



NÁRODNÁ BANKA SLOVENSKA  
EUROSYSTEM



# REPORT ON THE INTERNATIONAL ECONOMY

DECEMBER 2016

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## ABBREVIATIONS

CPI	Consumer Price Index
EA	euro area
ECB	European Central Bank
EC	European Commission
EIA	Energy Information Administration
EMU	Economic and Monetary Union
EONIA	euro overnight index average
ESA 95	European System of National Accounts 1995
EU	European Union
Eurostat	Statistical Office of the European Communities
FDI	foreign direct investment
Fed	Federal Reserve System
EMU	Economic and Monetary Union
EURIBOR	euro interbank offered rate
FNM	Fond národného majetku – National Property Fund
GDP	gross domestic product
GNDI	gross national disposable income
GNI	gross national income
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
IPI	industrial production index
IRF	initial rate fixation
MFI	monetary financial institutions
MF SR	Ministry of Finance of the Slovak Republic
MMF	money market fund
NARKS	National Association of Real Estate Offices of Slovakia
NBS	Národná banka Slovenska
NEER	nominal effective exchange rate
NPISHs	Non-profit Institutions serving households
OIF	open-end investment fund
p.a.	per annum
p.p.	percentage points
qoq	quarter-on-quarter
PPI	Producer Price Index
REER	real effective exchange rate
SASS	Slovenská asociácia správcovských spoločností – Slovak Association of Asset Management Companies
SO SR	Statistical Office of the Slovak Republic
SR	Slovenská republika – Slovak Republic
ULC	unit labour costs
VAT	value-added tax
yoy	year-on-year

Symbols used in the tables

- . – Data are not yet available.
- – Data do not exist / data are not applicable.
- (p) – Preliminary data



# 1 THE GLOBAL ECONOMY

Global economic growth picked up in the third quarter of 2016, as activity growth stabilised in advanced economies and accelerated slightly across emerging market economies (EMEs). Nevertheless, global growth remained modest and was subject to several factors that will continue to affect the economic situation in the period ahead. These include low commodity prices to which global exporters are having to adjust, the gradual ongoing rebalancing of the Chinese economy, the expected normalisation of US monetary policy, and the uncertainty surrounding the state of relations between the European Union and the United Kingdom.

The US economy made a significantly positive contribution to global GDP growth in the third quarter of 2016. Although US growth was boosted by a one-off effect in the area of exports, it also continued to be buoyed by private consumption, supported by the prolonged low interest rate environment and favourable labour market developments. The expected drop in the savings that households accumulated during the period of low energy prices is projected to continue supporting private consumption; nevertheless, consumption growth may slow owing to employment developments and rising energy prices. Investment should also have a positive impact, after previously being subdued by contraction in the energy sector. Japan's economic growth increased moderately, albeit not by as much as initial estimates had suggested. It was the country's third successive quarter of GDP growth. Net trade continued to be an important driver of Japanese growth, as export growth accelerated and imports declined. Both private and government consumption also contributed positively to growth, while investment and changes in inventories each had a negative impact. The postponement of fiscal consolidation measures and the effects of fiscal stimuli and an accommodative monetary policy stance are expected to support the Japanese economy going forward and to keep its growth above potential. The euro area GDP growth rate was unchanged from the previous quarter, and was supported by government and private consumption. In contrast with the previous quarter, net trade contributed neg-

atively to growth. Looking ahead, the economic recovery is expected to continue; it should be underpinned by domestic demand, supported by the ECB's accommodative monetary policy. Export growth is also projected to increase in line with the expected global recovery. The UK economy performed better than had been expected following the outcome of June's UK referendum on EU membership. Although economic growth slowed moderately, it included a positive contribution from private consumption. Net trade also supported growth, as exchange-rate depreciation was reflected in a pick-up in exports and an appreciable drop in imports. In response to the worsening economic outlooks that followed the UK's votes to leave the EU, the Bank of England loosened its monetary policy by cutting key interest rates for the first time since 2009 and concurrently expanding its quantitative easing programme. Nevertheless, the heightened uncertainty about what future model of trade relations will exist between the UK and EU continues to weigh on the GDP growth outlooks through the investment and foreign trade components.

Turning to EMEs, China maintained stable growth for the first three quarters of 2016, averaging a rate of 6.7% year on year, close to the full-year target of 6.5%. This growth was driven by political stimulus measures, as government investment compensated for a weakening of private investment. Such efforts to support economic activity imply that too little is being done to adopt the structural reforms that should in future contribute to a rebalancing of the Chinese economy. In the short term, the Chinese economy is not expected to slow significantly, given the continuance of solid consumption growth and monetary policy accommodation as well as the positive impact of fiscal stimuli on the economy. India's economy rebounded from a moderate slowdown in the second quarter to grow strongly in the third quarter, thus confirming favourable outlooks predicated on favourable sentiment and progress in economic reforms. Public sector wage growth and the aforementioned structural reforms (especially in regard to goods and services taxes) are expected to maintain economic growth at high levels via the conduit



of corporate investment. The Russian economy continued to contract in the third quarter of 2016, but the drop in its GDP was the most moderate for seven quarters. Looking ahead, Russia is expected to see an economic upturn based on improving financial conditions, since its central bank has responded to disinflationary trends by cutting interest rates. Even so, future developments are surrounded by persisting uncertainty, since consumer confidence remains subdued despite wage growth and since the policy of fiscal tightening could weigh on economic growth. Brazil experienced a further economic contraction in the third quarter, although the year-on-year decline in GDP was less pronounced compared with the previous quarter. That slight improvement notwithstanding, all GDP components apart from net trade decreased, and the economy remains weakened by high unemployment, subdued business and consumer confidence, and low commodity prices.

GDP growth in the OECD area accelerated in the third quarter of 2016 to 0.6%, quarter on quarter, up from 0.3% in the previous quarter. The year-on-year growth rate also edged up, from 1.6% to 1.7%. Further confirmation of the acceleration in

global growth was provided by the Composite Leading Indicator (CLI) for the OECD area<sup>1</sup>, which increased in the third quarter and continued its upward trend in October.

Global economic growth is expected to remain moderate in the period ahead. In the United States, low interest rates, favourable labour market developments, strengthening confidence, and an incoming administration committed to substantial fiscal measures are expected to support consumption and investment. Global activity may likewise be boosted by significant loosening of fiscal policy in other advanced economies. China could provide a further tailwind to global growth if it continues with fiscal stimulus measures aimed at boosting demand.

Annual inflation across the OECD area in the third quarter of 2016 reflected a gradual fading of base effects of past declines in oil prices, and although energy prices continued to fall, they did so at a slower pace. As a result, the OECD's annual inflation rate was higher in September (1.2%) than in the previous June (0.9%). At the same time, however, food price inflation in the OECD area turned negative for the first time since March, as a consequence of prolonged past declines in food commodity prices. Besides the food component, core inflation also had a negative impact on headline inflation, as it was slightly lower in September (1.8%) than in June (1.9%). These trends continued into October, with food prices falling further and core inflation dropping to 1.7%. Nevertheless, the overall inflation rate increased to 1.4% as the decline in energy prices moderated significantly.

Looking ahead, global inflation is expected to begin rising gradually. In the short term it is expected that the base effects of previous oil price falls will abate and, on the basis of current oil futures prices, that oil prices will put upward pressure on inflation. In the medium term, the gradual reduction in spare capacity at the global level is expected to support inflation. On the other hand, recent fluctuations in oil prices have not as yet been reflected in inflation expectations in advanced economies.



<sup>1</sup> The CLIs for OECD countries are published on a monthly basis, and the most recent, published in December 2016, are for the period up to October 2016.



## 2 COMMODITIES

Commodity prices increased further in the third quarter of 2016, in quarter-on-quarter terms, albeit more moderately than they did in the second quarter. Energy commodity prices recorded the most pronounced slowdown.

Looking at energy commodities, oil fell only marginally in price; the average price of a barrel of Brent crude oil remained almost unchanged from the previous quarter (at around USD 46). Subdued expectations for demand and rising output initially caused the price to fall, before halts in production and September's OPEC agreement on oil output reduction pushed the price in the opposite direction. Hence, the oil price had only a slight impact on the rate of change in the energy commodity price index. Natural gas prices had the greatest impact on the index, with those in the United States affected by a hot summer and a colder than usual autumn. At the same time, coal prices rose significantly in response to increasing demand from China. As for non-energy commodity prices, their growth rate was lower in the third quarter than in the previous quarter owing mainly to agricultural commodity prices, which after increasing quite strongly

in the second quarter, fell back again. The sole cause of the drop in the agricultural commodity price index was the food price component, which declined amid favourable production forecasts, in particular for wheat, maize and soya. Metal prices had little impact on the non-energy commodity price index, as they maintained steady, albeit more moderate, growth. Chinese demand for industrial metals was reflected in the prices of nickel and zinc. Commodity prices maintained an upward path in October, thanks largely to price trends in energy commodities (specifically coal and oil).

