EUROPEAN CENTRAL BANK

EUROSYSTEM

Economic Bulletin

Issue 8 / 2018

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Economic and monetary developments

Overview

At its monetary policy meeting on 13 December, the Governing Council decided to end the net asset purchases in December 2018, while keeping the key ECB interest rates unchanged and enhancing the forward guidance on reinvestment. While incoming information has been weaker than expected, reflecting softer external demand but also some country and sector-specific factors, the underlying strength of domestic demand continues to underpin the euro area expansion and gradually rising inflation pressures. This supports the Governing Council's confidence that the sustained convergence of inflation to its aim will proceed and will be maintained even after the end of the net asset purchases. At the same time, uncertainties related to geopolitical factors, the threat of protectionism, vulnerabilities in emerging markets and financial market volatility remain prominent. Therefore, significant monetary policy stimulus is still needed to support the further build-up of domestic price pressures and headline inflation developments over the medium term. The Governing Council's forward guidance on the key ECB interest rates, reinforced by the reinvestments of the sizeable stock of acquired assets, continues to provide the necessary degree of monetary accommodation for the sustained convergence of inflation to its aim. In any event, the Governing Council stands ready to adjust all of its instruments, as appropriate, to ensure that inflation continues to move towards its inflation aim in a sustained manner.

Economic and monetary assessment at the time of the Governing Council meeting of 13 December 2018

While global economic activity has remained resilient, it has become more uneven and signs of moderating momentum are emerging. The maturing global economic cycle, waning policy support across advanced economies and the impact of tariffs between the United States and China are weighing on global activity. Global trade growth has decelerated somewhat, and uncertainties about future trade relations have risen. At the same time, financial conditions remain accommodative in advanced economies, whereas they have tightened for some emerging markets. Looking ahead, global economic activity is expected to decelerate in 2019 and remain steady thereafter. Global inflationary pressures are expected to rise slowly as spare capacity diminishes.

Long-term risk-free rates have declined in the context of heightened geopolitical uncertainty and a perceived deterioration in the macroeconomic outlook since the Governing Council's meeting in September 2018. Euro area sovereign bond spreads have been largely stable, with the exception of those for Italy, which have exhibited considerable volatility. Although corporate earnings expectations remain robust, some downward revisions, in addition to a repricing of risk, have led to lower equity and bond prices of euro area corporations. In foreign exchange markets, the euro has broadly weakened in trade-weighted terms.

Euro area real GDP increased by 0.2%, quarter on quarter, in the third quarter of 2018, following growth of 0.4% in the previous two quarters. The latest data and survey results have been weaker than expected, reflecting a diminishing contribution from external demand and some country and sector-specific factors. While some of these factors are likely to unwind, this may suggest some slower growth momentum ahead. At the same time, domestic demand, also backed by the Governing Council's accommodative monetary policy stance, continues to underpin the economic expansion in the euro area. The strength of the labour market, as reflected in ongoing employment gains and rising wages, still supports private consumption. Moreover, business investment is benefiting from domestic demand, favourable financing conditions and improving balance sheets. Residential investment remains robust. In addition, the expansion in global activity is still expected to continue, supporting euro area exports, although at a slower pace.

This assessment is broadly reflected in the December 2018 Eurosystem staff macroeconomic projections for the euro area. These projections foresee annual real GDP increasing by 1.9% in 2018, 1.7% in 2019, 1.7% in 2020 and 1.5% in 2021. Compared with the September 2018 ECB staff macroeconomic projections, the outlook for real GDP growth has been revised slightly down in 2018 and 2019. The risks surrounding the euro area growth outlook can still be assessed as broadly balanced. However, the balance of risks is moving to the downside owing to the persistence of uncertainties related to geopolitical factors, the threat of protectionism, vulnerabilities in emerging markets and financial market volatility.

According to Eurostat's flash estimate, euro area annual HICP inflation declined to 2.0% in November 2018, from 2.2% in October. On the basis of current futures prices for oil, headline inflation is likely to decrease over the coming months. Measures of underlying inflation remain generally muted, but domestic cost pressures are continuing to strengthen and broaden amid high levels of capacity utilisation and tightening labour markets, which is pushing up wage growth. Looking ahead, underlying inflation is expected to increase over the medium term, supported by the ECB's monetary policy measures, the ongoing economic expansion and rising wage growth.

This assessment is also broadly reflected in the December 2018 Eurosystem staff macroeconomic projections for the euro area, which foresee annual HICP inflation at 1.8% in 2018, 1.6% in 2019, 1.7% in 2020 and 1.8% in 2021. Compared with the September 2018 ECB staff macroeconomic projections, the outlook for HICP inflation has been revised slightly up for 2018 and down for 2019. HICP inflation excluding energy and food is expected to rise from 1.0% in 2018 to 1.4% in 2019, 1.6% in 2020 and 1.8% in 2021.

Broad money (M3) growth picked up in October 2018, amid an ongoing shift towards more self-sustained sources of money creation as the monthly net asset purchases under the asset purchase programme were reduced. Lending to the private sector continued to grow and remained the largest driver of broad money growth, albeit with some signs of slowing down, mainly for loans to non-financial corporations. At the same time, bank funding and lending conditions have remained very favourable. The pass-through of the monetary policy measures put in place since June 2014 continues to significantly support borrowing conditions for firms and households, access to financing – in particular for small and medium-sized enterprises – and credit flows across the euro area.

The euro area general government budget deficit is projected to have declined significantly in 2018 but to increase somewhat next year. The fall in 2018 was mainly the result of favourable cyclical conditions and declining interest payments. The aggregate fiscal stance for the euro area is expected to be broadly neutral in 2018, to loosen in 2019 and 2020, and to turn neutral again in 2021.

Monetary policy decisions

Based on the regular economic and monetary analyses, the Governing Council made the following decisions. The Governing Council decided to keep the key ECB interest rates unchanged and continues to expect them to remain at their present levels at least through the summer of 2019, and in any case for as long as necessary to ensure the continued sustained convergence of inflation to levels that are below, but close to, 2% over the medium term. Regarding non-standard monetary policy measures, the Governing Council decided that net purchases under the asset purchase programme (APP) will end in December 2018. At the same time, the Governing Council enhanced its forward guidance on reinvestment. Accordingly, the Governing Council intends to continue reinvesting, in full, the principal payments from maturing securities purchased under the APP for an extended period of time past the date when the Governing Council starts raising the key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

1 External environment

While global economic activity has remained resilient, it has become more uneven and signs of moderating momentum are emerging. The maturing global economic cycle, waning policy support across advanced economies and the impact of tariffs between the United States and China are weighing on global activity. At the same time, financial conditions remain accommodative in advanced economies, while they have remained tight for some emerging markets. Global trade growth has decelerated somewhat, and uncertainties about future trade relations have risen. Looking ahead, global economic activity is expected to decelerate in 2019 and be steady over the following two years, as policy support gradually diminishes and China transitions to a lower growth path. Global inflationary pressures are expected to rise slowly as spare capacity diminishes. Risks to global activity are skewed to the downside.

