISKS TO THE FORECAST

The risks to the medium-term forecast for the real economy are predominantly on the downside. The greatest risk remains the difficulty in resolving the euro area sovereign debt crisis and the related developments in external demand. A further risk to the 2013 forecast is the economy's response to the adopted fiscal consolidation measures. According to the baseline scenario, the consolidation effort is expected to affect the real economy through various channels, but the actual impact may differ from the assumptions. The final (definitive) amount and composition of the fiscal consolidation measures are still not clear, since a slowdown in economic growth may necessitate the adoption of further measures if Slovakia is to meet the commitment to correct its excessive deficit in 2013.

Risks to the inflation forecast for 2012 are not significant, given that the movement of the rate over the first eight months is already established. The 2013 and 2014 forecasts are subject to upside risks. In 2013 the main risk is the price of oil, while in 2014 there is the additional risk of external inflation to consider. Lower external

Chart 16 HICP inflation forecast (%)



Zdroj: NBS.

demand and weak domestic consumer demand (resulting from lower incomes) are expected to dampen the effect of upside risks over the projection horizon.

Table 2 Risks to the forecast

	2012	2013	2014
<b>GDP</b>	↓ Sovereign debt crisis, external demand	↓ Sovereign debt crisis, external demand, amount and composition of fiscal consolidation measures	↓ Sovereign debt crisis, external demand, additional fiscal consolidation measures
<b>Inflation</b>		↑ Oil price	↑ Oil price, external demand

Source: NBS.

## 7 COMPARISON WITH THE PREVIOUS FORECAST

Looking at the technical assumptions of this forecast in comparison with those of the previous forecast, external demand growth has been revised down, most markedly in 2013. The main reason for this is the reassessment of external demand growth in the second half of 2012 and its subsequent impact in 2013. This forecast assumes a weaker exchange rate and therefore moderately higher oil price growth in 2013. The pass-through of reductions in ECB key rates to short-term market rates has been reflected in the upward revision of short-term interest rates over the projection horizon.

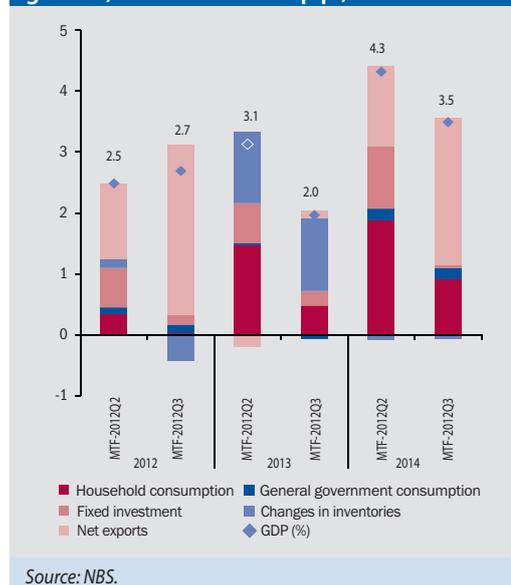
As regards the stabilisation and subsequent revival of external demand, this forecast makes the same assumption as the previous one. The most pronounced difference between the two forecasts is in projections for the domestic part of the economy, with the latest data indicating adverse developments in the real economy. Furthermore, the September forecast differs from the previous forecast by taking account of consolidation measures, which provide another negative impulse to the real economy. The medium-term forecast for overall economic growth has been revised down, with the growth projections for all components having been trimmed. The largest reduction was in the investment component, with investment activity expected to reflect lower demand and, to a great extent, the impact of consolidation measures that will raise the tax and contribution burden of firms. This forecast takes account of further investment in the automotive industry, which will also affect foreign trade. In this regard, it is assumed that growth in technology imports will be higher and that import intensity will decline from the beginning of 2014. Import growth has been revised down from the previous forecast owing to lower consumer and investment demand over the projection horizon. The export growth forecast has also been lowered in response to a decline in external demand.