In year-on-year terms, commodity prices declined far more moderately in the third quarter of 2016 compared with the previous quarter. This outcome reflected partly the impact of non-energy commodity prices, which recorded their first increase for more than three years, and partly the impact of energy commodity prices, whose annual rate of change was significantly less negative. As regards non-energy commodity prices, the main upward pressure on their index came from metal prices, which stabilised year on year after falling sharply in previous months.





## 3 THE UNITED STATES

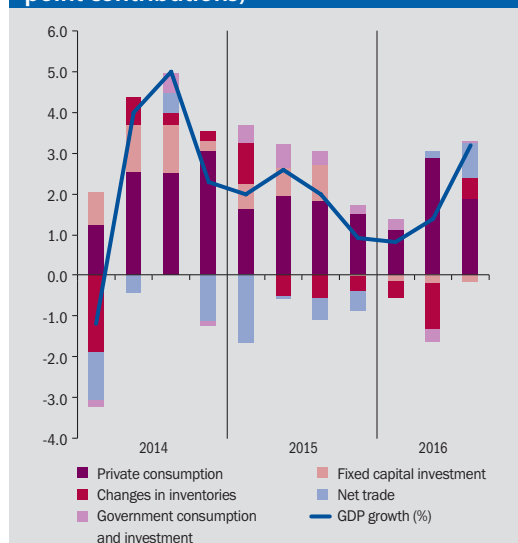
In the United States, the economy picked up significantly in the third quarter of 2016, with GDP growing at an annualised rate of 3.2%, up from 1.4% in the previous quarter. The year-on-year growth rate increased from 1.3% to 1.6%.

The robust acceleration of the US economy was largely driven by export performance, which jumped by a 10% annual pace on the basis of a one-off spike in soya exports to China. This trade was prompted by the impact of poor Brazilian soya harvests on global supplies of this commodity. Exports may also be benefiting at present from a gradual fading of the impact of dollar appreciation in 2014-2015. With imports accelerating to a lesser extent than exports, net trade made a substantial positive contribution to overall GDP growth. Inventories also contributed positively after a prolonged period without such impact. Private consumption maintained its growth trend, but its pace was lower compared with the previous quarter. Durables consumption was the only component of private consumption that accelerated. Government consumption and investment had a marginal impact on GDP growth, while fixed capital invest-

ment continued to contribute negatively, falling by approximately the same pace for a third successive quarter. The impact of some areas of investment recovery was cancelled out by an increased rate of decline in equipment investment and a continuing downward trend in residential investment. Despite an expected stronger contribution from domestic demand, US economic growth is expected to slow in the fourth quarter of 2016 since, according to available data, there has been a downward correction in export growth and an increase in imports of capital and consumption goods.

Annual consumer price inflation in the United States rebounded in the third quarter, reaching in September its highest level for two years. Although the inflation rate fell moderately in July, reflecting a more pronounced decline in energy prices, it accelerated in subsequent months. As in July, the change in the inflation rate was based solely on the impact of energy prices, with both food inflation and core inflation remaining unchanged. In August and, to a greater extent, September, energy prices reflected substantial moderation in the rate of decline in petrol prices as well as the fact that prices of natural gas and electricity returned to a positive, albeit modest, rate of change. Food inflation during the period under review was subdued amid insignificant movements in agricultural commodity prices, and September even saw food prices fall, year on year, for the first time since March 2010. The headline inflation rate climbed to 1.5% in September, after being at 1.0% in June. Inflation excluding food and energy was the same in September as it had been in June (2.2%). The headline rate continued on its upward path in October, increasing to 1.6%. Although core inflation dropped to 2.1% and the decline in food prices became more marked, their impact was more than offset by energy inflation, which was positive, year on year, for the first time in over two years. The combination of rising inflation, improving labour market conditions, accelerating economic growth and the expectation of fiscal expansion next year suggests that US monetary policy may return to normalisation in the near term.

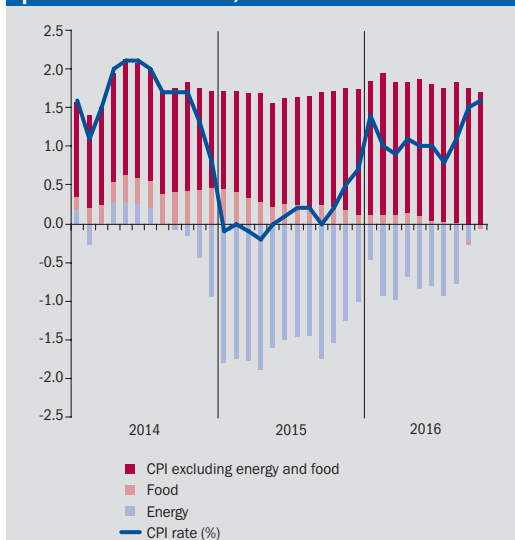
**Chart 2 Annualised GDP growth and its composition (percentages; percentage point contributions)**



Source: Bureau of Economic Analysis.



**Chart 3 Annual consumer price inflation and its composition (percentages; percentage point contributions)**



Sources: Bureau of Labor Statistics and NBS calculations.

The US Federal Open Market Committee decided at its meetings in July, September and November 2016 to leave the target range for the federal funds rate unchanged, at 0.25% to 0.50%. According to the Committee, the stance of monetary policy remains accommodative, thereby supporting further improvement in labour market conditions and a return to 2% inflation. At the September and November meetings, the Committee judged that the case for an increase in the federal funds rate had been strengthened but decided, for the time being, to wait for further evidence of continued progress toward its objectives. At these meetings, the Committee again agreed that in determining the timing and size of future adjustments to the target range for the federal funds rate, it would assess realised and expected economic conditions relative to its objectives of maximum employment and 2% inflation. This assessment would take into account a wide range of information, including measures of labour market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.

## 4 THE EURO AREA

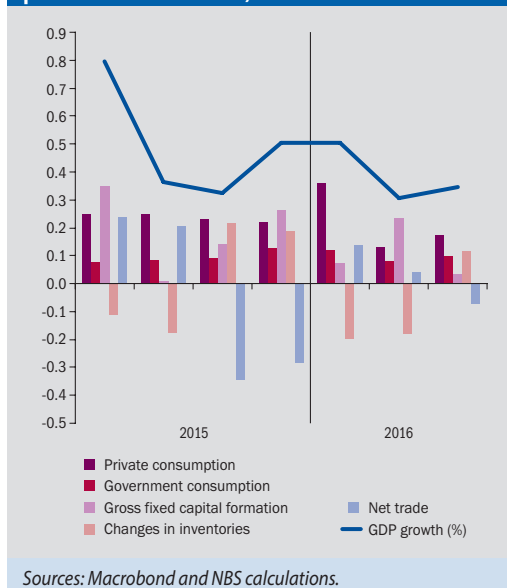
The euro area's GDP growth in the third quarter of 2016 was 0.3%, quarter on quarter, unchanged from the previous quarter. Across the largest euro area economies, GDP growth accelerated most strongly in France (from -0.1% to 0.2%) and Italy (from 0.1% to 0.3%), while it slowed in Germany (from 0.4% to 0.2%) and, more moderately, in Spain (from 0.8% to 0.7%), where it nevertheless remained at a relatively high level. The Netherlands also experienced quite robust economic growth (0.7%), which was unchanged from the second quarter. The annual GDP growth rate for the euro area was the same in the third quarter as in the previous quarter (1.7%).

GDP growth continued to be underpinned by domestic demand. Private consumption made a positive contribution as it increased for a tenth successive quarter. But despite a slight acceleration in consumer demand (up by 0.1 percentage point, to 0.3%), its level was lower compared with the previous periods. General government consumption expenditure also accelerated slightly. The component of domestic demand that contributed most to GDP growth was inventories, which grew in the third quarter after two quarters of destocking. By contrast, investment demand growth slowed appreciably (from

**Chart 4 GDP growth (constant prices; percentages)**



**Chart 5 Quarterly GDP growth and its composition (percentages; percentage point contributions)**



1.2% to 0.2%), possibly affected by uncertainty surrounding the effects of the UK's vote to leave the EU. Looking, however, at the trends in short-term sectoral indicators in the third quarter, it appears that production increased in sectors where fixed capital investment is a factor. Output growth was relatively strong in the construction sector (1.5%), and capital goods production increased in manufacturing industry (0.4%). Therefore some fixed investment may for the moment be supporting inventory growth. Net trade had a negative impact on GDP growth after contributing positively in the previous two quarters. Growth in both exports and imports slowed significantly in the third quarter, respectively by 1.1 percentage points (to 0.1%) and 1.0 percentage point (to 0.2%).

