



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM



REPORT ON THE INTERNATIONAL ECONOMY

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ABBREVIATIONS

CPI	consumer price index
EA	euro area
ECB	European Central Bank
EC	European Commission
EMEs	emerging market economies
EONIA	euro overnight index average
ESA 2010	European System of Accounts 2010
ESI	Economic Sentiment Indicator (European Commission)
EU	European Union
EUR	euro
EURIBOR	euro interbank offered rate
Eurostat	statistical office of the European Union
FDI	foreign direct investment
GDP	gross domestic product
GNDI	gross national disposable income
GNI	gross national income
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
MFI	monetary financial institutions
MF SR	Ministry of Finance of the Slovak Republic
MMF	money market fund
MTF	NBS's Medium-Term Forecast (published on a quarterly basis)
NACE	Statistical Classification of Economic Activities in the European Community (Rev. 2)
NARKS	National Association of Real Estate Offices of Slovakia
NBS	Národná banka Slovenska
NEER	nominal effective exchange rate
NFC	non-financial corporation
NPISHs	non-profit institutions serving households
OECD	Organisation for Economic Co-operation and Development
p.a.	per annum
p.p.	percentage point
PMI	Purchasing Managers' Index
REER	real effective exchange rate
SASS	Slovenská asociácia správcovských spoločností – Slovak Association of Asset Management Companies
SME	small and medium-sized enterprise
SO SR	Statistical Office of the Slovak Republic
ULC	unit labour costs
ÚPSVR	Ústredie práce, sociálnych vecí a rodiny – Central Office of Labour, Social Affairs and Family
ÚRSO	Úrad pre reguláciu sieťových odvetví – Regulatory Office for Network Industries
USD	US dollar
VAT	value-added tax

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

Although the global economy's favourable trends have continued in the recent period, world economic growth fell slightly in the third quarter of 2017, according to available data. But even though global growth remains below pre-crisis levels, monetary and fiscal stimuli are supporting growth cycle synchronisation across countries. Economic growth continues to be supported by favourable financial conditions, accommodative monetary policies, flexible financial markets and robust capital flows.

The US economy had a positive impact on global GDP growth in the third quarter of 2017. Its rate of expansion was higher compared with the previous quarter, despite the adverse effects of the hurricane season. Household consumption growth and fixed investment growth both softened, but their impact was offset by increases in inventories and in government consumption and government investment. A decline in imports ensured that net trade made a positive contribution to US GDP growth despite a slowdown in export growth. In the next period, it is expected that consumption and investment will be supported by the upward impact on wages of a tightening labour market and by still favourable financial conditions. Furthermore, the recently-adopted tax cut reform is expected to be growth-supporting, and strengthening foreign demand should give exports a boost. The United Kingdom's economic growth picked up slightly in the third quarter, surprisingly supported by private consumption. Thus there was no repeat of the scenario observed in the previous two quarters, where household consumption growth fell amid accelerating consumer prices. Private consumption growth increased in the third quarter even though inflation continued to rise (the Bank of England responded to that rise by increasing interest rates for the first time in ten years). On the other hand, a slowdown in investment growth, decline in exports, and increase in imports were a drag on economic growth. The UK's growth is expected to remain subdued in the short term, owing to continuing uncertainty and to the impact of past depreciation of the pound sterling. Euro area growth in the third quarter was moderately lower compared with the previous quarter

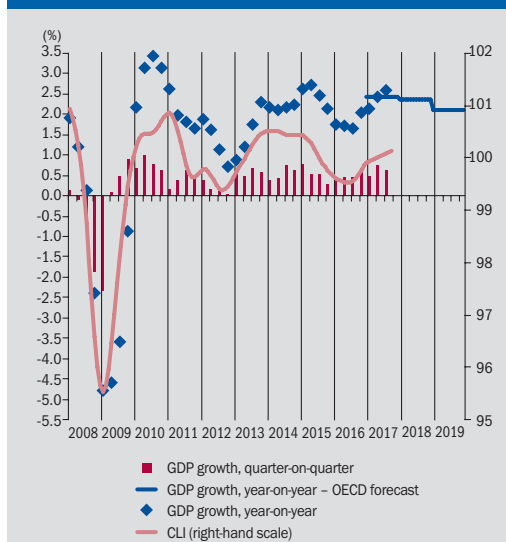
and was driven almost entirely by the domestic side of the economy. Because export growth was only slightly higher than import growth, net trade made only a modest positive contribution to overall GDP growth. The euro area economic recovery is expected to be maintained on the basis of an accommodative monetary policy stance and the continuing upward impact of favourable labour market developments on domestic demand. Japan's economy contributed to the third-quarter slowdown in global growth. There were declines in all components of domestic demand, including government consumption expenditure. Thanks, however, to a rebound in export performance and a simultaneous decline in imports, net trade had a positive impact on GDP growth; so too, to a lesser extent, did changes in inventories. Japan's economy grew for a seventh successive quarter, its longest period of continuous expansion for 16 years. The growth path is expected to continue, supported by economic policies and foreign demand. The pick-up in private consumption will be a slow process, despite favourable labour market trends and accelerating wage growth. Investment is expected to be boosted by improved financial conditions and by preparations for the 2020 Olympic Games. Besides foreign demand, depreciation of the yen is also expected to support exports.

China continued to be a major contributor to the economic growth of emerging market economies (EMEs). Despite the impact of environmental inspections on activity in heavy industry and construction, China's growth in the second half of the year has been robust, albeit slightly below the level of the second quarter. Infrastructure investment compensated for capacity reductions in the production of coal, steel and aluminium, and in other areas. The drop in the contribution of domestic demand (dampened by lower investment as well as stable consumption) was offset by the impact of strong exports. Short-term indicators such as industrial production and retail sales, along with cooling of the property market, suggest China's economic growth has moderated slightly in the last quarter of the year. Efforts to rebalance the country's economy were apparent in the political decision not to set a growth target

beyond the 2020 horizon and to focus more on financial stability. In India, annual GDP growth increased in the third quarter, after decelerating in each of the five previous quarters. India has therefore managed to overcome the continuing effects of demonetisation (November 2016) and goods and services tax reforms (July 2017), which in the previous period disrupted supply chains and, by generating uncertainty, led to declines in production and inventories. The economy is expected to keep gaining momentum over the longer term, as the same reforms should boost business investment, productivity and growth by creating a single market and reducing fixed investment expenditure. Investment is likely to be further supported by the recapitalisation plan for the country's state-controlled banks and by a major road construction plan. Russia's annual GDP growth slowed in the third quarter, reflecting mainly the impact of declines in export growth and investment demand growth. Despite a global rise in oil prices, Russian oil production fell as Russia maintained output restraint in line with an OPEC and non-OPEC members' agreement. The Russian economy's slowdown had a structural character, since it stemmed from a softening of private investment growth; by contrast, activity in the state sector expanded. Russian GDP growth is expected to maintain a moderate pace, as the recovery of investment will be only gradual. Real income growth and the availability of credit are expected to support household consumption. On the other hand, the stronger rouble may erode competitiveness, in particular among producers of non-oil-related products. The Brazilian economy expanded for a third successive quarter, although its growth rate was appreciably lower than before. Private consumption growth was similar to its level in the previous quarter, and investment had its largest positive impact for four years. By contrast, a fall in government consumption contributed negatively to GDP growth, as did net trade, with strongly accelerating import growth outpacing export growth. The economy is expected to pick up in the next period, but the level of its growth will depend on political developments. Real wage growth resulting from a low inflation rate should support growth.

Quarterly GDP growth in the OECD area fell to 0.6% in the third quarter of 2017, down from 0.8% in the previous quarter. In year-on-year terms, GDP growth accelerated from 2.4% in the

Chart 1 GDP growth and the CLI for the OECD area



Source: OECD.

Note: CLI – Composite Leading Indicator.

second quarter to 2.6% in the third. The Composite Leading Indicator for the OECD area¹ continued to increase in the third quarter of 2017 and also in October, therefore suggesting that global economic growth will accelerate in the short term. Leading indicators provided further evidence of a broad-based improvement in sentiment across the global economy. The Global Manufacturing Purchasing Managers' Index (PMI) increased in November to a six-and-a-half-year high. There were increases in all of the PMI's components, including output, new orders, and employment. For the first time in ten years, not one of the countries surveyed for the PMI experienced a deterioration in manufacturing.