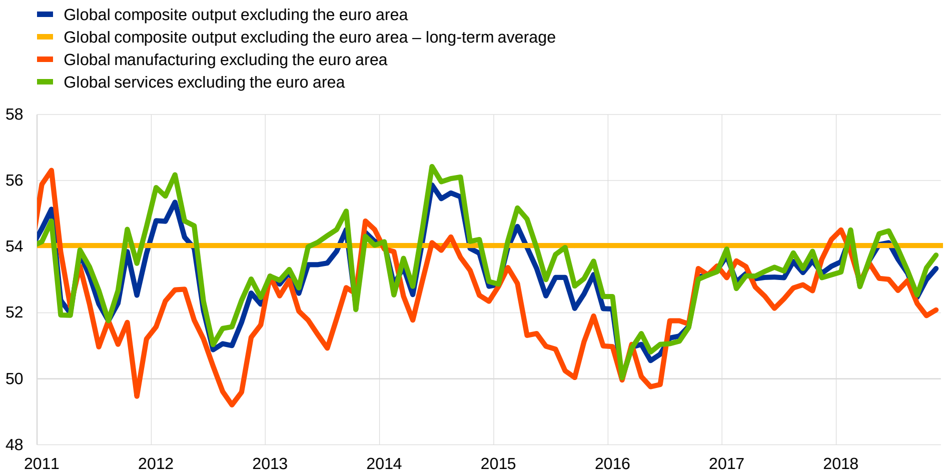
Global economic activity and trade

While global economic activity has remained resilient, signs of moderating momentum are emerging. The global economy continued to expand at a steady pace in the second quarter of 2018, supported by a rebound in activity in several advanced economies, including the United States, the United Kingdom and Japan. The growth rate for the third quarter in the United States still points to resilient activity, while in the United Kingdom GDP growth was strong, partially reflecting an increase in government spending; the Japanese economy contracted in the same period, which was largely due to temporary factors related to natural disasters. Across emerging market economies (EMEs), the growth picture is more mixed. Economic activity held up in China in the third quarter, but weakened substantially in EMEs that had been subject to financial turmoil earlier this year.

Survey-based evidence suggests that activity will decelerate in the near term. The global composite output Purchasing Managers' Index (PMI) excluding the euro area has been gradually retreating since early 2018, driven mainly by a continued deceleration in global manufacturing activity (Chart 1). The services sector performed better than manufacturing in the year to November, notwithstanding some volatility in the figures. Consumer confidence has recently declined, albeit from high levels.

Chart 1
Global composite output PMI

(diffusion indices)



Sources: Markit and ECB calculations.
Notes: The latest observations are for November 2018. "Long-term average" refers to the period from January 1999 to November 2018.

Financial conditions in advanced economies remain accommodative, while the picture for EMEs is relatively mixed. In China, financial conditions have eased owing to action by the People's Bank of China reacting to the worsening outlook for activity, amid domestic imbalances and rising trade tensions. However, financial conditions in the EMEs that were among the hardest hit by the summer financial market turbulence – including Argentina and Turkey – remain tight and are weighing significantly on their outlook for activity. Overall, global risk sentiment has not fully recovered since the summer months and financial investors have been discriminating against EMEs with significant imbalances, high external financing needs and limited room for policy support. Looking ahead, a further rise in US interest rates as the Federal Open Market Committee proceeds with its gradual policy normalisation, coupled with a stronger dollar, could lead to a further tightening of financial conditions across EMEs.

In the near term, the current cyclical momentum is expected to support global activity. Advanced economies continue to benefit from accommodative monetary policies and supportive financial conditions. A sizeable procyclical fiscal stimulus in the United States, including lower taxes and increased expenditure, will also provide an impetus to global growth, amid a broader shift towards more expansionary fiscal policies among advanced economies.

Looking further ahead, activity is projected to decelerate in 2019 and be steady in the following two years. This reflects the projected cyclical slowdown across advanced economies and in China. Output gaps are already closed in many advanced economies, and spare capacity is expected to narrow across emerging market economies over the medium term. The intensification of trade tensions between the United States and China should weigh on activity in both countries. While the global impact is still judged to be relatively limited, heightened uncertainty about future trade relations may adversely affect confidence and investment. Moreover, policy support is likely to gradually diminish. For the United States, the baseline projection is that the boost to growth from fiscal stimulus will peak in 2019; in Japan fiscal stimulus is already expected to fade this year. On the monetary policy side, a gradual tightening is expected in the United States, as reflected in current financial market prices, and should contribute to a modest tightening of global financial conditions. The expected path for global activity also reflects a recovery in several emerging market economies, especially those affected by the recent financial market turbulence. Overall, the pace of global expansion is expected to settle at rates below those seen before the 2007-08 financial crisis.

Turning to developments across countries, in the United States activity is expected to remain resilient in the near term. Strong labour market conditions, solid corporate profits and still favourable financial conditions should support growth. The procyclical fiscal stimulus will continue to underpin the favourable growth outlook next year, while the bilateral trade conflict with China is expected to weigh somewhat on activity and investment. Moreover, the mid-term elections resulted in split control of Congress, thereby increasing the likelihood of legislative gridlock.

In Japan, activity is expected to rebound in the near term, but the pace of the economic expansion is projected to decelerate gradually thereafter. The adverse impact of a series of natural disasters weighed on activity in the third quarter of 2018, although growth is expected to recover in the fourth quarter. Looking ahead, activity will benefit from accommodative monetary policy, but increasingly binding capacity constraints are expected to weigh on growth. Wages are rising moderately, amid a tight labour market, which should support household spending.

In the United Kingdom, the outlook is for moderate growth, as domestic demand remains subdued. Surprisingly solid activity in the third quarter was supported by several transitory factors. However, high uncertainty continued to weigh on business investment, which extended its decline to three consecutive quarters. The near term outlook remains subject to considerable uncertainty due to the upcoming voting on the EU withdrawal agreement in Parliament.

In central and eastern European countries, GDP growth is projected to remain robust in the near term. Activity is supported by strong investment linked to EU funds, solid consumer spending and improvements in the labour market. Over the medium term, activity is expected to decelerate towards potential.

Activity in China has remained strong, supported by solid consumption, government policy support and robust exports, possibly due in part to frontloading of orders in anticipation of higher tariffs. However, in the near term a slowing housing market and the lagged effects of earlier deleveraging efforts should weigh on growth. Also, new trade tariffs implemented by the US Administration are expected to adversely impact activity. Their overall effect in China is assumed to be relatively contained, though, owing to the recently enacted policy stimulus measures. Over the medium term, progress on the implementation of structural reforms is expected to result in an orderly slowdown and some rebalancing of the Chinese economy.

Economic activity is projected to strengthen in the large commodity-exporting countries. In Russia, the economic recovery is expected to continue, supported by the past increase in oil prices, and improving domestic demand amid rising disposable income and credit. The recent fall in oil prices implies some downside risk to the outlook for the Russia economy. Over the medium term, growth is seen benefiting somewhat from the recently announced multi-year government spending plan. In Brazil, activity is expected to accelerate in the near term, as the impact of political uncertainties and the disruptions from the truckers' strike fades away. Further ahead, an improved labour market and continuing monetary accommodation should support consumption, as inflationary pressures remain contained.

Turkey is expected to undergo a difficult adjustment in the coming months. Despite the recent stabilisation of the lira, financial conditions remain tight. Combined with high inflation and procyclical monetary and fiscal policies, this is projected to weigh on economic activity.