An increasing saving ratio<sup>2</sup> is so far preventing a more substantial recovery in consumer demand. Although the saving ratio should be under downward pressure from the significant reduction in interest rates, it has in fact increased for three successive quarters, probably owing to the persisting climate of heightened uncertainty. The scope is still there, however, created by monetary policy, for a fall in the saving ratio and

<sup>2</sup> Data on the saving ratio are not available beyond the second quarter of 2016.

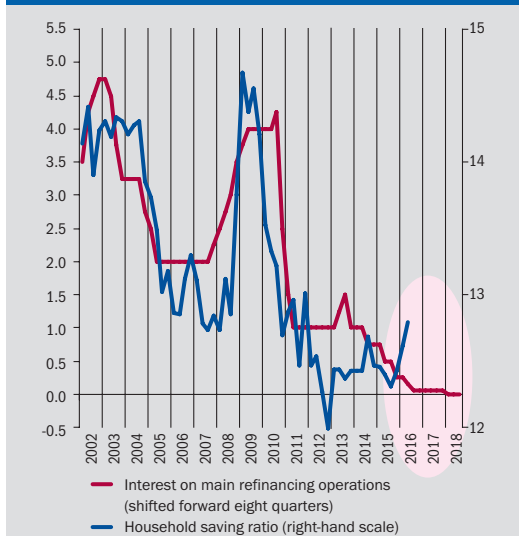


a further pick-up in consumption, and that potential was supported by December's decision of the Governing Council to extend the ECB's asset purchase programme. After weakening slightly in September, the willingness of consumers to make major purchases increased again in Octo-

ber and November, providing another potential stimulus to consumer demand.

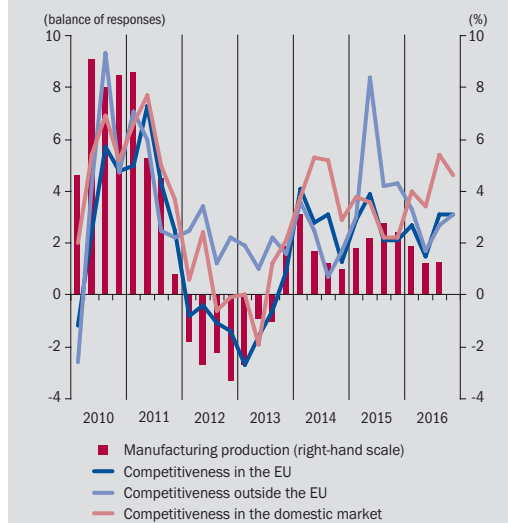
Manufacturing production grew quite strongly in the third quarter, by 0.5% quarter on quarter. However, its growth did not yet translate into ex-

**Chart 6 Monetary policy rates and the household saving ratio (percentages)**



Source: Macrobond.

**Chart 8 Competitiveness in industry (balance of responses) and manufacturing production (annual percentage changes)**



Sources: European Commission, Eurostat and NBS calculations.

**Chart 7 Consumers' willingness to make major purchases (balance of responses) and private consumption (annual percentage changes)**



Source: Macrobond.

Note: Year-on-year consumption growth in each month of each quarter is approximated by consumption growth for the quarter as a whole.

**Chart 9 Export expectations in industry (balance of responses) and growth in manufacturing production (annual percentage changes)**

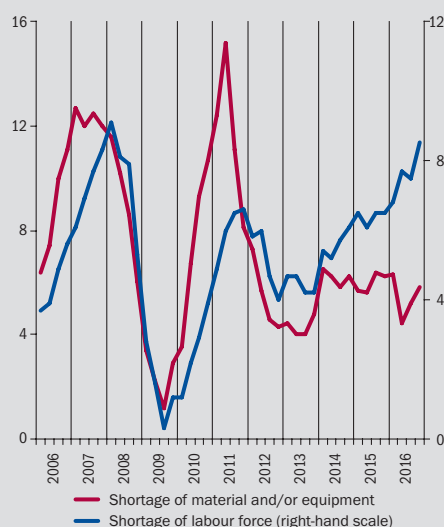


Sources: European Commission, Eurostat and NBS calculations.

port performance, probably because part of the output was allocated to inventories and will pass through to exports only with a lag. This is further confirmed by industrial firms' assessments of how they are positioned to compete in extra-EU markets in the fourth quarter of 2016. Export expectations for the near term also improved quite notably. The strongest production growth was in non-durable consumer goods, ahead of growth in durables, capital goods and intermediate goods. In year-on-year terms manufacturing production growth increased moderately.

Turning to industrial firms' assessments of what factors are limiting their production, survey results for the fourth quarter of 2016 showed a further decline in the impact of "insufficient demand", which indicates that the economy is continuing to recover. Concerns about "financial constraints" eased in the fourth quarter, after rising sharply in the third quarter (probably in response to the UK's vote to leave the EU). A further sign that the economy and labour market are strengthening is that an increasing number of respondents report "shortage of labour" as a factor limiting production. As for "shortage of material and/or equipment", its impact rose gradually in both the third and fourth quarters after falling significantly in the second quarter. This new trend suggests that the slowdown in investment demand, reported in the third quarter, may be temporary.

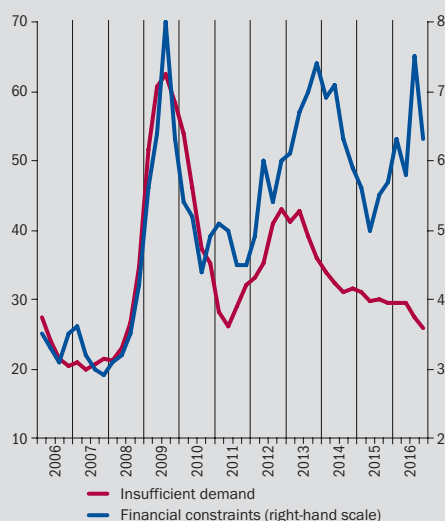
**Chart 11 Factors limiting production in industry (percentages)**



Source: Macrobond.

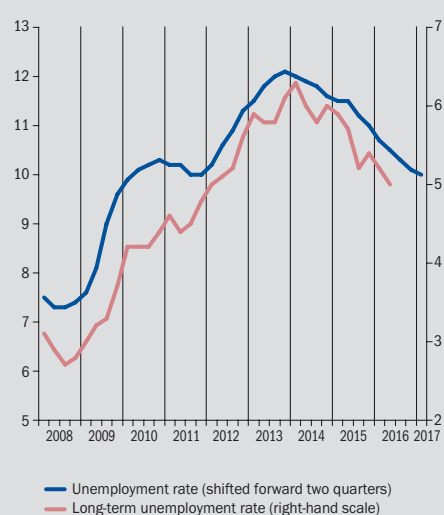
The unemployment rate maintained its downward trend in the third quarter, falling from 10.1% in June to 9.9% in September. The rate edged down further in October, to 9.8%. Employment expectations increased in almost all sectors in the first two months of the fourth quarter, providing further evidence of labour market strengthening. Despite a slight fall in the retail trade sector in November, overall employ-

**Chart 10 Factors limiting production in industry (percentages)**



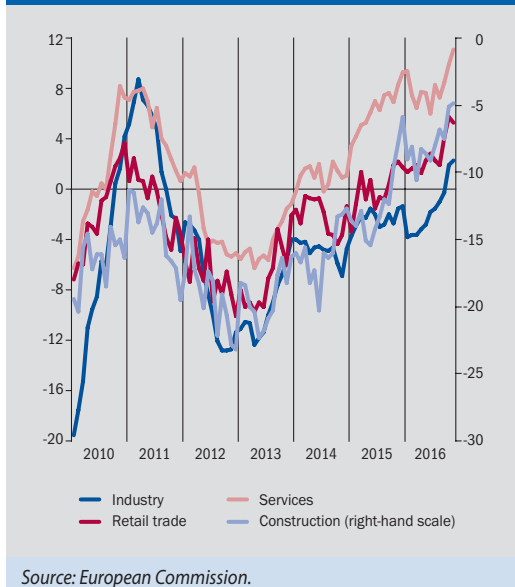
Source: Macrobond.