Going forward, global economic growth is expected to be relatively stable. Although the outlook is improving in general, many countries continue to report weak economic growth and sub-target inflation. Unemployment may be falling, but that decline must translate into real income growth if it is to support economic growth. In an environment of gradually receding monetary policy stimulus, it is particularly important to focus on structural and fiscal measures for supporting long-term potential output.

Global inflation accelerated moderately in the third quarter of 2017, as consumer prices re-

¹ The CLIs for OECD countries are published on a monthly basis, and the most recent, published in December 2017, are for the period up to October 2017.



flected the fading of the dampening effects of past declines in commodity prices. Annual consumer price inflation in the OECD area increased to 2.3% in September 2017, from 1.9% in June. With core inflation remaining stable (1.8%) during the period under review, the inflation increase was caused largely by the impact on energy prices of sharply rising energy commodity prices. Compared with its level at end of the first half of 2017, energy inflation more than doubled. The increase in consumer price inflation was also, however, partly driven by food prices. The headline inflation rate

moderated in October, to 2.2%, with the impact of a slight rise in core inflation (to 1.9%) being more than offset by declines in energy and food inflation.

Global inflation is expected to follow a gradual upward path. The current oil futures curve implies that oil prices will be relatively stable (increasing up to 2018 and then falling) and therefore that the impact of energy prices on headline inflation will be limited. Over the longer term, however, it is envisaged that a gradual decline in spare capacity will push up consumer prices.



2 COMMODITIES

The average commodity price index was higher in the third quarter of 2017 than in the previous quarter, reflecting increases in both energy and non-energy commodity prices.

Looking at energy commodities, the average price of a barrel of Brent crude oil increased to USD 52 in the third quarter, around USD 2 higher compared with the second quarter. The price growth resulted mainly from a fall in US inventories, as well as from increasing demand, mostly from China. Saudi Arabia's decision to cut oil exports in an effort to strike a balance between supply and demand also put upward pressure on the oil price. Brief declines in the oil price were triggered by news that OPEC oil production and exports had increased despite an OPEC and non-OPEC members' agreement to freeze output; as a result, fears of a global glut increased. Oil prices also retreated temporarily due to the adverse effects of hurricanes on refinery output in the United States and consequently on demand for crude. When production and then demand rallied again, oil prices also picked up. The benchmark oil price showed a rising

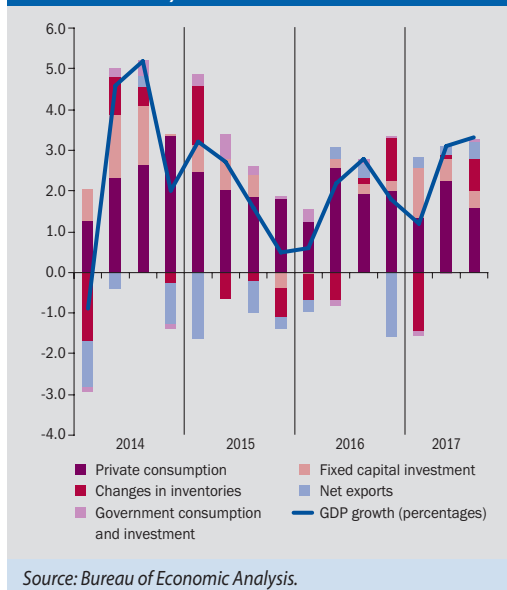
trend until early November, when it came under downward pressure from oil producers' observance of the output restraint agreement and the prospect of the deal being extended into 2018. Unlike the oil price, the natural gas price increased, and reached a two-year high, in response to the effects of the US hurricanes. Non-energy commodity prices increased in the third quarter owing mainly to rising metal prices (responding to strong growth in China's construction and processing industries) as well as to declines in the production of certain commodities. The increase in the benchmark iron ore price resulted mainly from strong demand from steel mills, which also had an impact on prices of other metals (nickel, zinc). Agricultural commodity prices also supported the increase in the non-energy component of the commodity price index. Wheat prices increased the most, as adverse weather (drought) in some parts of the United States resulted in delayed harvests. By contrast, maize prices fell owing to good harvests and ample stocks. Pigmeat prices also fell, although that development was normal for the season.

3 THE UNITED STATES

US economic growth surprised on the upside in the third quarter of 2017, recording its strongest growth for three years. The annualised rate of GDP growth increased to 3.3%, from 3.1% in the previous quarter. Expectations that the economy would weaken appreciably owing to the impact of hurricanes Harvey and Irma did not materialise. The year-on-year rate of GDP growth edged up to 2.3%, from 2.2% in the previous quarter.

Private consumption growth decreased as expected. Although household expenditure on durable goods (mainly motor vehicles) maintained strong growth, it did not offset the impact of a fall in spending on non-durable goods (clothing and footwear, motor fuel). At the same time, there was lower growth in the consumption of services, particularly housing-related services. Fixed investment growth fell, too, reflecting the fact that residential investment declined (after falling also in the previous quarter) and that, in the category of non-residential investment, the increase in investment in equipment was insufficient to compensate for a decline in other investment. As for the positive contributions to GDP growth, restocking had a strong impact that may have resulted from softening demand; on the other hand, its increase may have reflected producers' improving assessments of the economic outlook, as indicated in business tendency surveys. The government sector contributed positively to GDP growth after two quarters in which it had a negative impact; however, growth in both consumption and investment fell at the federal level, and the positive result was based entirely on the moderation of their rates of decline at the state level. Net trade also supported GDP growth, since a drop in export growth was accompanied by a decline in imports. Against the backdrop of the global economy's accelerating growth, US economic growth is also expected to continue. Elevated asset prices and strong business and consumer confidence are expected to support domestic demand. The impact of decreasing employment growth on consumption should be offset by increasing wage growth in a tightening labour market. It is envisaged that next year's consumption and investment will be boosted by the fiscal stimulus of expected tax cuts.

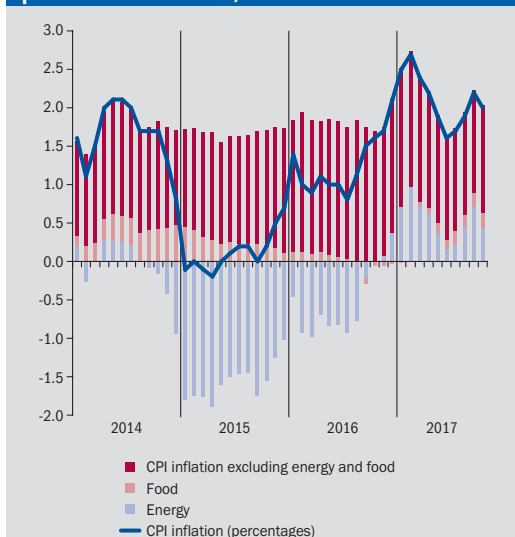
Chart 2 Annualised GDP growth and its composition (percentages; percentage point contributions)



Turning to inflation in the United States, the disinflationary trend of previous months came to an end in the third quarter. Annual CPI inflation increased in the period under review, mainly due to increases in energy prices and, to a lesser extent, food prices. Energy prices reflected trends in energy commodity prices, which responded to increased demand during the hurricane period; food inflation was pushed up mainly by prices of meat, fruit and vegetables. The inflation rate excluding food and energy remained unchanged. Under this measure, the impact of falling prices of new motor vehicles (with deep discounts being provided to reduce inventories) and lower increases in medicinal product prices was offset by higher increases in services and transportation prices. Annual CPI inflation increased from 1.6% in June, to 2.2% in September. Core inflation remained stable throughout the quarter, at 1.7%.

In October, energy price developments ended the rise in headline inflation, even though food inflation increased again and core inflation edged up (to 1.8%). The fading of hurricane-related effects caused a marked slowdown in energy inflation, and consequently the annual CPI

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



Sources: Bureau of Labor Statistics and NBS calculations.

rate fell to 2%. The next period is expected to see goods inflation increase on the back of dollar depreciation. At the same time, economic growth and labour market tightening are expected to be reflected in stronger wage growth, which should put upward pressure on core inflation.