Turning to the labour market, the employment forecast for 2012 has been revised down, and the following period is expected to see not only a deterioration in domestic and external demand,

but also negative repercussions for employment from the Labour Code Amendment. In line with the weaker employment growth, the unemployment rate over the projection horizon has been revised up. Compensation growth is expected to be boosted by fiscal consolidation measures (as employers' payroll contributions are raised), but this acceleration is assumed to be outweighed by a worsening of real economy developments; consequently, the compensation growth projections for 2013 and 2014 have been revised down, and the disposable income projections are far lower as well. On the supply side, current negative developments in the labour market and a substantial reassessment of investment activity over the projection horizon are the basis for this forecast assuming moderately lower potential output growth (through reduced contributions from capital stock and total factor productivity).

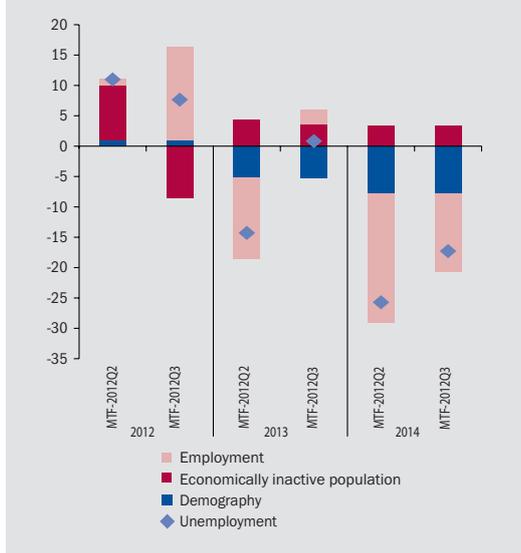
The inflation forecasts for 2012 and 2013 have been revised up to reflect current price inflation growth and developments in technical assumptions. The increase in administered energy prices at the beginning of 2013 was reassessed; as a result, the annual rate of decline in elec-

**Chart 17 Comparison of forecasts for economic growth (annual percentage GDP growth; contributions in p.p.)**



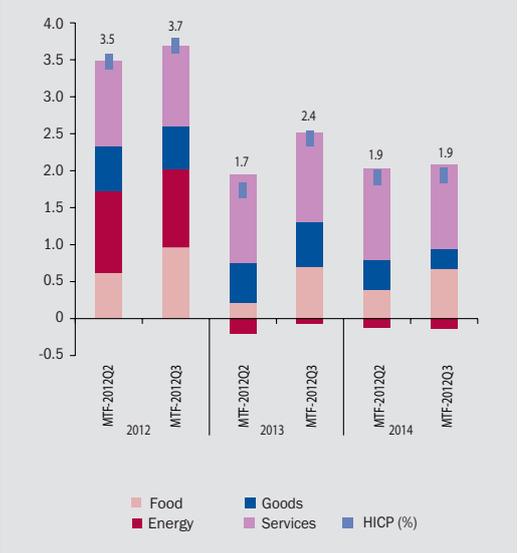
Source: NBS.

**Chart 18 Comparison of labour market indicators (level and contributions in thousands of persons)**



Source: NBS.

**Chart 19 Comparison of price developments (annual percentage growth of the HICP; component contributions in p.p.)**



Source: NBS.

tricity inflation has been revised up, but it will be outweighed by higher inflation in gas and heat prices. The projection for food inflation in 2013 is higher in this forecast than in the previous one, since agricultural commodity prices have been pushed up by a weak harvest. Another change since the previous forecast is that the rise in excise taxes on cigarettes has been brought forward from February–March 2013 to October–November 2012, in accordance with

newly-adopted legislation. The headline inflation projection for 2014 is unchanged from the June forecast. There are minor changes in the composition of inflation, with food inflation expected to make a higher contribution and other items (particularly services and non-energy industrial goods) assumed to offset that increase with a lower contribution. Demand-pull inflation is expected to be dampened by lower consumer demand.