**Chart 12 Unemployment rate and long-term unemployment rate (percentages)**



Source: Eurostat.

**Chart 13 Employment expectations by sector (balance of responses)**



**Chart 14 Euro area leading indicators and quarterly GDP growth**

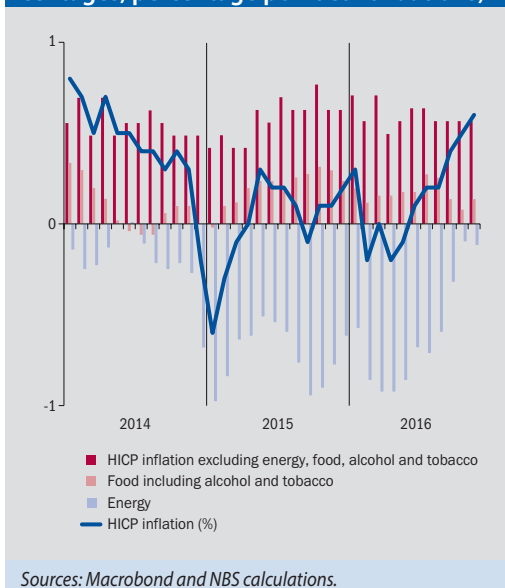


ment expectations in October and November were higher than their average level in the third quarter.

Leading indicators are sending relatively favourable signals that point to a moderate acceleration of economic growth. Most indicators improved in the first two months of the fourth quarter, rebounding from the negative shock of the UK's vote to leave the EU. The Purchasing Managers' Index (PMI) for the euro area rose in both October and November, to average 53.6 for the two months (up from an average of 52.9 in the third quarter). The PMI for Germany also rallied in October and, despite correcting marginally in November, its average for the first two months of the last quarter was 55.1. This was significantly higher than its average for the third quarter (53.8) and suggests that GDP growth will increase in the fourth quarter. The European Commission's Economic Sentiment Indicator (ESI) showed a similar trend, with the ESI for the euro area improving in both October and November and the ESI for Germany picking up strongly in October and correcting slightly in November. For both the euro area and Germany, the average ESI for the two months was higher than the third-quarter average. In Germany, both the Ifo Business Climate Index and ZEW economic sentiment index recorded an improvement in sentiment.

Euro area annual HICP inflation accelerated gradually in the third quarter as the negative contribution of its energy component diminished. The headline inflation rate was 0.4% in September, up from 0.1% in June. Food inflation continued to accelerate in July, but slowed in the next two months and therefore did not add upward pressure to the headline rate. HICP inflation exclud-

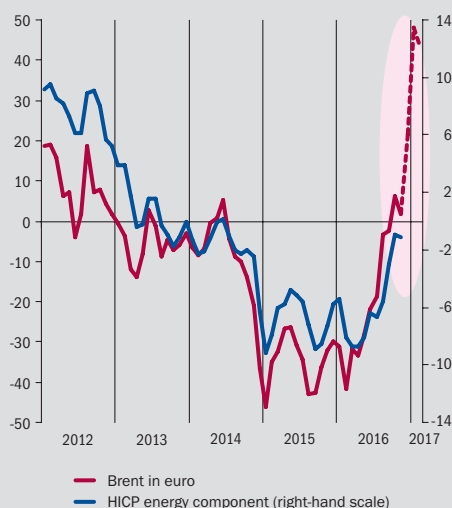
**Chart 15 Annual HICP inflation rate and the contributions of selected components (percentage point contributions)**



ing food and energy edged down to 0.8% in September, from 0.9% in June, reflecting a slower rate of increase in non-energy industrial goods prices and also in services prices. The headline rate continued to accelerate moderately in October and November, reaching 0.6%. The October increase was supported by further easing of the rate of decline in energy prices, while slower food inflation had the opposite impact. In November, food prices picked up again, while energy prices exerted a drag on the headline rate. Inflation excluding food and energy remained steady in both months. Inflation is therefore still reflecting mainly cost-push pressures, while prices of demand-sensitive items maintain relatively stable, but subdued, growth.

Energy prices continued to closely track year-on-year changes in global oil prices, and thus had a key impact on the headline inflation rate. The average oil price fell in July, but it remained broadly stable in the next two months and, owing to a base effect, its annual rate of decline slowed markedly. In October the oil price increased and its annual rate of change turned positive for the first time in more than two years. The decline in consumer energy prices again diminished significantly. The year-on-year increase in the oil price moderated in November, but it is expected to accelerate appreciably in subsequent months owing to a base effect.

**Chart 17 Oil prices in euro and the HICP energy component (annual percentage changes)**

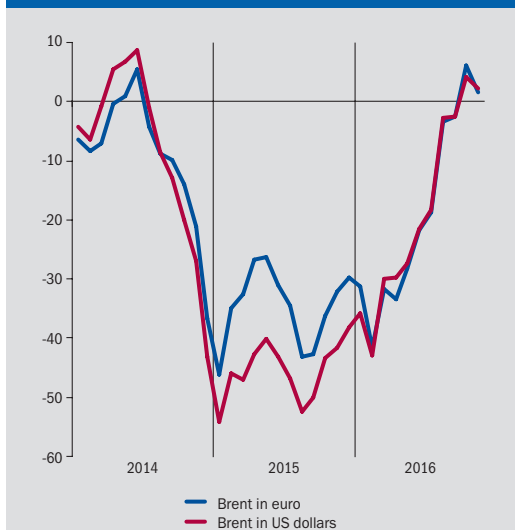


Sources: Macrobond and NBS calculations.

Note: The broken line denotes the expected annual rate of change in oil prices in the period from December 2016 to February 2017 on the assumption that the prices remain fixed at their November 2016 level.

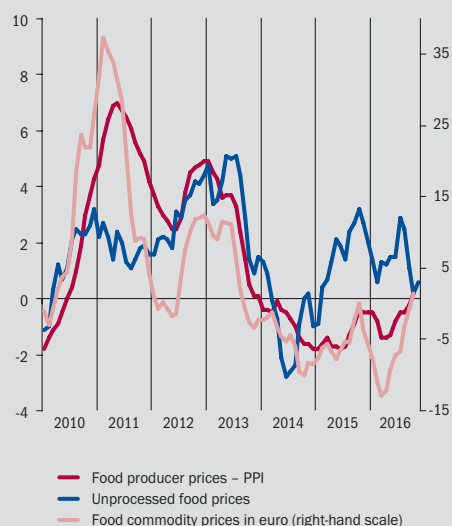
As the food commodity market continued to recover in the third quarter of 2016 and the next two months, food producer prices gradually began to accelerate, but not yet with any significant pass-through to consumer food prices.

**Chart 16 Oil prices in euro and US dollars (annual percentage changes)**



Sources: Macrobond and NBS calculations.

**Chart 18 Food prices: commodity, producer and consumer prices (annual percentage changes)**



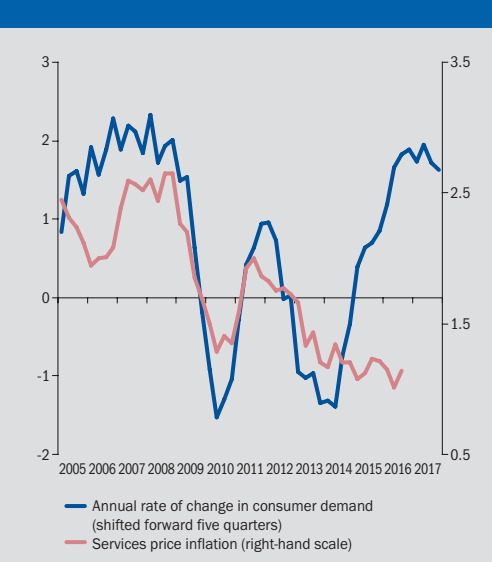
Sources: Macrobond, ECB and NBS calculations.

**Chart 19 Food commodity prices and processed food prices (annual percentage changes)**



Source: Macrobond.

**Chart 20 Consumer demand and services price inflation (annual percentage changes)**



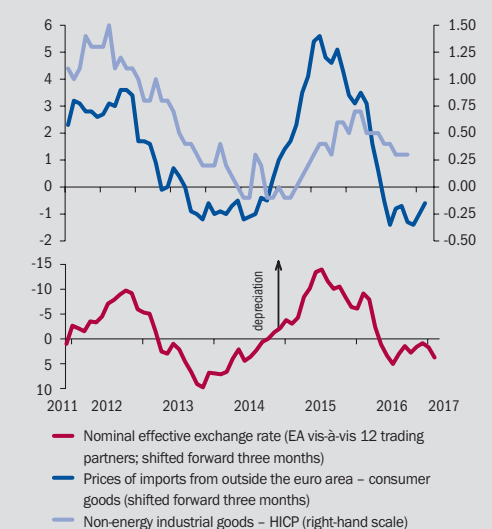
Source: Macrobond.