The US Federal Open Market Committee (FOMC) decided at its meetings in July, September and October/November 2017 to leave the target range for the federal funds rate unchanged, at 1.00% to 1.25%. The stance of monetary policy therefore remained accommodative. In June the Committee had said it would begin implement-

ing its balance sheet normalisation programme in 2017 if the economy evolved broadly as anticipated, and it reiterated this position in the press release after its July meeting. After its September meeting, the Committee announced that in October 2017 it would initiate the balance sheet normalisation programme described in the June 2017 Addendum to the Committee's Policy Normalization Principles and Plans. According to the Addendum, the Committee intends to gradually reduce the Federal Reserve's securities holdings by decreasing the reinvestment of the principal payments it receives from these holdings. Specifically, such payments will be reinvested only to the extent that they exceed gradually rising caps. For payments of principal that the Federal Reserve receives from maturing Treasury securities, the Committee anticipates that the cap will be USD 6 billion per month initially and will increase in steps of USD 6 billion at three-month intervals over 12 months until it reaches USD 30 billion per month. For payments of principal that the Federal Reserve receives from its holdings of agency debt and mortgage-backed securities, the Committee anticipates that the cap will be \$4 billion per month initially and will increase in steps of \$4 billion at three-month intervals over 12 months until it reaches \$20 billion per month. The Committee also anticipates that the caps will remain in place once they reach their respective maximums so that the Federal Reserve's securities holdings will continue to decline in a gradual and predictable manner until the Committee judges that the Federal Reserve is holding no more securities than necessary to implement monetary policy efficiently and effectively.

4 THE EURO AREA

Euro area economic growth remained relatively robust in the third quarter of 2017, at 0.6% quarter on quarter. It was, however, 0.1 percentage point lower than the rate for the second quarter (after that had been revised up by 0.1 percentage point). Looking at the larger economies within the euro area, quarter-on-quarter growth accelerated in Germany (by 0.2 percentage point, to 0.6%) and Italy (by 0.1 percentage point, to 0.4%). GDP growth slowed in France (by 0.1 percentage point, to 0.5%) and Spain (also by 0.1 percentage point, to 0.8%), but in both cases the rates were still relatively favourable. The Dutch economy experienced the largest drop in growth (down by 1.1 percentage point, to 0.4%), but that was more a result of its particularly strong growth in the second quarter. Despite the dip in its quarterly growth, the euro area economy saw its year-on-year growth increase by 0.2 percentage point, to 2.6%.

Domestic demand was the main driver of activity growth in the euro area during the third quarter. Gross fixed capital formation growth contributed significantly to overall GDP growth, even though its rate in the third quarter (1.1%)² was markedly lower than in the second quarter. According to

incoming data on the composition of investment demand, the softening of fixed investment growth was largely caused by weaker growth in investment in intellectual property products (a relatively volatile component of investment demand). Construction investment growth also fell, but although investment in other buildings declined, residential investment growth accelerated. Investment in machinery and equipment grew at a faster pace. Private consumption continued to have a positive impact on economic growth, although its increase of 0.3% was slightly lower compared with the first and second quarters (0.5% in each case). Government consumption expenditure also increased moderately, and restocking, too, contributed positively to GDP growth. In contrast to the previous quarter, when they were a drag on growth, net exports made a slightly positive contribution in the third quarter, owing mainly to a softening of import growth and also to a modest increase in export growth.

Although households' assessments of conditions for making major purchases are currently very favourable, these results have not as yet translated into an acceleration of consumption growth. Nevertheless, private consumption growth is

Chart 4 GDP growth (constant prices; percentages)



Source: Macrobond.

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



Sources: Macrobond and NBS calculations.

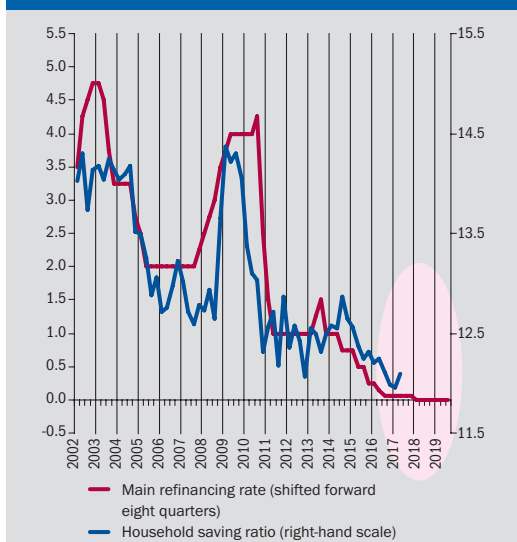
² Investment demand growth for the second quarter was revised up from 0.9% to 2.2%.



relatively robust, underpinned not only by the improving labour market situation, but also by the previous decline in the saving ratio. That downward trend, however, came to end in the second quarter³, and if the saving ratio does not begin falling again, it may weigh on private consumption growth. Even in that case, however, the labour market's buoyancy should continue supporting private consumption growth.

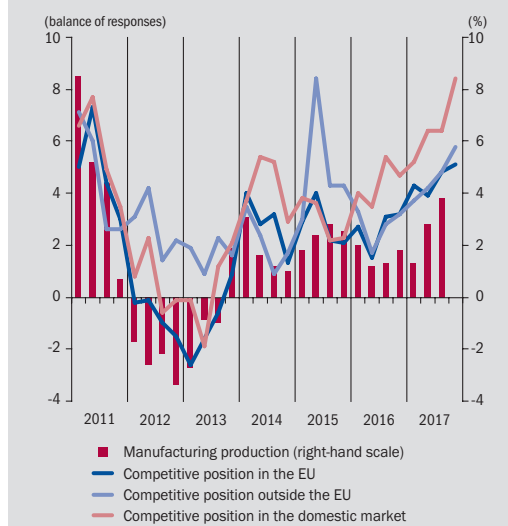
The further improvement in industrial firms' assessments of their competitive position indicates that economic growth will remain relatively strong. Their optimism about competitiveness in domestic markets showed the largest rise, and their assessments in regard to EU and extra-EU markets also brightened. The continuing upward trend in assessments of competitive position, along with the further strengthening of export

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



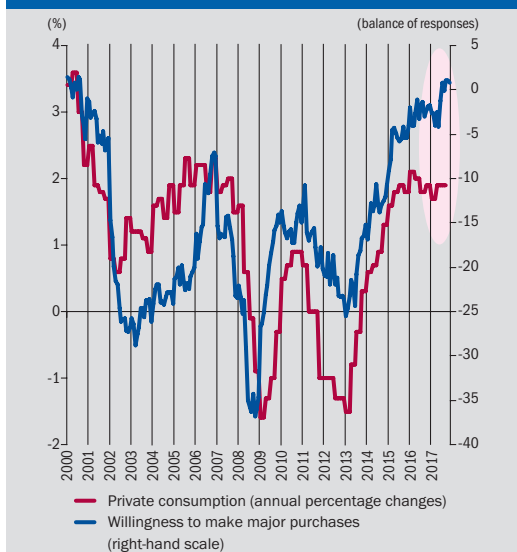
Source: Macrobond.

Chart 8 Industrial competitiveness (balance of responses) and manufacturing production (annual percentage changes)



Sources: European Commission, Eurostat and NBS calculations.

Chart 7 Private consumption and consumers' willingness to make major purchases



Source: Macrobond.

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



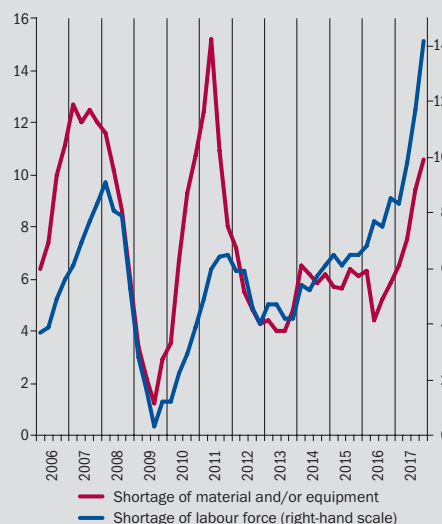
Sources: European Commission, Eurostat and NBS calculations.