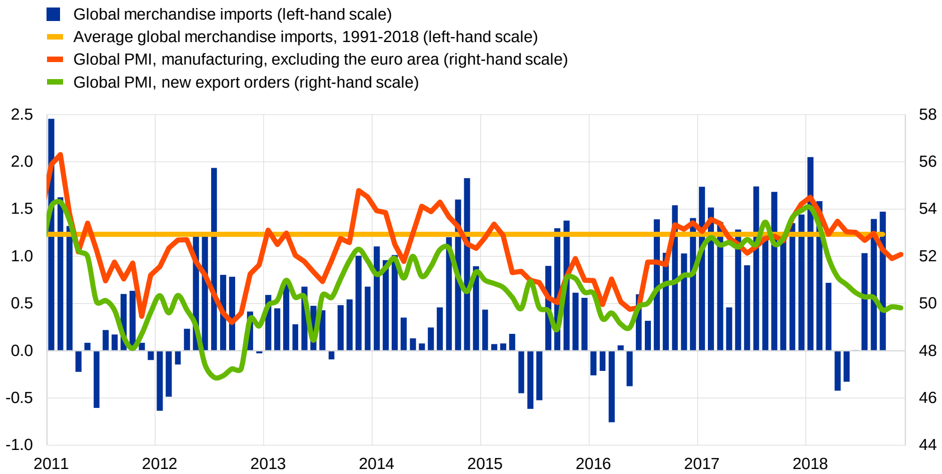
Global trade growth has moderated in 2018, following its strong momentum in 2017. The volume of global merchandise imports has been relatively volatile this year. After stalling in the second quarter of 2018, trade increased by 1.5% in the third quarter on account of stronger EME imports. Indicators for subsequent periods provide mixed signals. While the new export order PMI would suggest more underlying weakness in global trade (Chart 2), other indicators – such as global industrial production or the Tech Pulse index – suggest steady growth.

Trade tensions between the United States and China have escalated. The US Administration has announced tariffs targeting an additional USD 200 billion of Chinese exports to the United States, and China has retaliated with tariffs on an additional USD 60 billion of exports from the United States, both effective as of 24 September 2018. This follows previously enacted tariffs targeting USD 50 billion of these countries' bilateral merchandise trade, as well as tariffs targeting steel and aluminium exports to the Unites States and retaliation by China. These measures are expected to weigh on activity and trade in the United States and China, yet their global impact us expected to remain relatively contained.

Chart 2

World trade in goods and surveys

(left-hand scale: three-month-on-three-month percentage changes; right-hand scale: diffusion indices)



Sources: Markit, CPB Netherlands Bureau for Economic Policy Analysis and ECB calculations.
Note: The latest observations are for September 2018 for global merchandise imports and November 2018 for the PMIs.

Looking ahead, global trade is expected to remain subdued. While the impact of tariffs remains contained so far, it is expected to affect merchandise trade between the United States and China to a larger extent next year. Over the period 2020-21, global trade is projected to grow broadly in line with activity.

Global economic growth is projected to decelerate next year and be steady in the following two years. According to the December 2018 Eurosystem staff macroeconomic projections, world real GDP growth (excluding the euro area) is expected to stand at 3.8% this year before decelerating to 3.5% in 2019. Over the period 2020-21, it is projected to be broadly steady. This projection path reflects the expected slowdown in the near term in some emerging economies, as financial conditions have tightened. Further ahead, the expansion in advanced economies is projected to slow towards potential growth. Moreover, the pace of expansion in China is expected to moderate gradually. Growth in euro area foreign demand is projected to decline from 4.3% this year to 3.1% in 2019, before rising slightly in the medium term. Compared with the September 2018 ECB staff projections, global GDP growth has been revised slightly downwards for 2018 and 2019, reflecting the weaker outlook in some EMEs. Growth in euro area foreign demand has also been revised downwards, for 2019 and 2020, reflecting the effect of higher tariffs and weaker projected economic activity.

Risks for global activity are on the downside. A further escalation of trade disputes could significantly weigh on global growth. While the temporary truce between the United States and China sent a positive signal, there remains considerable uncertainty as to whether the talks will lead to a significant de-escalation of US-China trade tensions. Other downside risks relate to a faster than expected tightening of global financial conditions leading to broader stress in emerging markets, uncertainties regarding China's reform process, and political and geopolitical uncertainties, including risks related to Brexit.

Global price developments

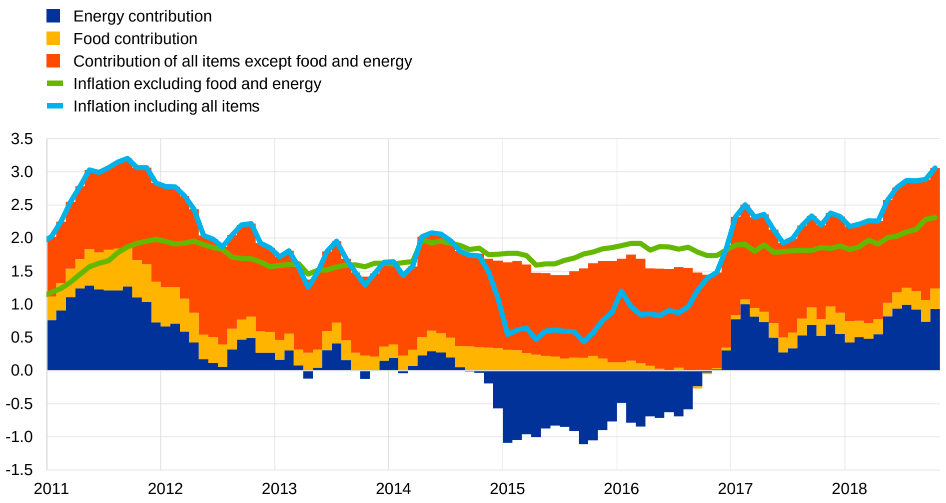
Although very volatile, oil prices have recently declined significantly. Volatility in the oil price has largely reflected news from the supply side of the market, although, more recently, expectations of lower global demand have weighed on the oil price. The Brent crude oil price peaked at USD 86 per barrel in early October amid expectations of significantly lower oil exports from Iran owing to looming US sanctions and a decision by OPEC and Russia to keep their production steady. Since then, a confluence of positive news on the supply side, including declarations of sufficient spare supply capacity by Saudi Arabia and Russia and the announcement of temporary waivers from US sanctions for several large economies importing oil from Iran, have contributed to an oil price decline. More recently, expectations of lower global demand for oil have also pushed the price down. These developments have meant that the oil price assumption underpinning the December 2018 Eurosystem staff macroeconomic projections was about 5.8% lower for 2019 and 3.2% lower for 2020 than in the previous projections. Since the cut-off date for the projections, however, the price of oil has fallen further, reaching USD 59 per barrel on 12 December.

Before the recent fall in oil prices, past increases put some upward pressure on global consumer price inflation. Annual consumer price index inflation in the countries of the Organisation for Economic Co-operation and Development (OECD) rose to 3.1% in October. Excluding food and energy, inflation was unchanged at 2.3%, pausing on a very moderate upward trend observed over the past year (Chart 3). At the same time, despite tightening labour markets across advanced economies, wage pressures remain relatively subdued.

Chart 3

OECD consumer price inflation

(year-on-year percentage changes; percentage point contributions)



Sources: OECD and ECB calculations.
Note: The latest observation is for October 2018.

Looking ahead, global inflationary pressures are expected to remain contained. In the short term, the export prices of the euro area's competitors are expected to increase following the past pick-up in oil prices and higher inflation across several EMEs affected by the summer financial turmoil. Further ahead, the recent decline in oil prices and the current oil futures curve, which suggests gradually declining prices over the medium term, indicate a falling contribution from energy prices to inflation. On the other hand, diminishing spare capacity at the global level is projected to put some upward pressure on inflation.