Unprocessed food inflation, after accelerating markedly in July, moderated in the next two months and only picked up again in November (to reach 0.6%, 0.9 percentage point lower than its rate in June). As for processed food inflation, it remained steady from the beginning of the third quarter to October (at 0.5%), only edging up in November (to 0.7%) in response to increasing food commodity inflation. This indicates further acceleration of processed food inflation. Food producer prices gradually reacted to the upturn in food commodity prices, as their year-on-year rate of change became less negative and then turned slightly positive in October.

In an environment of strong competition, prices of demand-sensitive items in the consumption basket remained subdued in the third quarter of 2016. Services inflation was broadly unchanged throughout the months from July to November (at 1.1%). Although relatively strong growth in consumer demand continues to support expectations of a moderate increase in services inflation, its impact appears to be offset by heightened competition and efforts to gain market share. Furthermore, the annual growth rate in consumer demand has slowed slightly in recent quarters, thus easing demand pressures.

Non-energy industrial goods inflation fell slightly in August and remained unchanged in the following months to November (at 0.3%). Its rate was still not reflecting developments in import prices, whose rate of decline moderated with

**Chart 21 Non-energy industrial goods prices and the nominal exchange rate (annual percentage changes)**



Source: Macrobond.

Note: Positive values for the exchange rate denote depreciation of the euro.



support from past exchange-rate movements. However, the appreciation of the nominal effective exchange rate during the summer months could further weigh on import prices and subsequently on prices of non-energy industrial goods.

After being subdued for a long time, price expectations increased notably across economic sectors in October and November. Their increase was most pronounced in industry and more moderate in retail trade and services. As import price inflation became less negative, so too gradually did the annual rate of change in producer price inflation. The increase in price expectations and the moderating decline in import prices and production prices reflect cost factors stemming from energy and non-energy commodity price trends.

At its meetings from September to December, the ECB's Governing Council decided to leave the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility unchanged at 0.00%, 0.25% and -0.40% respectively. The Governing Council said it continued to expect the key ECB interest rates to remain at present or lower levels for an extended period of time, and well past the horizon of its net asset purchases.

**Chart 22 Price expectations in industry, services and retail trade (balance of responses)**



Sources: European Commission and Eurostat.

**Chart 23 Price expectations in industry (balance of responses) and producer prices (annual percentage changes)**



Sources: European Commission, Eurostat and Macrobond.

At its December meeting, the Council decided that purchases under the asset purchase programme (APP) would be continued at the current monthly pace of €80 billion until the end of March 2017. At the same time, it decided that monthly purchases under the APP would be conducted at a pace of €60 billion from April 2017 until the end of December 2017, or beyond, if necessary, and in any case until the Council sees a sustained adjustment in the path of inflation consistent with its inflation aim. If, in the meantime, the outlook becomes less favourable, or if financial conditions become inconsistent with further progress towards a sustained adjustment of the path of inflation, the Council intends to increase the programme in terms of size and/or duration. The net purchases will be made alongside reinvestments of the principal payments from maturing securities purchased under the APP. To ensure the continued smooth implementation of the Eurosystem's asset purchases, the Council decided to adjust the parameters of the APP as of 2 January 2017 as follows: first, the maturity range of the public sector purchase programme will be broadened by decreasing the minimum remaining maturity for eligible securities from two years to one year; second, purchases of securities under the APP with a yield to maturity below the interest rate on the ECB's deposit facility will be permitted to the extent necessary.

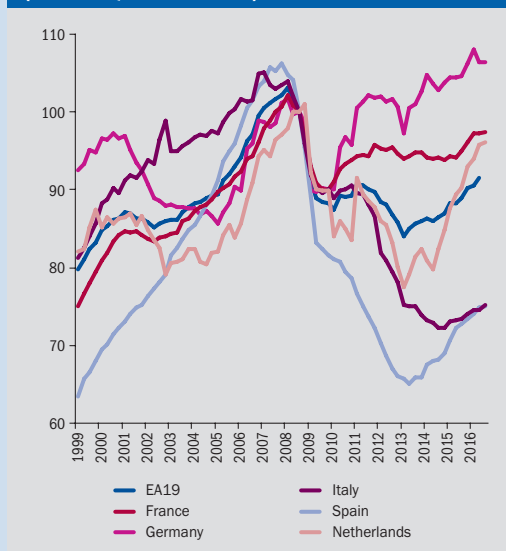
Box 1

INVESTMENT TRENDS IN THE EURO AREA

Investment is a significant aspect of the business cycle and investment trends are among the factors that determine the conditions for future economic growth. Investment was hard hit during the Great Recession, slumping by 11.2% in 2009 after growing by 4.8% in 2007. The amount of investment stopped falling in 2010, but then resumed its decline and reached its lowest point in the first quarter of 2013, 16% below its pre-crisis level (Q3 2008 = 100).

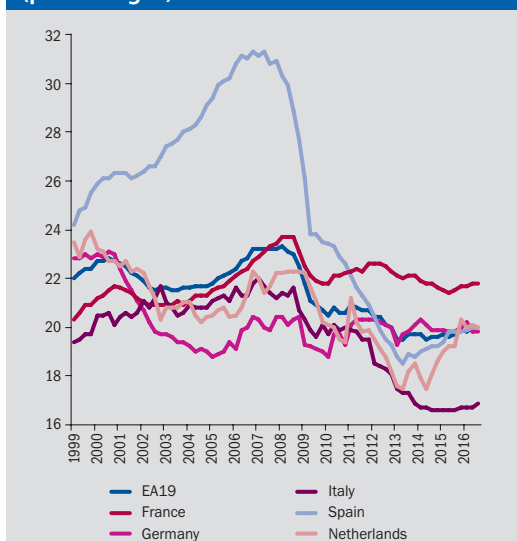
The total investment-to-GDP ratio also fell substantially. From a level of over 23% in 2007, it declined gradually to 19% (2013–2015) and then further to 20% (Q2 2016). Across the larger euro area economies, Spain recorded the largest drop in investment, owing mainly to the bursting of a construction sector bubble. As a ratio of Spanish GDP, construction sector investment fell by more than half, from 21% in 2006 to below 10% in 2013 and 2014. Gross fixed capital formation in the euro area picked up only gradually in the post-crisis period, and Germany was the

Chart B Gross fixed capital formation (index: Q3 2008=100)



Sources: Eurostat and NBS calculations.

Chart A Total investment to GDP ratio (percentages)



Source: Eurostat.