³ Saving ratio data were available only up to the second quarter of 2017.

expectations, are probably related to firming of global economic growth and provide grounds to expect an increase in export performance.

The euro area's economic revival continues to be seen in industrial firms' assessments of what factors are limiting their production. Survey results for the fourth quarter of 2017 showed a further drop in the impact of 'insufficient demand', leaving this factor's level only marginally above historical lows. Concerns about 'financial constraints' fell sharply, correcting from the previous quarter's increase (and possibly reflecting reaction to the ECB Governing Council's decision of October 2017 to prolong the ECB's asset purchase programme until September 2018). The gradual shift in the economy's cyclical position was further evident from the relatively marked fourth-quarter increases in the importance of production factors: 'shortage of labour force' and 'shortage of material and/or equipment', with the former increasing for a sixth successive quarter and the latter for a fifth successive quarter. The impact of labour force shortages is now at all-time high levels. The overall assessment of production constraints points to further strengthening of the labour market, which may gradually put upward pressure on wages and inflation. At the same time, investment is expected to continue growing and to moderate the importance of shortages in material and equipment. The pick-up in investment

Chart 11 Factors limiting production in industry (percentages)

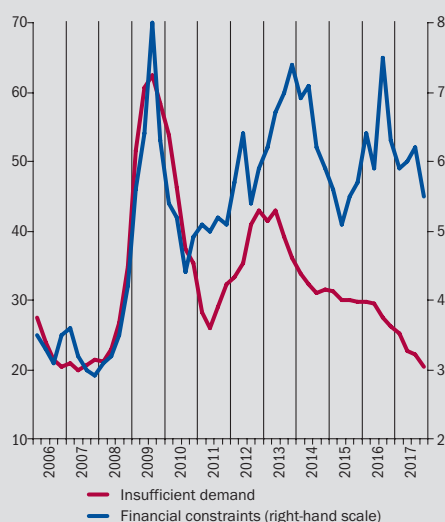


Source: Macrobond.

is also expected to reflect the implementation of investment plans postponed during the crisis period. Investment demand should also continue being supported by the accommodative monetary policy stance and financing conditions, as well as by the favourable demand situation.

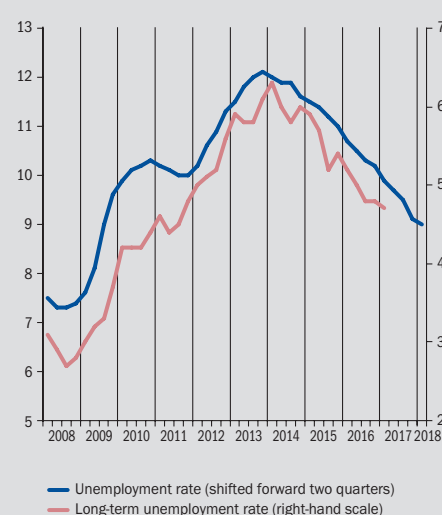
The labour market continued to strengthen in the third quarter of 2017. The unemployment

Chart 10 Factors limiting production in industry (percentages)



Source: Macrobond.

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

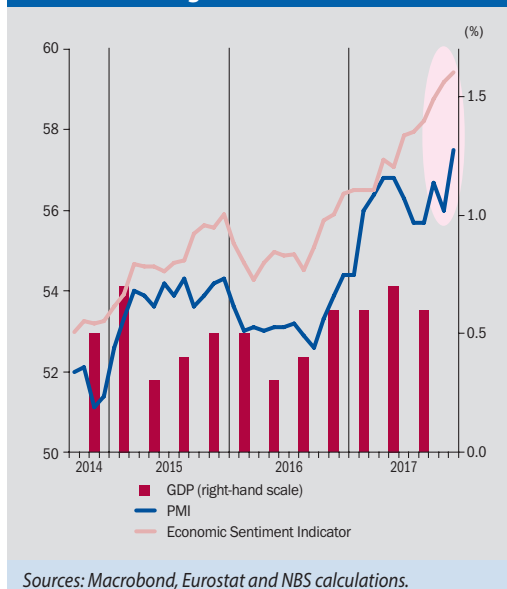


Source: Macrobond.

Chart 13 Employment expectations by sector (balance of responses)



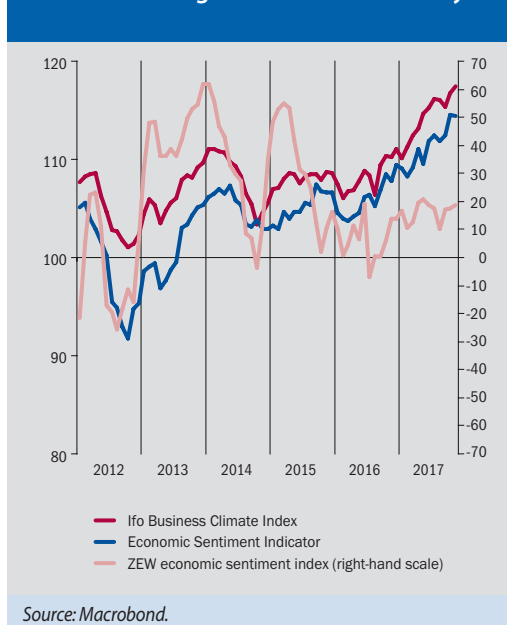
Chart 14 Leading indicators and quarterly euro area GDP growth



rate fell gradually, to stand at below 9% (8.9%) for the first time in almost nine years; in October it edged down again, to its lowest level (8.8%) since February 2009. Employment expectations continued to increase in the months from September to November and in all sectors apart from services, in which they fell in November after rising in the previous two months. Despite that decline, however, employment expectations in services remain close to pre-crisis levels, as do employment expectations in the construction sector. In both industry and retail trade, employment expectations are at the highest levels ever recorded for this indicator (going back to 1985).

Leading indicators for the euro area remain favourable, implying the continuance of robust economic growth. The European Commission's Economic Sentiment Indicator (ESI) increased in each month from June to November, to reach its highest level for 17 years. Similarly, the Eurocoin indicator rose from May to November, when a relatively large increase left the indicator at its highest level since April 2007. The Composite Purchasing Managers' Index (PMI) was more volatile; after increasing in September, it corrected downwards slightly in October and then surged in November, to stand at its highest level since April 2011. Its current level implies a moderate acceleration of economic growth, as occurred in the previous quarter. As regards indicators of

Chart 15 Leading indicators for Germany



economic activity in Germany, several of them are also favourable. Both the Ifo Business Climate Index (BCI) and the ESI show an upward trend despite recent dips (the BCI in August, the ESI in September). The BCI reached an all-time high in November, and the ESI, despite a marginal drop in November, is around its highest levels since mid-2011. Except for a stutter in October, the Composite PMI for Germany has been rising



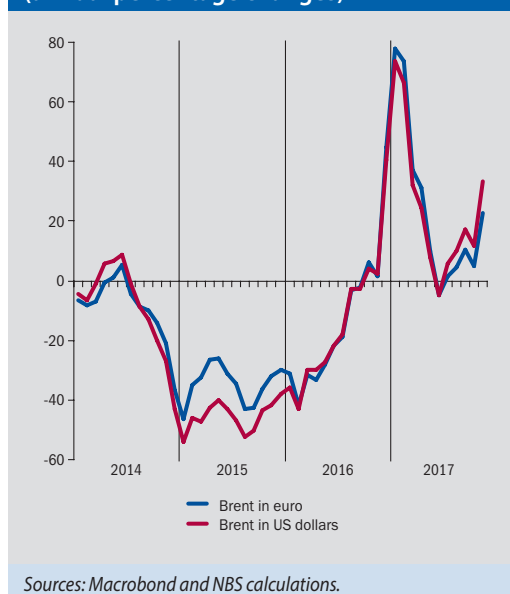
and its November level implied relatively robust economic growth. The signals from the ZEW economic sentiment index are less clear and less optimistic, since the indicator remained below its long-run average during the period under review. In general, however, most of the leading indicators for the euro area and for Germany point to positive economic trends and a potential slight acceleration in growth.