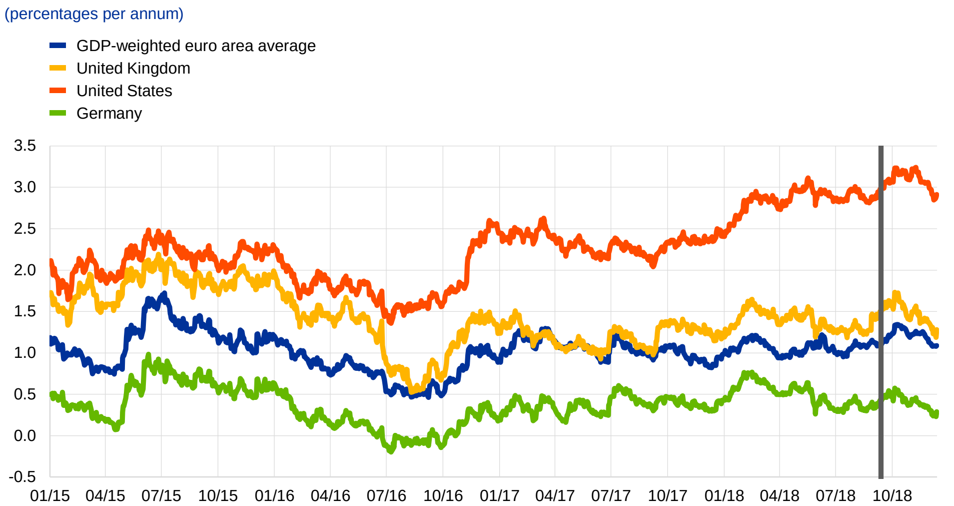
2 Financial developments

Since the Governing Council's meeting in September 2018 global long-term risk-free rates have declined in the context of heightened geopolitical uncertainty and a perceived deterioration in the macroeconomic outlook. Euro area sovereign bond spreads have been largely stable, with the exception of Italy where they have exhibited significant volatility. Although corporate earnings expectations remain robust, some downward revisions, in addition to a repricing of risk, have led to falls in the equity and bond prices of euro area corporations. In foreign exchange markets, the euro has broadly weakened in trade-weighted terms.

Long-term yields have declined in the euro area and in the United States. During the period under review (from 13 September to 12 December 2018), the euro area ten-year risk-free overnight index swap (OIS) rate fell overall to 0.72% (down 4 basis points) and the GDP-weighted euro area ten-year sovereign bond yield fell to 1.09% (down 1 basis point). In the United States (see Chart 4), the ten-year sovereign bond yield fell by 6 basis points to 2.91%, while in the United Kingdom the ten-year sovereign bond yield fell by 22 basis points to 1.28%. Intra-period movements and the overall decline in global long-term yields were driven by heightened geopolitical uncertainty and a number of worse-than-expected macroeconomic data releases.

Chart 4

Ten-year sovereign bond yields



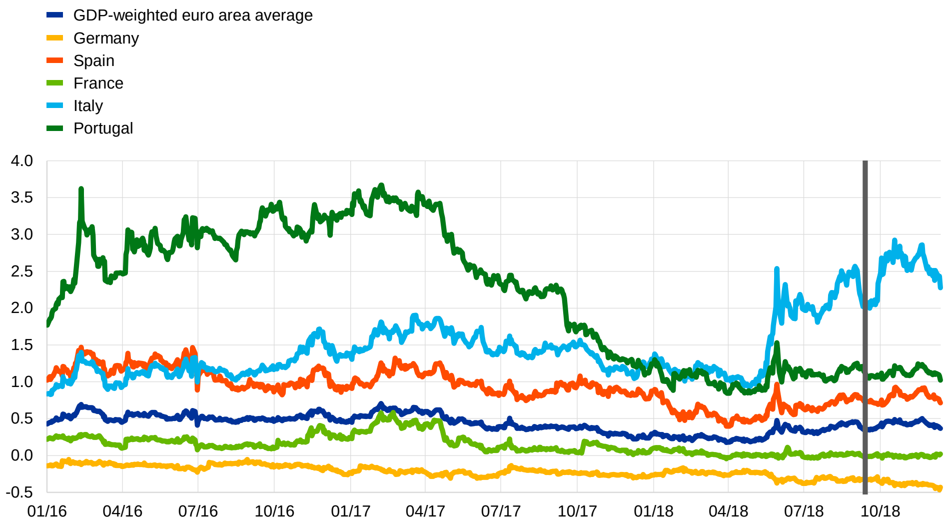
Sources: Thomson Reuters and ECB calculations.
Notes: Daily data. The vertical grey line denotes the start of the review period on 13 September 2018. The latest observation is for 12 December 2018.

Euro area sovereign bond spreads relative to the risk-free OIS rate remained broadly unchanged compared with September, despite some volatility. Sovereign bond market conditions were largely stable throughout the review period, with the exception of the Italian market, where ten-year spreads increased by 26 basis points to stand at 2.28% amid sustained political uncertainty (see Chart 5). Overall, since 13 September the spreads of other euro area sovereign bonds have been broadly unchanged and, consequently, the GDP-weighted average of ten-year sovereign bond yields has remained stable, standing at 37 basis points on 5 December.

Chart 5

Euro area sovereign bond spreads vis-à-vis the OIS rate

(percentages per annum)



Sources: Thomson Reuters and ECB calculations.
Notes: The spread is calculated by subtracting the ten-year OIS rate from the sovereign yield. The vertical grey line denotes the start of the review period on 13 September 2018. The latest observation is for 12 December 2018.

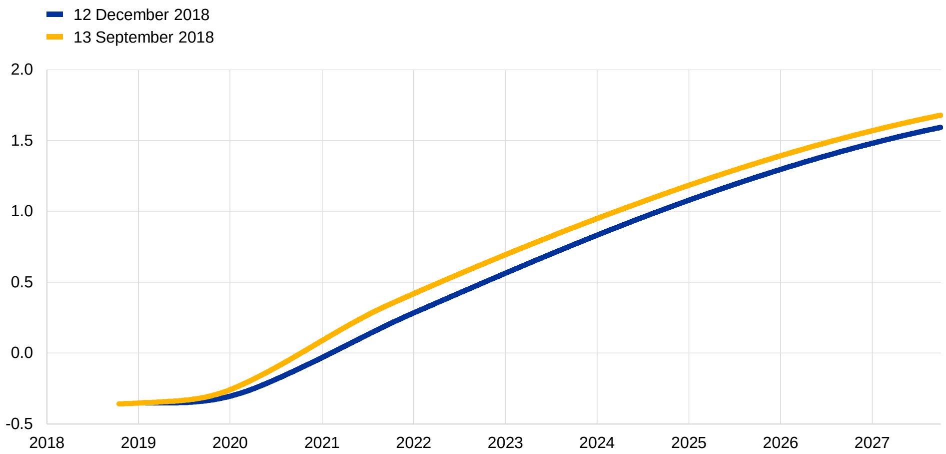
The euro overnight index average (EONIA) was -36 basis points on average over the review period. Excess liquidity decreased slightly, falling by about €13 billion to stand at around €1,891 billion. The decline in excess liquidity was driven by an increase in net autonomous factors, the maturing of the first series of targeted longer-term refinancing operations (TLTRO-I) and some early repayments of funds borrowed under the second series (TLTRO-II). At the same time, ongoing purchases under the Eurosystem’s asset purchase programme partially offset the decline in excess liquidity. For further details on developments in liquidity conditions, see Box 2.

The EONIA forward curve shifted downwards somewhat over the review period. The curve remains below zero for horizons prior to 2021, reflecting market expectations of a prolonged period of negative interest rates (see Chart 6).