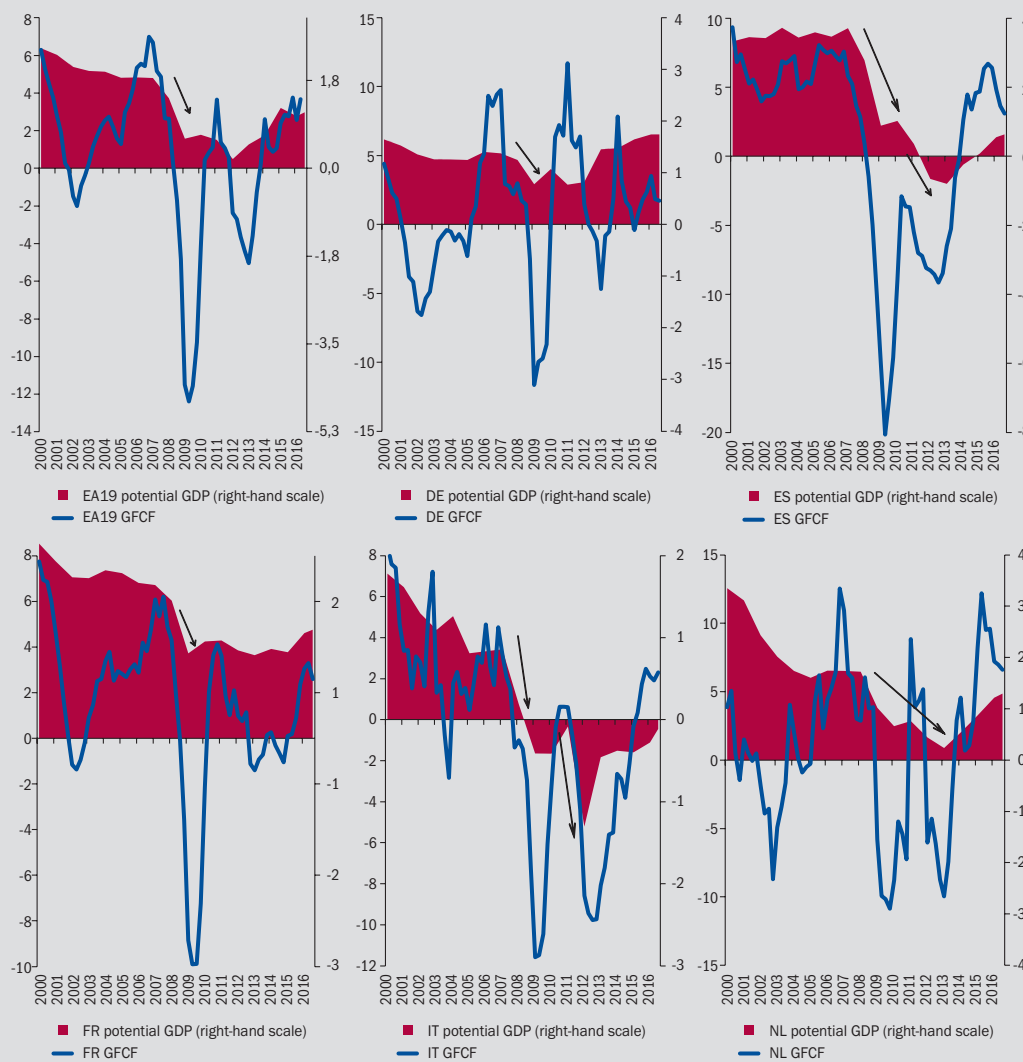
only larger EU country in which GFCF eventually exceeded its pre-crisis level. The Netherlands, too, has reported a favourable GFCF trend over the past three years. In France, and even more so in Italy and Spain, however, investment has been slower to recover from the crisis.

A decline in investment or slowdown in investment demand may weigh on an economy's productive capacity. The crisis-related slump in investment reduced potential GDP growth<sup>3</sup> both in the euro area as a whole and in its largest economies. The euro area's average potential GDP growth in the pre-crisis period (1999–2008) averaged 1.97%, whereas in the subsequent period (2009–2018) it dropped to 0.78% (calculated using the European Commission's potential GDP growth projections for the years 2016 to 2018). Looking at the euro area's largest economies, average potential GDP growth for the aforementioned periods fell most sharply in Italy (from 1.14% to -0.34%) and Spain (from 3.42%

<sup>3</sup> Estimates of potential GDP growth are taken from the European Commission.

to 0.28%), followed by the Netherlands (by 1.45 percentage points, to 0.86%) and France (by 0.76 percentage point, to 1.05%). The most moderate drop was in Germany (by just 0.08 percentage point, to 1.31%), the same economy that recorded the strongest recovery of investment.

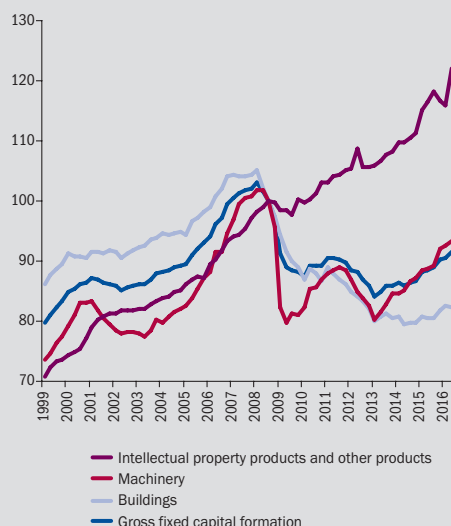
Chart C Gross fixed capital formation and potential GDP (annual percentage changes)



Sources: Eurostat, European Commission and NBS calculations.

In the breakdown of investment by type of product, investment in machinery, investment in buildings, and investment in intellectual property (IP) products all slowed and then fell sharply in 2008 and 2009. Over the next two years they recovered moderately with the exception of investment in buildings, which recorded a year-on-year increase only in the first quarter of 2011. Overall investment in all three areas declined further, albeit more moderately, in 2012 and then began to rebound in 2013, reflecting the impact of pro-investment policies, the availability of financing sources, and, not least, the recovery of confidence in the economy. The first of the three types of investment to pick up was investment in IP products (in the second half of 2013), followed by investment in machinery (at the turn of 2013-14) and investment in buildings (only from the beginning of 2015). Nevertheless, investment in IP products was the only one of the three that returned to its pre-crisis level. As a share of their total amount, investment in IP property increased from 14% in at the beginning of 2007 (when investment in buildings accounted for 55% and investment in machinery for 31%), to 20% by mid-2016 (buildings, 49%; machinery 31%).

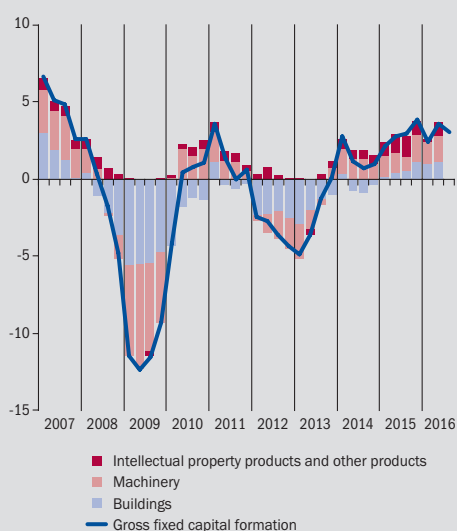
**Chart E Intra-euro area investment (index: Q3 2008=100)**



Sources: Eurostat and NBS calculations.

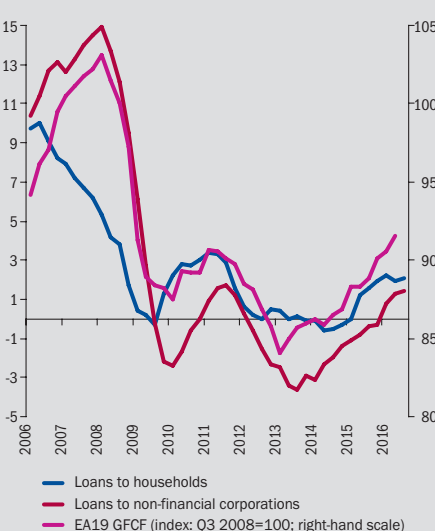
The recovery of investment is contingent on increases in demand and expected profits, as well as on improvement in conditions for investment financing and in economic sentiment. In recent years investment has been supported by several policies aimed at enhancing the regulatory environment, lend-

**Chart D Intra-euro area investment (annual percentage changes; percentage point contributions)**



Sources: Eurostat and NBS calculations.

**Chart F Intra-euro area investment and credit (annual percentage changes; index: Q3 2008=100)**

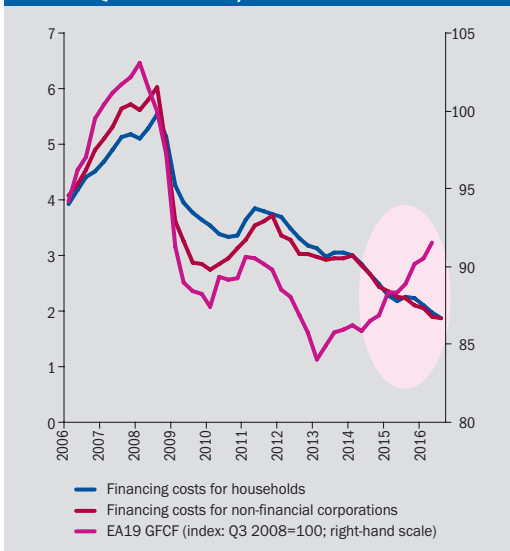


Sources: Eurostat, ECB and NBS calculations.

ing condition, labour force flexibility and restructuring conditions. The ECB has regularly adapted its monetary policy to crisis developments and has implemented measures to support functioning of the transmission mechanism. Through its asset purchase pro-

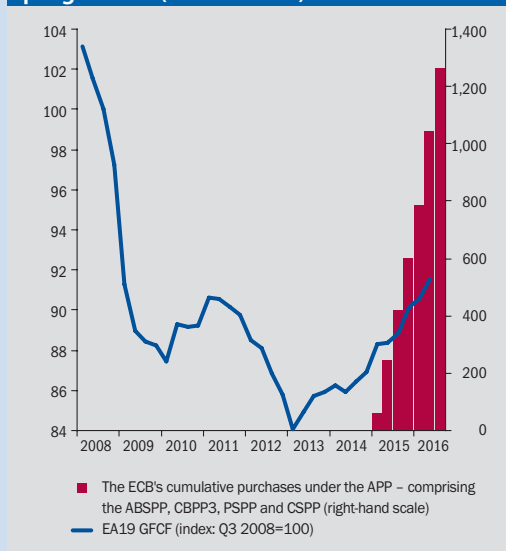
gramme, the ECB has supplied banks with liquidity. The easing of lending conditions has had an impact on the economy, as lower borrowing costs have resulted in an increase in lending. All of these measures have significantly supported investment.