Euro area annual HICP inflation accelerated moderately from 1.3% in June 2017, to 1.5% in September, reflecting the impact of accelerating energy inflation in July and August and increases in both energy and food inflation in September. By contrast, services inflation moderated slightly. After falling slightly in October (to 1.4%), headline inflation rebounded in November, back to its September level.⁴ Again in the first two months of the fourth quarter, energy prices were the main determinant of the inflation rate, with their growth rate decelerating in October and accelerating significantly in November. At the same time, food inflation was higher than in September. Services inflation fell notably in October, and its impact along with that of a drop in non-energy industrial goods inflation offset the impact of increases in energy and food inflation. Annual inflation excluding energy and food accelerated in July, and then in September fell back

to its June level (1.1%). It slowed further in October, to 0.9%, under the downward impact of the services component and, to a lesser extent the non-energy industrial goods component, and remained at that level in November.

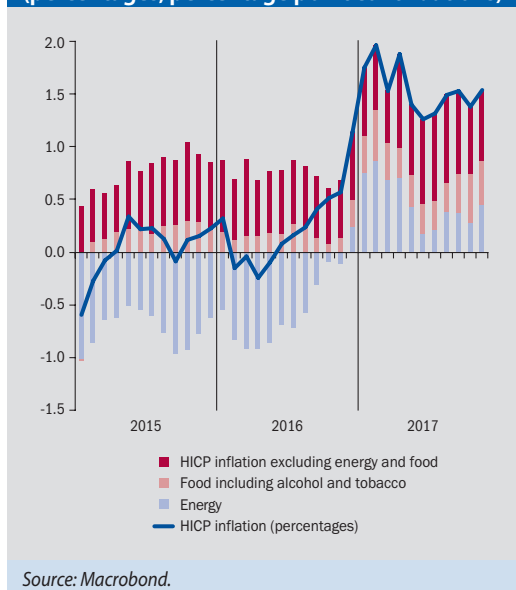
Energy inflation continued to be determined by year-on-year changes in global oil prices. The Brent crude oil price (US dollars per barrel) de-

Chart 17 Oil prices in euro and US dollars (annual percentage changes)



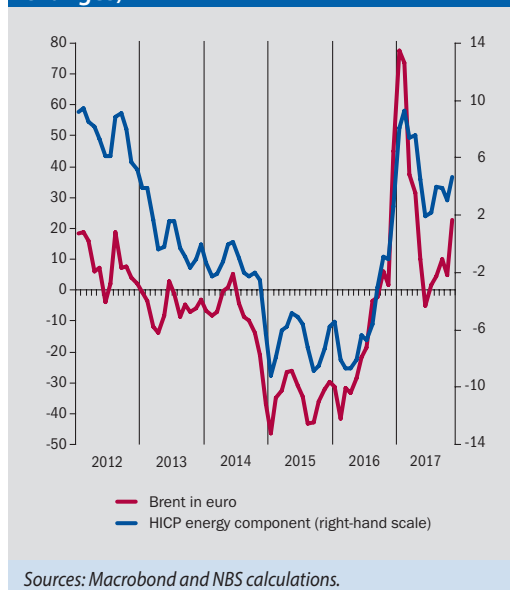
Sources: Macrobond and NBS calculations.

Chart 16 Annual HICP inflation rate and the contributions of selected components (percentages; percentage point contributions)



Source: Macrobond.

Chart 18 Oil prices in euro and the HICP energy component (annual percentage changes)



Sources: Macrobond and NBS calculations.

⁴ The data for November are based on Eurostat's flash estimate, which does not include estimates for the components of HICP inflation.



creased in June, year on year, before gradually increasing during the third quarter and climbing by more than 33% in November. That upward trend reflected a gradual increase in the oil price, from around USD 45 per barrel (in the second half of June) to more than USD 60 per barrel (November). The increase in US dollar oil prices was curbed by the euro's appreciation against the dollar. Due to that appreciation, November's year-on-year increase in the oil price in euro was around 10 percentage points lower than the increase in the dollar oil price.

After accelerating in the second quarter, the year-on-year increase in euro area food commodity prices⁵ began moderating from August. This trend was gradually reflected in food producer price inflation. As for processed food inflation, however, it was determined mainly by the acceleration of food commodity prices in past months. Therefore the year-on-year increase in processed food prices was 0.4 percentage point higher in September than in June, at 2.0%, and it accelerated further in October, to 2.1%. It remained at that level in November. Unprocessed food inflation was relatively volatile, declining significantly in July and August and then increasing again September, owing mainly to rises in fruit and vegetable prices. Overall food inflation accelerated from 1.4% in June to 1.9% in Sep-

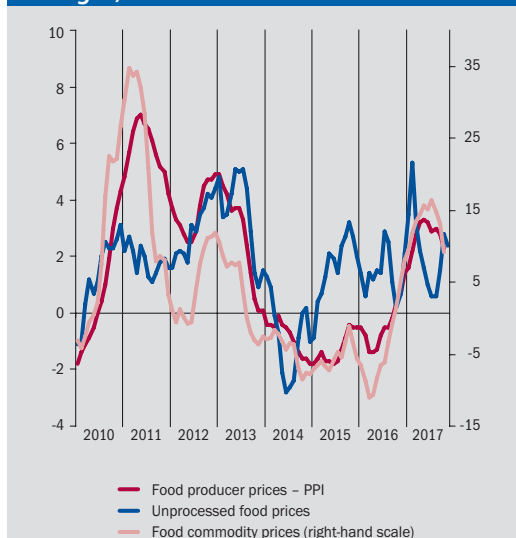
Chart 20 Food commodity prices and processed food prices (annual percentage changes)



Source: Macrobond.

tember, and then to 2.3% in October. The rate moderated slightly in November (to 2.2%). The months ahead are expected to see the recent trend in euro area food commodity prices have a downward impact on food inflation.

Chart 19 Food prices: commodity, producer and consumer prices (annual percentage changes)



Sources: Macrobond, ECB and NBS calculations.

Demand-pull inflation, i.e. headline inflation excluding energy and food, was broadly stable in the third quarter, with its rate in September (1.1%) the same as in June. The impact of a slight drop in the services component was offset by an increase in the non-energy industrial goods component. In October demand-pull inflation fell to 0.9%, since services inflation fell (by 0.3 percentage point, to 1.2%) and so did non-energy industrial goods inflation (by 0.1 percentage point, to 0.4%). Services inflation remains subdued and has been lagging behind consumer demand growth for an extended period of time. Its slowdown in October, however, was related to developments in volatile components of the consumption basket, in particular recreational and other services (mainly package tours) and transportation services. The rate of increase in prices of education also moderated. The decline in services inflation therefore reflected the impact of non-demand-pull factors. Past appreciation of the exchange rate weighed on the year-on-year decrease in import prices of consumer goods and, with a lag, on prices of goods

⁵ Farm-gate and wholesale market prices (source: ECB).

in the consumption basket. The persisting and relatively strong year-on-year appreciation of the euro's nominal effective exchange rate (around 5% in November) is expected, via import prices, to remain a drag on consumer price inflation in the period ahead.

Selling price expectations remain relatively elevated in industry, services, and retail trade, and their trend, despite some volatility, is still moderately upward. Price expectations have probably been supported by industrial firms' favourable assessments of their competitive position as well

Chart 21 Consumer demand and services price inflation (annual percentage changes)

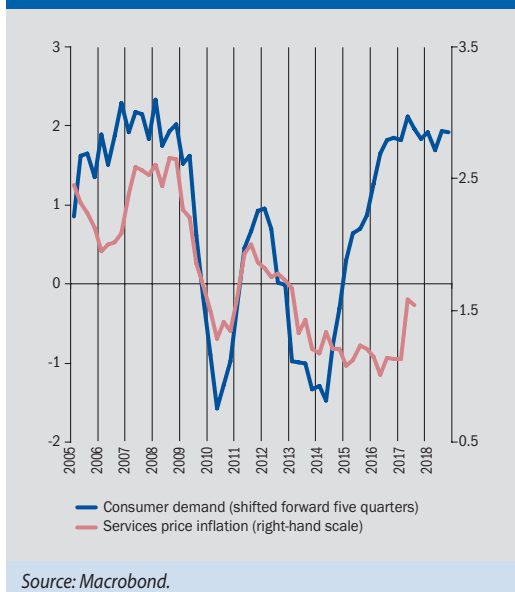


Chart 23 Price expectations in industry, services and retail trade (balance of responses)