Chart 6

EONIA forward rates

(percentages per annum)



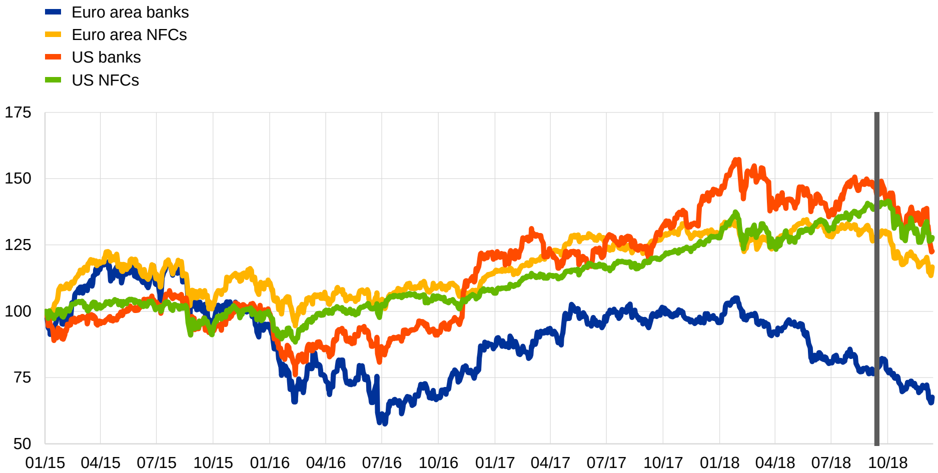
Sources: Thomson Reuters and ECB calculations.

Broad indices of euro area equity prices fell amid increasing geopolitical uncertainty and some spillover from volatility in US markets. Over the review period equity prices of euro area banks and non-financial corporations (NFCs) decreased by around 13% and 9% respectively (see Chart 7). Falls of similar magnitudes were observed in the United States. Some of the fall in euro area equity prices was driven by downward revisions to corporate earnings expectations in the light of a perceived deterioration in the macroeconomic outlook. However, overall, earnings expectations remain above average for euro area corporations and supportive of their equity prices. Euro area equity market volatility increased over the review period amid ongoing tension in euro area sovereign bond markets, geopolitical uncertainty and some spillover from volatility in US equity markets.

Chart 7

Euro area and US equity price indices

(index: 1 January 2015 = 100)



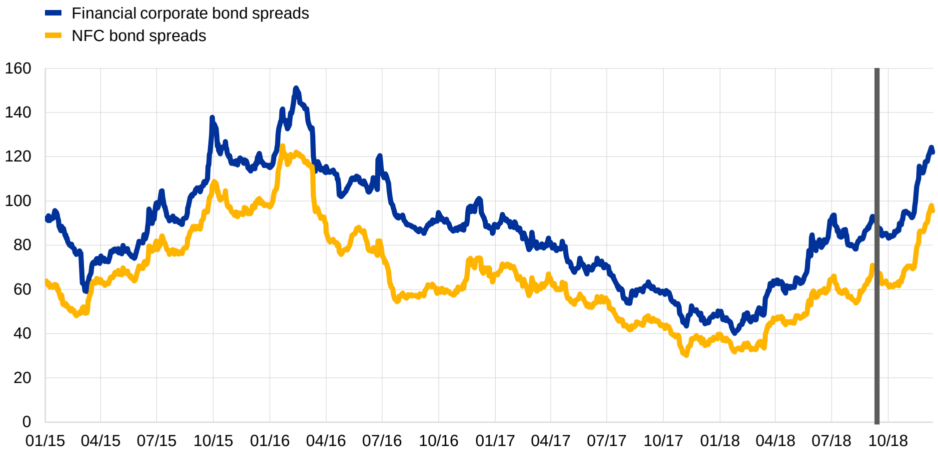
Sources: Thomson Reuters and ECB calculations.
Notes: The vertical grey line denotes the start of the review period on 13 September 2018. The latest observation is for 12 December 2018.

Euro area corporate bond spreads increased over the review period. Since September the spread on investment-grade NFC bonds relative to the risk-free rate has increased by around 30 basis points to stand at 96 basis points (see Chart 8). Yields on financial sector debt have also increased, resulting in a widening of the spread of around 35 basis points. Model-based estimates suggest that this increase most likely reflects a repricing of risk rather than an increase in default probabilities. Overall, corporate bond spreads remain below the levels observed in March 2016, prior to the announcement and subsequent launch of the corporate sector purchase programme.

Chart 8

Euro area corporate bond spreads

(basis points)



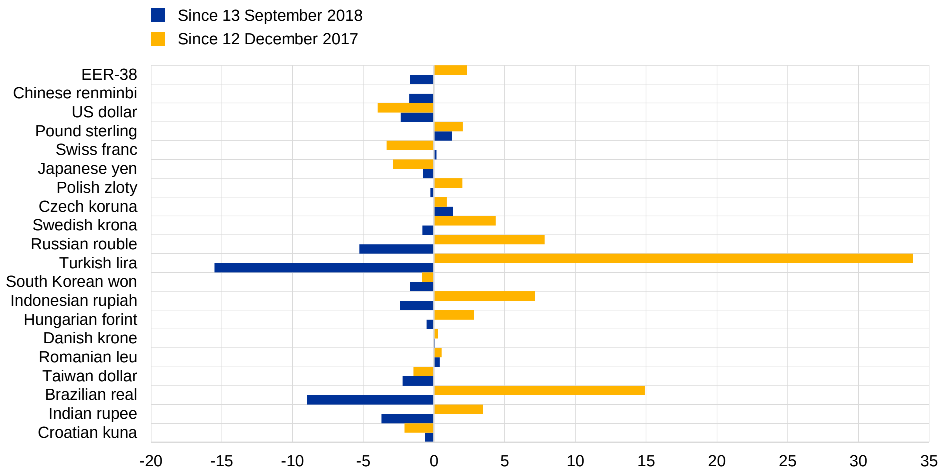
Sources: iBoxx indices and ECB calculations.
Notes: The vertical grey line denotes the start of the review period on 13 September 2018. The latest observation is for 12 December 2018.

In foreign exchange markets, the euro broadly weakened in trade-weighted terms (see Chart 9). Over the review period the nominal effective exchange rate of the euro, measured against the currencies of 38 of the euro area's most important trading partners, depreciated by 1.7%. In bilateral terms, the euro weakened against most currencies. In particular, it depreciated against the US dollar by 2.4%, partly reflecting expectations about the relative future monetary policy stances of the Federal Reserve System and the ECB. The euro also broadly depreciated vis-à-vis the currencies of most emerging economies, including the Chinese renminbi (by 1.7%) and, in particular, the Turkish lira (by 15.5%), the Brazilian real (by 9.0%) and the Russian rouble (by 5.3%), which continued to make up some of their previous losses.

Chart 9

Changes in the exchange rate of the euro vis-à-vis selected currencies

(percentage changes)



Source: ECB.
Notes: "EER-38" is the nominal effective exchange rate of the euro against the currencies of 38 of the euro area's most important trading partners. All changes have been calculated using the foreign exchange rates prevailing on 12 December 2018.