Table 3 Medium-term forecast (MTF-2012Q3) – main macroeconomic indicators							
Indicator (annual percentage changes unless otherwise stated)	2011	2012	2013	2014	2012	2013	2014
	Actual	Forecast P3Q-2012			Difference with MTF-2012Q2		
<b>Prices</b>							
HICP inflation (average)	4.1	3.7	2.4	1.9	0.2	0.7	0.0
CPI inflation (average)	3.9	3.7	2.4	1.9	0.3	0.6	0.0
ULC <sup>1)</sup> (compensation per employee at current prices / labour productivity ESA 95 at constant prices)	-0.6	0.7	2.1	0.8	-0.2	0.0	-0.9
Labour productivity ESA 95 (GDP at current prices/employment ESA 95)	1.5	2.5	2.0	2.9	0.5	-0.5	-0.4
Compensation per employee	0.9	3.2	4.1	3.7	0.2	-0.5	-1.3
<b>Economic activity</b>							
Real GDP	3.3	2.7	2.0	3.5	0.2	-1.1	-0.8
Final consumption of households	-0.4	0.1	0.9	1.8	-0.5	-1.9	-1.8
Final consumption of general government	-3.5	0.7	-0.4	1.1	0.1	-0.6	-0.1
Gross fixed capital formation	5.7	0.7	1.0	0.2	-2.1	-1.8	-4.2
Exports of goods and services	10.8	8.4	5.6	6.5	3.8	-1.1	-1.3
Imports of goods and services	4.5	5.9	6.1	4.6	2.3	-1.6	-2.5
Real gross disposable income of households	-0.8	0.1	0.3	1.9	-0.1	-2.4	-1.8
Output gap (% of potential output)	-1.0	-1.1	-2.0	-1.4	0.7	0.0	-0.5
<b>Labour market</b>							
Employment (ESA 95)	1.8	0.2	0.0	0.6	-0.2	-0.6	-0.4
Unemployment rate (Labour Force Sample Survey; percentage)	13.5	13.9	13.9	13.3	0.0	0.5	0.9
<b>Balance of payments</b>							
Economic openness (% of GDP)	174.1	183.4	189.5	192.4	3.6	3.7	1.7
Balance of trade (% of GDP)	3.5	4.1	2.9	4.7	0.3	-0.2	0.8
Balance of services (% of GDP)	-0.5	0.2	0.2	0.2	0.3	0.3	0.2
Current account (% of GDP)	0.1	2.2	1.1	3.0	0.6	0.1	1.1
Current and capital account (% of GDP)	1.3	4.1	2.9	4.7	0.7	0.1	1.2

**External assumptions for the forecast**

External environment							
Real world GDP growth	3.6	3.2	3.5	4.1	0.0	-0.3	-0.1
Growth in Slovakia's export markets	6.3	2.2	5.0	6.4	0.1	-0.8	-0.2
Technical assumptions							
Exchange rate (USD/EUR) <sup>2)</sup>	1.4	1.3	1.2	1.2	-3.1	-5.4	-5.4
Price for a barrel of Brent crude oil (USD) <sup>2)</sup>	111.0	111.7	107.3	102.3	-2.5	-0.6	0.3
Price for a barrel of Brent crude oil (EUR) <sup>2)</sup>	79.7	88.4	87.1	83.0	0.6	4.9	5.7
Rise in oil prices (in USD)	39.3	0.7	-3.9	-4.7	-2.6	2.0	0.7
Rise in oil prices (in EUR)	32.7	10.9	-1.5	-4.7	0.6	4.1	0.7
Non-energy commodity prices	17.9	-8.3	-0.3	4.3	-0.3	-1.9	-0.8
3M EURIBOR (%)	1.4	0.6	0.3	0.6	-0.2	-0.4	-0.3

Source: NBS, ECB, SO SR.

1) ULC – unit labour costs.

2) Changes against the previous forecast in %