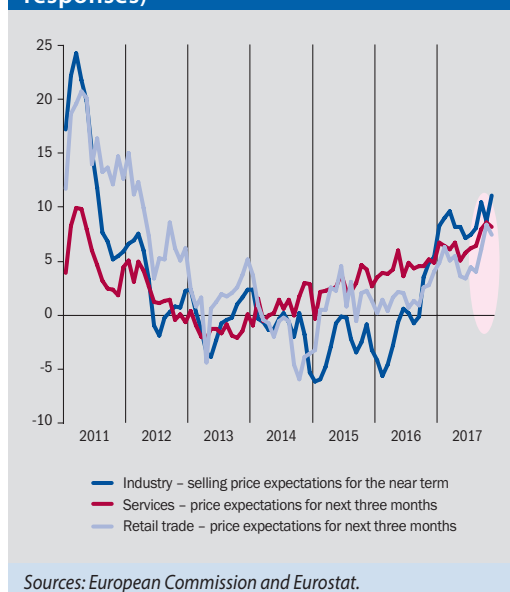
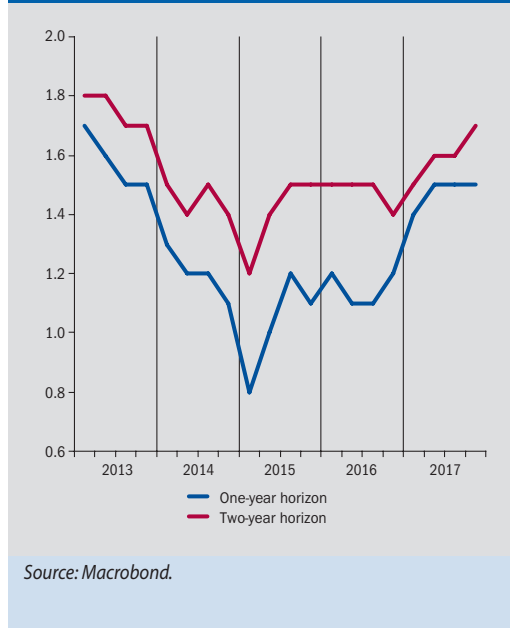


Chart 22 Non-energy industrial goods prices and the nominal exchange rate (annual percentage changes)



Chart 24 HICP inflation - expectations according to the ECB's Survey of Professional Forecasters





as by the pick-up in economic growth and in demand. The strengthening of short-term inflation expectations (for a one-year-ahead horizon) was also evident from the ECB's Survey of Professional Forecasters. On the other hand, inflation expectations for the two-year-ahead horizon were unchanged.

At its meetings in September, October and December 2017, 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 expects the rates to remain at their present levels for an extended period of time, and well past the horizon of the ECB's net asset purchases.⁶

On 20 September 2017 the Governing Council decided to develop a euro unsecured overnight interest rate. The rate will be produced before 2020 and will complement existing benchmark rates produced by the private sector. The key features of this new overnight interest rate will be communicated to market participants in the course of 2018.

Box 1

THE EXPANDED ASSET PURCHASE PROGRAMME – FROM LAUNCH TO LATEST RECALIBRATION⁷

The European Central Bank (ECB), in pursuit of its mandate, has been responsive to events and has employed a broad range of standard and non-standard monetary policy instruments. Seeking to ensure the functioning of the monetary policy transmission mechanism and to support lending to the real economy in the euro area, the ECB in October 2014 launched its third covered bond purchasing programme (CBPP3), under which it began purchasing a broad portfolio of euro-denominated covered bonds issued by monetary financial institutions (MFIs) domiciled in the euro area; then, in November 2014, the ECB launched the asset-backed securities purchase programme (ABSPP), under which it began to buy a broad portfolio of simple and asset-backed securities where the underlying assets are claims on the euro area's non-financial private sector.

In January 2015 the ECB's Governing Council announced an expansion of its asset purchase programme (APP) to address risks of too prolonged a period of low inflation, and so to support the fulfilment of its price stability mandate. The expanded APP would encompass the ABSPP, CBPP3 and, from March 2015, a new public sector purchase programme (PSPP). The decision to expand the APP was taken at a time when both actual and expect-

ed inflation were moving further into negative territory than they had ever been before. There were also fears that this situation could spill over into wages and pricing. This programme was designed to provide a monetary stimulus to the economy in a context where key ECB interest rates were at their lower bound. Its purpose was to further ease monetary and financial conditions, making access to finance cheaper for firms and households. This would support investment and consumption, and ultimately contribute to a return of inflation rates towards 2%. From March 2015 to March 2016 the Eurosystem purchased securities under the APP at a pace of €60 billion per month. Furthermore, in December 2015, the Governing Council decided to reinvest the principal payments on the securities purchased under the APP. This step was intended to contribute both to favourable liquidity conditions and to an appropriate monetary policy stance.

In response to increased risks to the price stability objective and to expectations that oil price trends would keep inflation very subdued, the Governing Council decided in March 2016 to increase monthly purchases under the APP to €80 billion from April 2016 to March 2017. At the same time, the Governing Council decided to add a corporate sector purchase

⁶ Details of additional monetary policy decisions are provided in Box 1.

⁷ Source: ECB.



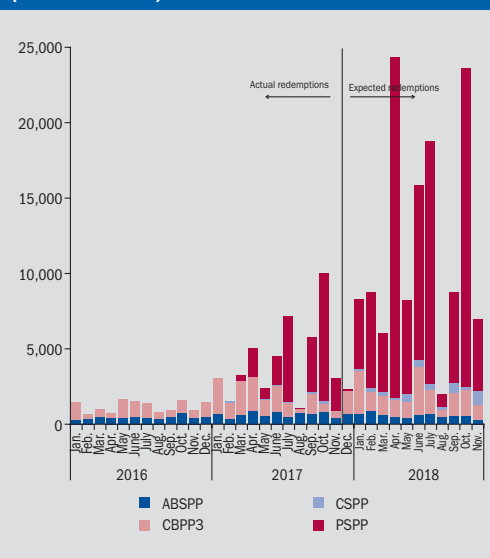
programme (CSPP) to the APP. In June 2016 the Eurosystem started to make purchases under the CSPP. The new programme was intended to operate in conjunction with the other non-standard measures so as to further strengthen the pass-through of the Eurosystem's asset purchases to the financing conditions of the real economy, thereby stimulating euro area economic growth and accelerating the return of inflation rates to levels below, but close to, 2% in the medium term.

In December 2016, in response to persistently subdued inflation pressures, the Governing Council decided that APP purchases would be continued at the monthly pace of €80 billion until the end of March 2017 and that they would be extended until December 2017 at a reduced monthly pace of €60 billion. This extension of the APP was calibrated to preserve the very substantial degree of monetary accommodation. The Governing Council also said that the APP would be prolonged, if necessary, and in any case until the Governing Council saw a sustained adjustment in the path of inflation consistent with its inflation aim. The Governing Council also reiterated its readiness to increase the APP in terms of size and/or duration if the outlook became less favourable, or if financial conditions become inconsistent with further progress towards a sustained adjustment in the path of inflation.

At its meeting on 26 October 2017 the Governing Council decided to recalibrate the APP. According to the official post-meeting statement, the decision was taken to preserve the very favourable financing conditions that were still needed for a sustained return of inflation rates towards levels that are below, but close to, 2%. The recalibration also reflected growing confidence in the gradual convergence of inflation rates towards the inflation aim, on account of the increasingly robust and broad-based economic expansion, an uptick in measures of underlying inflation and the continued effective pass-through of monetary policy measures to the financing conditions of the real economy. At the same time, domestic price pressures were still muted overall

and the economic outlook and the path of inflation remained conditional on continued support from monetary policy. Therefore, an ample degree of monetary stimulus remained necessary for underlying inflation pressures to continue to build up and support headline inflation developments over the medium term, the statement said. On the basis of these facts, the Governing Council decided that APP purchases would continue at the monthly pace of €60 billion until the end of December 2017 and at reduced rate of €30 billion from January 2018 until the end of September 2018, or beyond, if necessary. In any case, until the Governing Council sees a sustained adjustment in the path of inflation consistent with its inflation aim, it stands ready to increase the APP in terms of size and/or duration. It was also decided that the Eurosystem will reinvest the principal payments from maturing securities purchased under the APP for an extended period of time after the end of its net asset purchases, and in any case for as long as necessary. This, in the view of the Governing Council, will contribute both to favourable liquidity conditions and to an appropriate

Chart A Actual and expected redemptions (EUR millions)



Source: ECB.