3 Economic activity

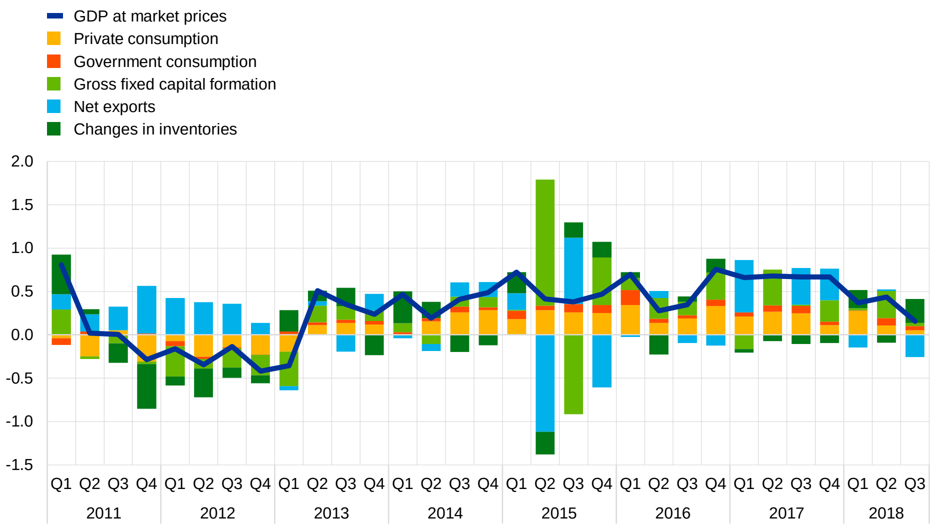
Euro area real GDP growth slowed further to 0.2%, quarter on quarter, in the third quarter of 2018, mainly as a result of sector-specific developments. Looking ahead, the incoming information remains overall consistent with an ongoing economic expansion, albeit with increased downside risks. Euro area real GDP growth is supported primarily by growth in private consumption and investment. The December 2018 Eurosystem staff macroeconomic projections for the euro area foresee annual real GDP increasing by 1.7% in 2019, 1.7% in 2020 and 1.5% in 2021. Compared with the September 2018 projections, real GDP growth has been revised down slightly for 2018 and 2019, mainly owing to the weaker data outturn in the third quarter of 2018 and the associated lower carry-over into 2019.

Growth in the euro area moderated further in the third quarter of 2018, mainly owing to sector-specific developments, but remained resilient overall, despite a slight contraction in a few euro area countries. Real GDP increased by 0.2%, quarter on quarter, in the third quarter of this year, following growth of 0.4% in the previous two quarters (see Chart 10). The slowdown in the third quarter appears to have been mainly related to temporary bottlenecks in car production (mainly in Germany). For a more detailed discussion of the slowdown in growth in 2018, see Box 3. Domestic demand continued to make a positive contribution to growth in the third quarter of 2018, although it was smaller than in previous quarters. Changes in inventories also provided a further positive contribution, whereas net trade made a negative contribution. On the production side, economic activity in the third quarter was again mainly supported by robust growth in the services and construction sectors, while value added in industry (excluding construction) contracted somewhat.

Chart 10

Euro area real GDP and its components

(quarter-on-quarter percentage changes and quarter-on-quarter percentage point contributions)



Source: Eurostat.
Note: The latest observations are for the third quarter of 2018.

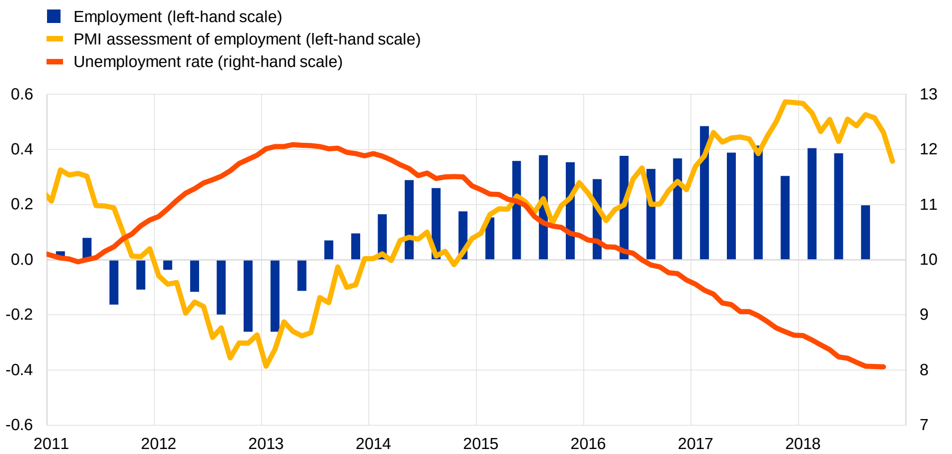
Employment continued to increase in the third quarter of the year, rising by 0.2%, quarter on quarter (see Chart 11). The level of employment currently stands 2.6% above the pre-crisis peak recorded in the first quarter of 2008. Employment increased in most euro area countries and the increase was also broadly based across sectors. With the latest increase, cumulative employment growth in the euro area since the trough in the second quarter of 2013 amounts to 9.6 million. While this increase is similar in magnitude to that seen in the five years before the crisis, its composition differs, particularly in terms of contributions by age group (see Box 4). Continuing employment growth in combination with the drop in GDP growth in 2018 has translated into a moderation in productivity growth, following a modest pick-up in 2017.

Short-term labour market indicators have been weaker recently, but still point to continuing employment growth in the fourth quarter of 2018. The euro area unemployment rate stood at 8.1% in October, unchanged from the third quarter of 2018, and remains at the lowest level seen since November 2008. Survey indicators have moderated somewhat from very high levels, but still point to continued employment growth in the fourth quarter of 2018. While indicators of labour shortages have moderated slightly in some sectors and countries, they remain at historically very high levels.

Chart 11

Euro area employment, PMI assessment of employment and unemployment

(quarter-on-quarter percentage changes; diffusion index; percentages of the labour force)



Sources: Eurostat, Markit and ECB calculations.
Notes: The Purchasing Managers' Index (PMI) is expressed as a deviation from 50 divided by 10. The latest observations are for the third quarter of 2018 for employment, November 2018 for the PMI and October 2018 for the unemployment rate.

Despite some short-term weakness, private consumption continues to be driven by employment growth and stronger household balance sheets. Private consumption rose by 0.1%, quarter on quarter, in the third quarter of 2018, following somewhat stronger growth in the second quarter. Retail trade displayed zero growth in the third quarter of 2018. Moreover, new passenger car registrations in October were more than 16% below the level recorded in the third quarter. However, these data are currently difficult to interpret owing to the temporary bottlenecks in car production and sales. While crude oil prices are still far below the peaks recorded in 2012, they have been volatile recently, giving rise to heightened uncertainty about households' purchasing power. From a longer-term perspective, increasing labour income continues to support the solid underlying momentum in consumer spending. In addition, the strengthening of households' balance sheets remains an important factor behind steady consumption growth, particularly as households' creditworthiness is a key determinant of their access to credit.

The ongoing recovery in housing markets is expected to continue to drive growth, albeit at a slower pace. Housing investment increased by 0.6% in the third quarter of 2018, reflecting the continuing recovery in many euro area countries and in the euro area as a whole. Recent short-term indicators and survey results point to positive, but decelerating, momentum. Construction production in the buildings segment increased by 0.8%, quarter on quarter, in the third quarter of 2018, decelerating from 0.9% in the second quarter. The European Commission's construction confidence indicators in the last few months point to positive, albeit weakening, momentum in the fourth quarter of 2018. The Purchasing Managers' Index (PMI) for housing activity averaged 50.1 from September to November. Confidence indicators from European Commission surveys also declined somewhat in November. However, both the PMI indicators and the European Commission confidence indicators remain clearly above their long-run averages.

Business investment (proxied by non-construction investment) rose by 0.4%, quarter on quarter, in the third quarter of 2018, following the strong rebound in the previous quarter (1.7%). The slowdown was entirely due to the marked deceleration in the quarterly growth of the machinery and equipment component, which fell from 2.5% in the second quarter of 2018 to 0.5% in the third quarter. This was partly explained by the rather weak export performance, given that this component is highly trade-intensive. Developments across countries also exhibited some disparities. While non-construction investment increased at robust growth rates in France and Spain (1.9% and 1.5%, quarter on quarter, respectively), it grew more moderately in Germany and the Netherlands (0.6% and 0.3%, quarter on quarter, respectively), and in Italy it declined sharply (-2.3%, quarter on quarter). Despite these recent developments, business investment is expected to remain supported by resilient domestic demand, profitability and favourable financial conditions in the period ahead. However, trade policy uncertainty and weakening global trade are factors that pose downside risks.