**Chart G Intra-euro area investment and financing costs (annual percentage changes; index: Q3 2008=100)**



Sources: Eurostat, Macrobond and NBS calculations.

**Chart H Intra-euro area investment and the ECB's purchases under its asset purchase programme (EUR billions)**



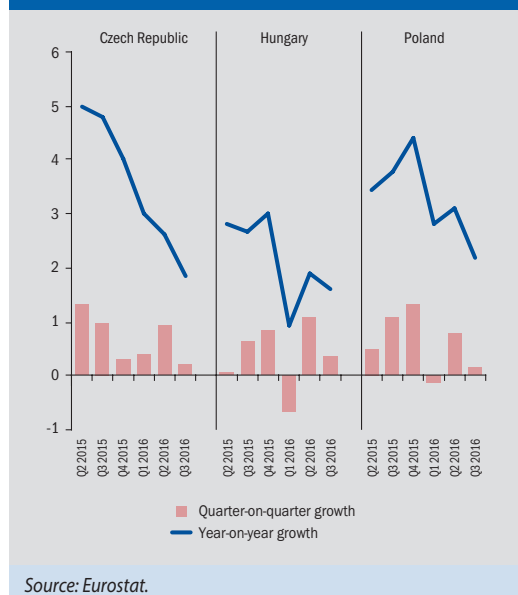
Sources: Eurostat, ECB and NBS calculations.

## 5 THE CZECH REPUBLIC, HUNGARY AND POLAND

In all three countries, annual GDP growth was lower in the third quarter of 2016 than in the previous quarter. It fell to 1.9% in the Czech Republic

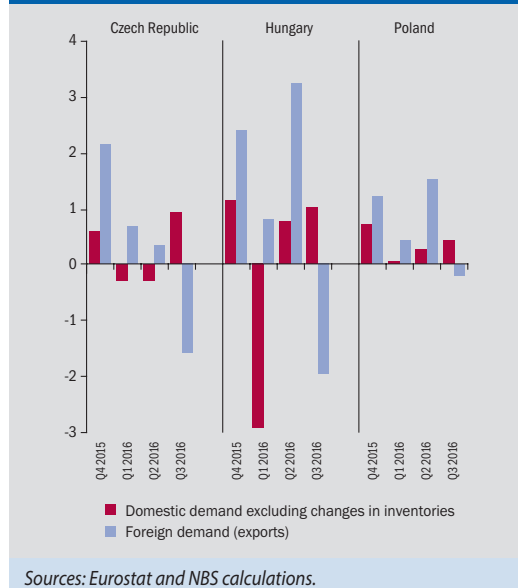
(by 0.7 percentage point), to 1.6% in Hungary (by 0.3 percentage point) and to 2.2% in Poland (by 0.9 percentage point).

Chart 24 GDP growth (percentages)



Source: Eurostat.

Chart 25 Contributions to quarterly GDP growth (percentage points)



Sources: Eurostat and NBS calculations.

In quarter-on-quarter terms, the three economies under review also grew more slowly in the third quarter than in the second quarter. Growth fell to 0.2% in the Czech Republic (by 0.7 percentage point), to 0.3% in Hungary (by 0.8 percentage point) and to 0.2% in Poland (by 0.6%). In the Czech Republic, growth was dampened by government final consumption, changes in inventories and, most of all, by net trade, as exports fell more than imports. Positive contributions to GDP growth came from accelerated growth in household final consumption and in investment demand. In Hungary, the slowdown was likewise caused largely by net trade, with exports declining much faster than imports. Household final consumption also contributed negatively, as its growth rate fell. Government consumption growth remained unchanged and therefore had a neutral impact. Investment demand and inventories both had a positive impact, as their growth rates increased. Poland's lower GDP growth was caused largely by a decline in investment demand and, to a lesser extent, by net trade (as in the other economies, the pace of decline in exports was greater than that in imports). Both private and public consumption had a positive impact on GDP growth, as did changes in inventories.

Turning to annual consumer price inflation in the third quarter, the headline rates in both the Czech Republic and Hungary turned positive after being negative in the previous quarter, while the inflation rate in Poland became slightly less negative. In the **Czech Republic**, the year-on-year inflation rate increased from -0.1% in June to 0.5% in September, mainly because processed food prices fell in June and rose in September. Services prices also contributed positively to the increase in headline inflation, and so did energy prices, as their rate of decline moderated. On the other hand, non-

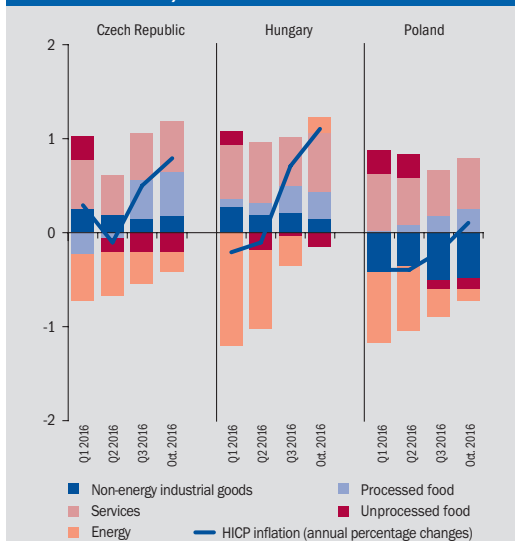


energy industrial goods inflation slowed and unprocessed food prices fell. In October, the Czech inflation rate accelerated further, owing mainly to higher processed food prices and further moderation in the decline of energy prices. In **Hungary**, annual consumer price inflation increased from -0.1% in June to 0.7% in September, driven up mainly by the acceleration of both processed food inflation and unprocessed food inflation as well as by a less pronounced rate of decline in energy prices. Non-energy industrial goods inflation remained unchanged, while services inflation slowed. In October, Hungary's headline inflation increased again, mainly because energy inflation turned positive after an extended period in negative territory. In **Poland**, the annual inflation rate was slightly less negative in September (at -0.2% than in June (-0.4%)), largely because energy prices fell at a slower pace and because processed food prices had a slightly positive impact. By contrast, non-energy industrial goods prices fell even more sharply than they did in the second quarter, and unprocessed food prices declined after previously increasing. Services inflation was practically unchanged. In October, Poland's headline inflation rate turned positive, with the main causes expected to be a significantly less pronounced decline in energy prices and an increase in services inflation.

The currencies of all three countries were stronger against the euro at the end of the third quarter than at the end of the second quarter, with the Czech koruna up by 0.41%, the Hungarian forint by 2.29% and the Polish zloty by 2.64%. This development stemmed mainly from the depreciation of the three central European currencies at the end of June following the outcome of the UK's referendum on EU membership. Furthermore, the koruna remains constrained to follow a largely strengthening trajectory, since the Czech central bank is still committed to using foreign exchange interventions to maintain accommodative monetary policy conditions. The movement of the forint and zloty during the third quarter reflected financial market sentiment, which was influenced in particular by the "Brexit" vote and later, after a return to calm, by the release of macroeconomic data for the United States and the euro area and by expectations of further measures from the major central banks.

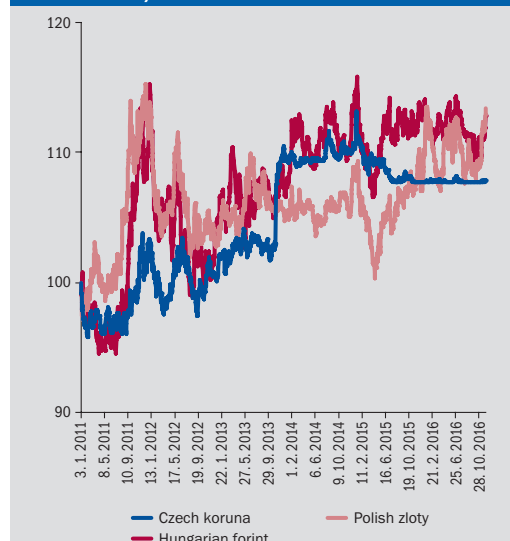
The koruna's exchange rate, after depreciating slightly at the end of the second quarter (due to the UK's vote to leave the EU), remained just above CZK 27.0 per euro during the third quarter thanks to the Czech central bank's interventions on the foreign exchange market. The central bank does not intend to discontinue the use of

**Chart 26 HICP inflation and its composition (percentages; percentage point contributions)**



Sources: Eurostat and NBS calculations.