Note: Reinvestments of the principal payments from maturing securities may differ from the expected redemptions owing to payments being made before or after their due date. The expected redemptions are estimated on the basis of end-month data.



monetary policy stance. The Governing Council also decided in October that it will publish additional data on redemptions and reinvestments, with the aim of supporting continued smooth implementation of asset purchases. It will publish, with a monthly frequency, the expected monthly redemption amounts for the APP over a rolling 12-month horizon, as well as additional details on the implementation of the programme. This, according to the Gov-

erning Council, reflects the ECB's commitment to increase transparency further. The redemption dataset will include, besides information about reinvestments, the estimated cumulative monthly redemptions for each of the four individual components of the APP, i.e. the ABSPP, the CBPP3, the PSPP, and, for outright purchases of investment-grade euro-denominated bonds issued by non-bank corporations established in the euro area, the CSPP.

5 THE CZECH REPUBLIC, HUNGARY AND POLAND

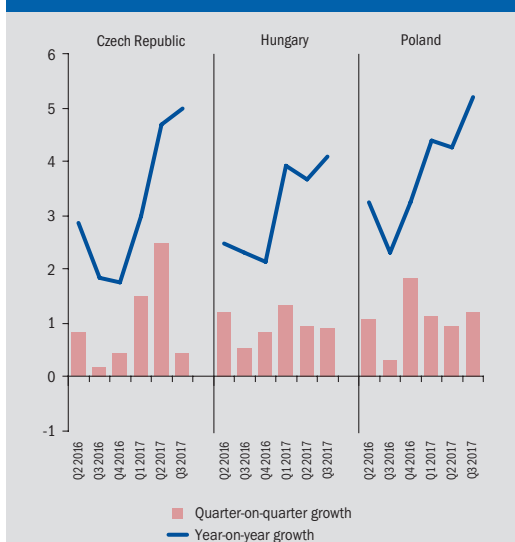
In all three reviewed economies, annual GDP growth was higher in the third quarter of 2017 than in the second quarter. It accelerated moderately in the Czech Republic (by 0.3 percentage point, to 5.0%), slightly more strongly in Hunga-

ry (by 0.4 percentage point, to 4.1%), and most sharply in Poland (by 0.9 percentage point, to 5.2%).

In quarter-on-quarter terms, Poland was the only one of the reviewed countries in which GDP growth was higher in the third quarter of 2017 than in the second quarter, with the rate increasing by 0.3 percentage point to 1.2%. Hungary's economic growth remained unchanged from the previous quarter, at 0.9%, while the Czech Republic's was significantly lower, by 2.0 percentage points, at 0.5%. In the Czech Republic, all components contributed to the slowdown in GDP growth with the exceptions of changes in inventories (the only component whose impact was more positive compared with the previous quarter) and government consumption expenditure, whose contribution was unchanged. Investment demand recorded the largest drop in growth, and household final consumption growth also fell. Net exports had a negative impact on GDP growth, as exports fell more than imports. In Hungary, GDP growth remained unchanged since the negative impact of net exports and decline in the positive contributions of household final consumption and investment demand were offset by the positive contributions of government consumption and changes in inventories. In Poland, the increase in GDP growth was driven mainly by net exports and, to a lesser extent, by investment demand. Changes in inventories had a negative impact. Household final consumption growth was the same as in the previous quarter, while government consumption growth was lower.

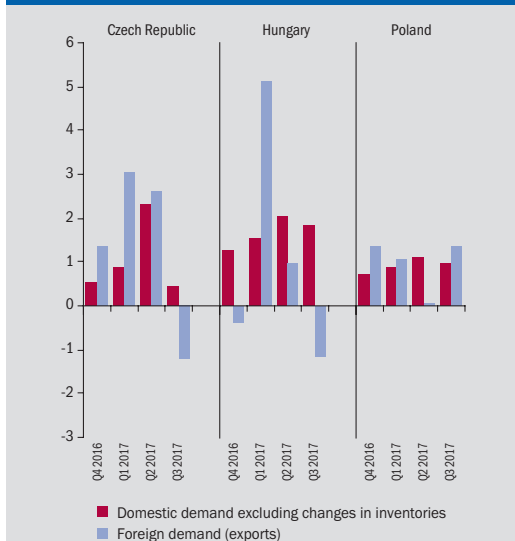
In all three countries, annual consumer price inflation was higher in September 2017 than in June 2017. The Czech Republic saw headline inflation increase by 0.1 percentage point, to 2.5%, Hungary by 0.5 percentage point, to 2.5%, and Poland by 0.3 percentage point, to 1.6%. In the **Czech Republic**, the acceleration of headline inflation was driven mainly by the non-energy industrial goods and energy components. The contributions of both processed and unprocessed food inflation were similar to

Chart 25 GDP (percentage changes)



Source: Eurostat.

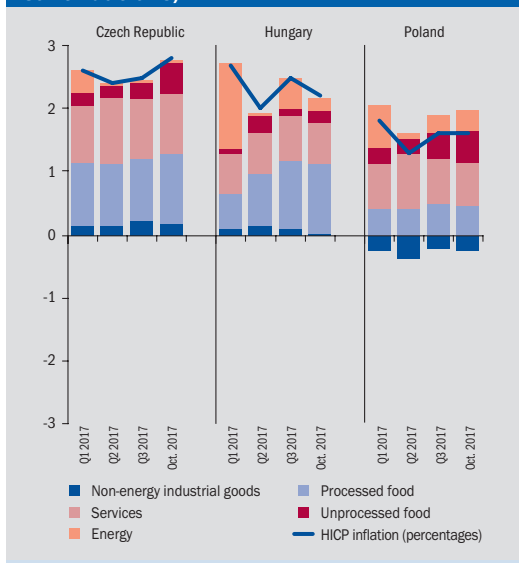
Chart 26 Contributions to quarterly GDP growth (percentage points)



Sources: Eurostat and NBS calculations.

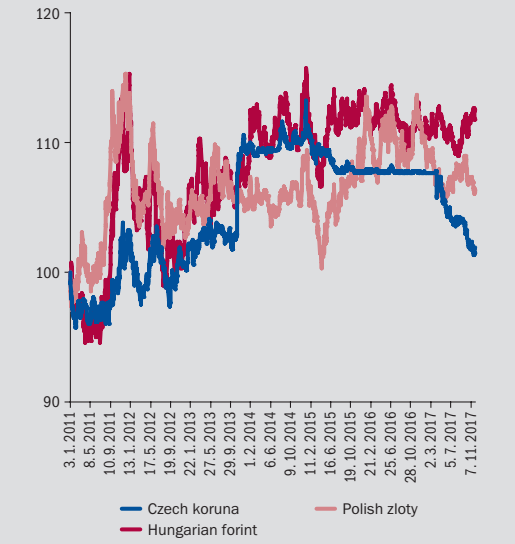
their levels in the previous quarter. Services inflation was the only component whose impact fell. In October, consumer price inflation in the Czech Republic increased slightly from its rate in September, owing to a stronger increase in prices of food, in particular unprocessed food. In **Hungary**, the difference between the consumer price inflation rates in June and September was caused mainly by an increase in energy inflation and, to a lesser extent, by increases in processed food inflation and services inflation. On the other hand, the positive contributions of the non-energy industrial goods and unprocessed food components were both lower in September than in June. In October, Hungary's headline inflation rate fell on the basis of lower positive contributions from all components other than processed food and unprocessed food. In **Poland**, the higher consumer price inflation in September, compared with June, was supported by all components other than services inflation. In the case of non-energy industrial goods prices, their rate of decrease moderated. The other components apart from services recorded stronger increases. In October, the headline inflation rate in Poland remained approximately the same, with the only notable change being an increase in unprocessed food inflation.

Chart 27 HICP inflation and its composition (percentages; percentage point contributions)



Sources: Eurostat and NBS calculations.