After the recovery in the second quarter, total real euro area exports slightly contracted in the third quarter of 2018 in quarter-on-quarter terms. The decline in exports was driven by goods exports (-0.2%), whereas services exports slightly increased (0.2%). Data on trade in goods show that the weakness in goods exports primarily resulted from intra-euro area export flows. Extra-euro area export growth improved, but remained subdued, particularly exports to the United Kingdom, China and Turkey. Total real euro area imports increased by 0.6%, quarter on quarter, in the third quarter of 2018. This led to a negative net trade contribution of 0.3 percentage point. Looking ahead, leading indicators confirm weak export performance in the near future, with survey results pointing to a small contraction in exports and hard data based on industrial orders outside the euro area pointing to a less pronounced deterioration.

The latest economic indicators and survey results, while somewhat weaker than expected, overall confirm ongoing broad-based growth of the euro area economy. Industrial production (excluding construction) increased slightly in October. However, outcomes were mixed across sectors and across the larger euro area countries. The European Commission's Economic Sentiment Indicator (ESI) declined in October and remained broadly stable in November, but remains well above its long-term average. The composite output PMI decreased in October and November, while still remaining at levels suggesting continued growth.

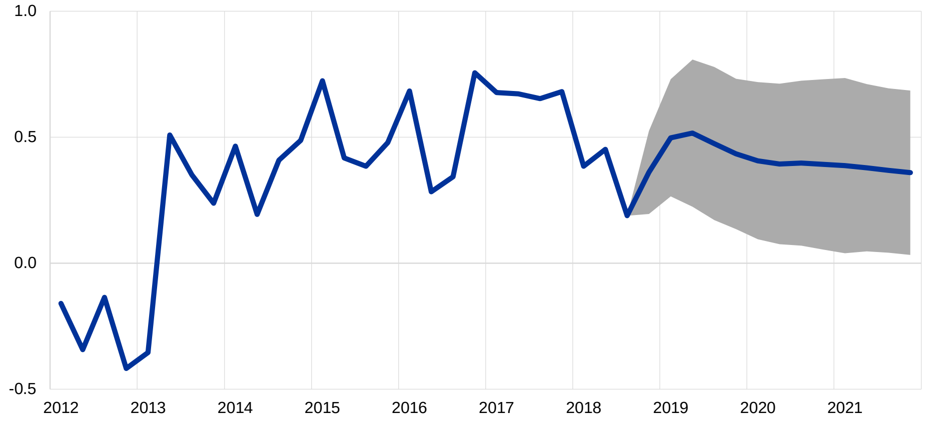
The ongoing broad-based economic expansion is expected to continue. The ECB's accommodative monetary policy continues to support domestic demand. Ongoing employment gains and rising wages should underpin private consumption. At the same time, business investment is supported by solid domestic demand, favourable financing conditions and improving balance sheets. Residential investment remains buoyant.

The December 2018 Eurosystem staff macroeconomic projections for the euro area foresee annual real GDP increasing by 1.7% in 2019, 1.7% in 2020 and 1.5% in 2021 (see Chart 12). Compared with the September 2018 projections, real GDP growth has been revised down slightly for 2018 and 2019. This reflects the weaker data outturn in the third quarter of 2018 and the associated lower carry-over into 2019. At the same time, for both 2019 and 2020, while slightly higher long-term lending rates, lower stock prices and lower foreign demand growth will dampen activity, these effects are expected to be broadly offset by the favourable impact of lower oil prices, the weaker effective exchange rate of the euro and some additional fiscal loosening. The risks surrounding the euro area growth outlook can still be assessed as broadly balanced. However, the balance of risks is moving to the downside owing to the persistence of uncertainties related to geopolitical factors, the threat of protectionism, vulnerabilities in emerging markets and financial market volatility.

Chart 12

Euro area real GDP (including projections)

(quarter-on-quarter percentage changes)



Sources: Eurostat and the article entitled “Eurosystem staff macroeconomic projections for the euro area, December 2018”, published on the ECB’s website on 13 December 2018.
Notes: The ranges shown around the central projections are based on the differences between actual outcomes and previous projections carried out over a number of years. The width of the range is twice the average absolute value of these differences. The method used for calculating the ranges, involving a correction for exceptional events, is documented in “New procedure for constructing Eurosystem and ECB staff projection ranges”, ECB, December 2009, available on the ECB’s website.

4 Prices and costs

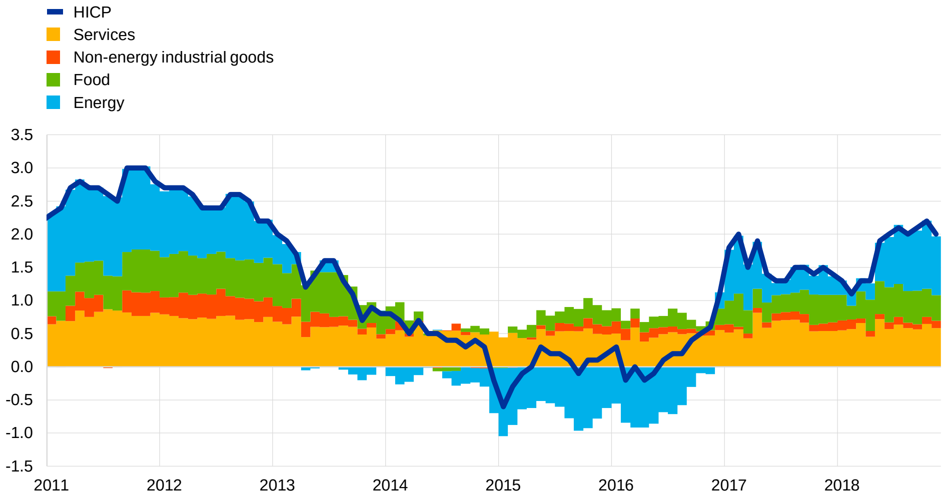
According to Eurostat's flash estimate, euro area annual HICP inflation declined to 2.0% in November 2018, from 2.2% in October. While measures of underlying inflation continued to move sideways, domestic cost pressures continued to strengthen and broaden amid high levels of capacity utilisation and tightening labour markets. Looking ahead, underlying inflation is expected to increase gradually over the medium term, supported by the ECB's monetary policy measures, the continuing economic expansion and rising wage growth. This assessment is also broadly reflected in the December 2018 Eurosystem staff macroeconomic projections for the euro area, which foresee annual HICP inflation at 1.6% in 2019, 1.7% in 2020 and 1.8% in 2021 – revised downwards slightly for 2019 from the September 2018 ECB staff macroeconomic projections. Annual HICP inflation excluding energy and food is expected to be 1.4% in 2019, 1.6% in 2020 and 1.8% in 2021.

Headline inflation decreased in November. According to Eurostat's flash estimate, euro area annual HICP inflation declined to 2.0% in November 2018, from 2.2% in October (see Chart 13). This reflected lower inflation rates for all main sub-components: energy, HICP inflation excluding energy and food (HICPX), and total food. The contribution of energy prices to headline inflation is likely to continue declining strongly as the impact of past higher oil prices fades.