**Chart 27 Exchange rate indices of national currencies vis-à-vis the euro (index: 3 January 2011 = 100)**



Sources: Eurostat and NBS calculations.

Note: A fall in value denotes appreciation.



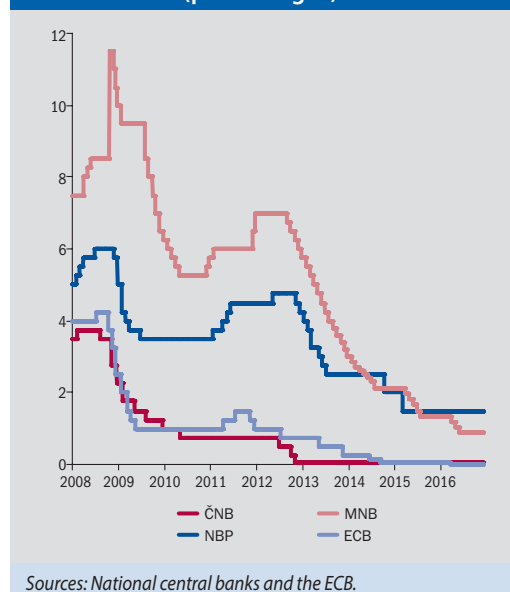


the exchange rate as a monetary policy instrument before the end of second quarter of 2017, and therefore no significant appreciation of the Czech koruna against the euro is expected before then. The forint also stabilised during the third quarter after weakening against the euro at the end of the second quarter. The exchange rate then appreciated, reacting in part to further monetary policy easing by the Hungarian central bank (it cut the overnight collateralised lending rate and one-week collateralised lending rate to the base rate level of 0.9%, and changed the frequency of three-month deposit tenders, from a weekly to monthly basis), and partly to the decision of credit rating agencies to upgrade Hungary's rating. The exchange rate weakened towards the end of the year due to the impact of the outcome of the US presidential election. The zloty, too, after weakening at the end of the second quarter, steadied during the third quarter as financial markets calmed. The exchange rate did not subsequently appreciate to any notable extent, given the deterioration in Poland's economic outlook (owing to the approval of a retirement age reduction that will burden future budgets), and the impact on the currency (similar to the impact on the forint) of the US presidential election outcome and other external factors (expectations of an interest rate hike by the Federal Reserve).

As regards monetary policy settings in the three countries, none of the central banks made any changes to their settings in the third quarter of 2016 and only the Hungarian central bank did so in October and November. In the Czech Republic, **Česká národní banka** (ČNB) kept its base rate unchanged at 0.05% (zero lower bound). In the statements from its third-quarter monetary policy meetings, the ČNB Bank Board restated that it was committed to using the exchange rate as an additional instrument for easing monetary policy until mid-2017 – hence over the whole projection horizon (its interventions on the foreign exchange market during the third quarter amounted to CZK 5.051 billion). According to the ČNB Bank Board, sustainable fulfilment of the inflation target, which is a condition for a return to conventional monetary policy, is expected to occur in the second half of 2017. In the statement from its August meeting, the Bank Board said ČNB still stood ready to shift the exchange rate commitment to a weaker level if

there were to be a systemic decrease in inflation expectations. At its September meeting, the Bank Board also discussed the possibility of applying negative interest rates to support the exchange rate commitment or a smooth exit from that commitment, but in the end agreed it was not necessary. At its November meeting, the Bank Board again agreed that the exchange rate commitment would likely be discontinued in mid-2017. In Hungary, the **Magyar Nemzeti Bank** (MNB) did not alter either its base rate or overnight deposit rate in the third quarter of 2016, leaving them at 0.9% and -0.05% respectively (the deposit rate has been at that level since 23 March 2016). In the statements from its meetings, the MNB Monetary Council said that the current level of the base rate and maintaining a loose monetary policy for an extended period were consistent with the medium-term achievement of the inflation target and a corresponding degree of support to the economy. In July the MNB announced a change to the frequency of its three-month deposit tenders, from weekly to monthly intervals, with effect from August 2016, and that the central bank would limit the amount of bids it accepts in these tenders. According to the MNB, these unconventional measures should, by directing bank liquidity, support the central bank's schemes to stimulate bank lending and its Self-Financing Programme. In September, the Monetary Council announced

Chart 28 Key interest rates of national central banks (percentages)



Sources: National central banks and the ECB.



that it was ready to apply a stronger limitation to three-month deposits. In October and November the MNB cut the overnight collateralised lending rate by a cumulative 25 basis points, to 0.9%, and the one-week collateralised lending rate by a cumulative 15 basis points, to 0.9%. The Monetary Council also said it stood ready to ease monetary conditions further. In Poland, **Narodowy Bank Polski** (NBP) left its monetary-policy settings unchanged in the third quarter of 2016 (keeping the reference rate at 1.5%). According to NBP's Monetary Policy Council (MPC), inflationary pressure is currently

absent from the economy since the output gap remains negative and average nominal wage growth is moderate. The MPC also noted that external factors – particularly the earlier sharp fall in global commodity prices and low inflation in the environment of the Polish economy – continued to be the main sources of deflation and that this situation was accompanied by low inflation expectations. The MPC reiterated its assessment that the current level of interest rates was conducive to keeping the Polish economy on a sustainable growth path and to maintaining macroeconomic equilibrium.



## SUMMARY OF GDP GROWTH PROJECTIONS OF SELECTED INSTITUTIONS

Table 1 Global economy

	Release	2016		2017		2018	
IMF	October 2016	3.1	(=)	3.4	(=)	3.6	-
OECD	November 2016	2.9	(=)	3.3	(0.1)	3.6	-
EC	November 2016	3.0	(-0.1)	3.4	(=)	3.5	-
ECB <sup>1)</sup>	December 2016	3.0	(=)	3.5	(=)	3.7	(=)

Table 2 United States

	Release	2016		2017		2018	
IMF	October 2016	1.6	(-0.6)	2.2	(-0.3)	2.1	-
OECD	November 2016	1.5	(0.1)	2.3	(0.2)	3.0	-
EC	November 2016	1.6	(-0.7)	2.1	(-0.1)	1.9	-
Federal Reserve	September 2016	1.8	(-0.15)	2.05	(=)	1.95	(=)

Table 3 Euro area

	Release	2016		2017		2018	
IMF	October 2016	1.7	(0.1)	1.5	(0.1)	1.6	-
OECD	November 2016	1.7	(0.2)	1.6	(0.2)	1.7	-
EC	November 2016	1.7	(0.1)	1.5	(-0.3)	1.7	-
ECB	December 2016	1.7	(=)	1.7	(0.1)	1.6	(=)

Table 4 Czech Republic

	Release	2016		2017		2018	
IMF	October 2016	2.5	(=)	2.7	(0.3)	2.4	-
OECD	November 2016	2.4	(=)	2.5	(-0.1)	2.6	-
EC	November 2016	2.2	(0.1)	2.6	(=)	2.7	-
ČNB	November 2016	2.8	(0.4)	2.9	(-0.1)	2.9	(-0.1)

Table 5 Hungary

	Release	2016		2017		2018	
IMF	October 2016	2.0	(-0.3)	2.5	(=)	2.4	-
OECD	November 2016	1.7	(0.1)	2.5	(-0.6)	2.2	-
EC	November 2016	2.1	(-0.4)	2.6	(-0.2)	2.8	-
MNB	September 2016	2.8	(=)	3	(=)	-	-

Table 6 Poland

	Release	2016		2017		2018	
IMF	October 2016	3.1	(-0.5)	3.4	(-0.2)	3.3	-
OECD	November 2016	2.6	(-0.4)	3.2	(-0.3)	3.1	-
EC	November 2016	3.1	(-0.6)	3.4	(-0.2)	3.2	-
NBP	November 2016	3	(-0.2)	3.6	(0.1)	3.3	(=)

<sup>1)</sup> Global economic growth excluding the euro area.

Note: Data in brackets denote the percentage point change from the previous projection.