Chart 28 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.

Against the euro, the Czech koruna stood stronger at the end of the third quarter of 2017 than at the end of the second quarter (by 0.82%), while both the Hungarian forint and Polish zloty were weaker (by 0.55% and 1.85%, respectively).

The Czech koruna, which in the second quarter appreciated significantly against the euro following the Czech central bank's decision to end the exchange rate floor, strengthened only slightly in the third quarter and never appreciated below CZK 26 to the euro. As in the previous quarter, the impact of positive domestic economic news on the koruna's exchange rate was largely offset by the 'overboughtness' of the koruna market. The movement of the forint and zloty in the third quarter reflected mostly upward trends in financial market sentiment, with investment risk affected mainly by expectations surrounding the monetary policy stances of major world central banks (although the expected timing of the ECB's tightening of monetary policy was put back), by macroeconomic data, and by the state of the 'Brexit' negotiations between the United Kingdom and the European Union. The forint's depreciation stemmed from central bank statements about making monetary policy more accommodative (by lowering the overnight deposit rate and by further reducing the cap on three-month



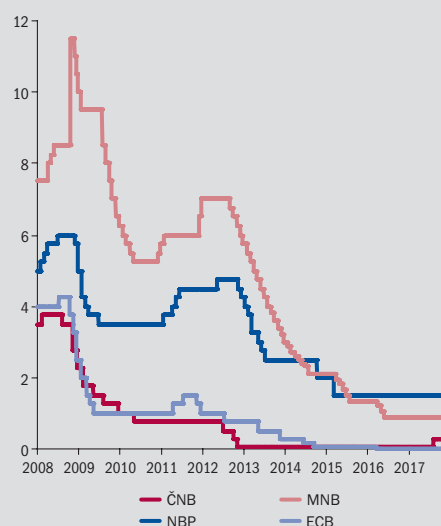
deposits). In the case of the zloty, its depreciation was due mainly to non-economic factors; most of the macroeconomic data were favourable.

Among the reviewed countries' central banks, the Czech and Hungarian institutions both adjusted their monetary policy rates in the third quarter of 2017, but in the case of the Hungarian central bank, only in respect of its overnight deposit rate.

Česká národní banka (ČNB) decided to increase its main interest rate (the two-week repo rate) by 20 basis points to 0.25% with effect from 4 August 2017. It also increased the Lombard rate, by 25 basis points to 0.50%, but kept the discount rate unchanged at 0.05%. According to the ČNB, the decision was based on developments in the Czech economy and on the central bank's macroeconomic forecast, which indicated that the domestic economy no longer required stimulus in the form of technical zero interest rates. Although the koruna's appreciation had led to a tightening of the exchange rate component of monetary policy conditions, the interest rate component still had scope to be tightened. At the same time, the central bank considered the raising of interest rates to be a further step in the return to standard monetary policy-making. Future rate hikes would be conditional on the evolution of all key macroeconomic variables. In line with that position, the central bank increased the two-week repo rate again in November, by a further 25 basis points. In Hungary, the **Magyar Nemzeti Bank (MNB)** only partly adjusted its key interest rates in the third quarter of 2017, cutting the overnight deposit rate by 10 basis points, to -0.15%, with effect from 20 September 2017. The other key rates (the base rate, the overnight collateralised lending rate, and the one-week collateralised lending rate) were all left unchanged at 0.9%. In explaining the reason for its decision, the MNB Monetary Council pointed out that the inflation target was expected to be met by mid-2019, i.e. one quarter later than previously projected, and that the external environment posed a downside risk to the inflation outlook. The Monetary Council confirmed that it stood ready to ease monetary conditions further if inflation remained below target, including by means of unconventional instruments. Since October 2016 the MNB has capped the use of its three-month deposit facility, seeing the cap as an integral element of its monetary policy toolkit. This measure is intended to crowd out additional liquidity from

the deposit facility. The upper limit on the stock of three-month deposits held with the MNS as at the end of the third quarter of 2017 was HUF 300 billion (set by the Monetary Council at its meeting in June). At its September meeting, the Monetary Council set a new upper limit from the end of 2017. In November the Monetary Council decided to introduce additional unconventional measures in order to further loosen monetary policy (the measures, to begin in 2018, consist of unconditional interest rate swap facilities with five- and ten-year maturities, and a targeted programme for the purchasing of mortgage bonds with maturities of three years or more). In Poland, **Narodowy Bank Polski (NBP)** was the only one of the reviewed central banks that left its monetary policy rates unchanged in the third quarter of 2017 (the reference rate remained at 1.5%). In the opinion of the NBP's Monetary Policy Council (MPC), inflation will remain moderate in following quarters, given that domestic inflationary pressure stemming from improving domestic economic conditions is expected to increase only gradually and that import price growth should decline due to the stabilisation of energy commodity prices and low inflationary pressure abroad. The MPC added that, given the available data and forecasts, the current level of interest rates was conducive to keeping the Polish economy on a sustainable growth path and to maintaining macroeconomic equilibrium.

Chart 29 Key interest rates of national central banks (percentages)



Sources: National central banks and the ECB.



SUMMARY OF GDP GROWTH PROJECTIONS OF SELECTED INSTITUTIONS

Table 1 Global economy

	Release	2016		2017		2018		2019	
IMF	October 2017	3.2	(=)	3.6	(0.1)	3.7	(0.1)	-	-
OECD	November 2017	3.1	(=)	3.6	(0.1)	3.7	(=)	3.6	-
EC	November 2017	-	-	3.5	(0.1)	3.7	(0.1)	3.7	-
ECB ¹⁾	December 2017	-	-	3.7	(=)	3.9	(0.1)	3.8	(=)

Table 2 United States

	Release	2016		2017		2018		2019	
IMF	October 2017	1.5	(-0.1)	2.2	(0.1)	2.3	(0.2)	-	-
OECD	November 2017	1.5	(=)	2.2	(0.1)	2.5	(0.1)	2.1	-
EC	November 2017	1.5	(-0.1)	2.2	(=)	2.3	(=)	2.1	-
Federal Reserve	September 2017	-	-	2.35	(0.2)	2.2	(0.15)	1.9	(=)

Table 3 Euro area

	Release	2016		2017		2018		2019	
IMF	October 2017	1.8	(=)	2.1	(0.2)	1.9	(0.2)	-	-
OECD	November 2017	1.8	(=)	2.4	(0.3)	2.1	(0.2)	1.9	-
EC	November 2017	1.8	(=)	2.2	(0.5)	2.1	(0.3)	1.9	-
ECB	December 2017	-	-	2.4	(0.2)	2.3	(0.5)	1.9	(0.2)

Table 4 Czech Republic

	Release	2016		2017		2018		2019	
IMF	October 2017	2.6	(0.2)	3.5	(0.7)	2.6	(0.4)	-	-
OECD	November 2017	2.5	(0.2)	4.3	(1.4)	3.5	(0.9)	3.2	-
EC	November 2017	2.6	(0.2)	4.3	(1.7)	3.0	(0.3)	2.9	-
ČNB	November 2017	2.5	(=)	4.5	(0.9)	3.4	(0.2)	2.1	(=)

Table 5 Hungary

	Release	2016		2017		2018		2019	
IMF	October 2017	2.0	(=)	3.2	(0.3)	3.4	(0.4)	-	-
OECD	November 2017	2.2	(0.3)	3.9	(0.1)	3.6	(0.2)	2.8	-
EC	November 2017	2.2	(0.2)	3.7	(0.1)	3.6	(0.1)	3.1	-
MNB	September 2017	2.0	(=)	3.6	(=)	3.7	(=)	3.2	(=)

Table 6 Poland

	Release	2016		2017		2018		2019	
IMF	October 2017	2.6	(-0.2)	3.8	(0.4)	3.3	(0.1)	-	-
OECD	November 2017	2.9	(0.2)	4.3	(0.7)	3.5	(0.4)	3.2	-
EC	November 2017	2.9	(0.2)	4.2	(0.7)	3.8	(0.6)	3.4	-
NBP	November 2017	2.8	(0.1)	4.2	(0.2)	3.6	(0.1)	3.2	(-0.1)

1) Global economic growth excluding the euro area.

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