Chart 13

Contributions of components to euro area headline HICP inflation

(annual percentage changes; percentage point contributions)



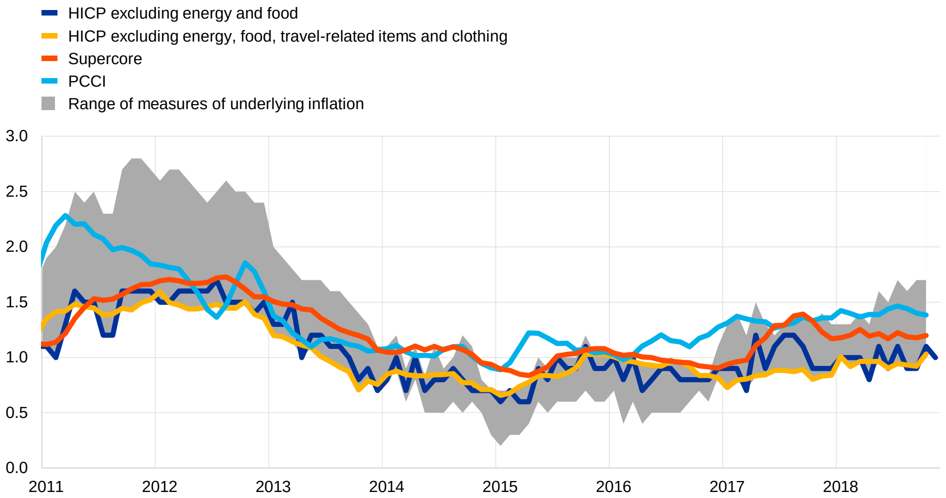
Sources: Eurostat and ECB calculations.
Note: The latest observations are for November 2018 (flash estimates).

Measures of underlying inflation continued their recent sideways movement after rising from earlier lows. HICP inflation excluding energy and food was 1.0% in November, down from 1.1% in October, and thus continued to hover around the 1% rate it reached after rising from its low in mid-2016. The decrease in November reflected a decline in services inflation from 1.5% to 1.3%, while non-energy industrial goods inflation remained unchanged at 0.4%. Other measures of underlying inflation, including the Persistent and Common Component of Inflation (PCCI) and the

Supercore,[1] which are only available for the period to October, generally also pointed to a continuation of the broad sideways movement of recent months (see Chart 14). Looking ahead, measures of underlying inflation are expected to increase gradually, driven by a further strengthening of compensation per employee and output prices coupled with lagged indirect effects from earlier higher oil prices.

Chart 14
Measures of underlying inflation

(annual percentage changes)



Sources: Eurostat and ECB calculations.
Notes: The latest observations are for November 2018 (flash estimate) for HICP excluding energy and food and October 2018 for all the other measures. The range of measures of underlying inflation consists of the following: HICP excluding energy; HICP excluding energy and unprocessed food; HICP excluding energy and food; HICP excluding energy, food, travel-related items and clothing; the 10% trimmed mean; the 30% trimmed mean; and the weighted median of the HICP.

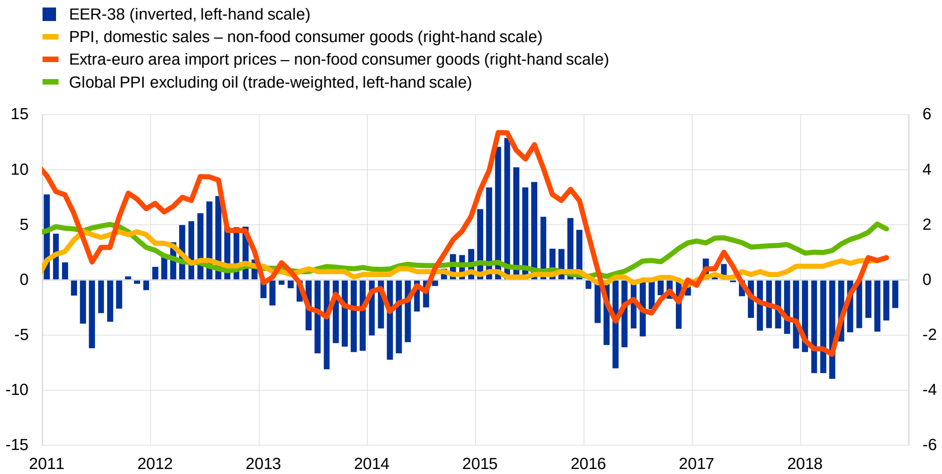
Price pressures for non-energy industrial goods in the HICP were largely unchanged in the later stages of the supply chain. There were mixed signals in the recent data for the very early stages of the pricing chain: the annual rate of change of oil prices in euro fell modestly in October and then substantially in November. In contrast, global non-energy producer price inflation was 4.6% in October, up considerably from its historical average of about 2.5% at the beginning of this year. Despite stabilising in recent months at about 0.8%, import price inflation for non-food consumer goods and for intermediate goods remained substantially higher than their lows recorded earlier this year (see Chart 15). Domestic producer price inflation for non-food consumer goods increased slightly to 0.8% in October, up from 0.7% in the previous three months and above its long-term average of 0.6%. Overall, price pressures along the later stages of the supply chain remained broadly unchanged.

[1] For more information on these measures of underlying inflation, see Boxes 2 and 3 in "Measures of underlying inflation for the euro area", ECB Economic Bulletin Issue 4/2018.

Chart 15

Producer and import prices

(annual percentage changes; percentage point contributions)



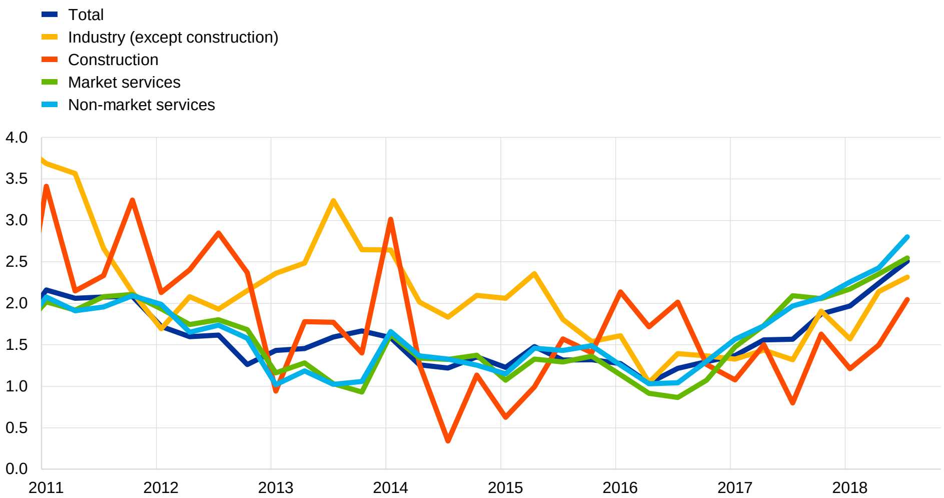
Sources: Eurostat and ECB calculations.
Notes: The latest observations are for November 2018 for EER-38 and October 2018 for the other items. "EER-38" is the nominal effective exchange rate of the euro against the currencies of 38 of the euro area's most important trading partners. "PPI" measures the monthly development of ex-factory selling prices.

Recent developments in wage growth signal a continued upward trend and support the notion of a gradual build-up in domestic cost pressures. Annual growth in compensation per employee increased to 2.5% in the third quarter of 2018, compared with 2.2% in the second quarter of 2018. Compensation per employee growth now stands markedly higher than in the first half of 2016. These developments are in line with increasing tightness in the labour market. Also, factors that were weighing on wage growth, including past low inflation and the ongoing impact of labour market reforms implemented in some countries during the crisis, continue to fade. While the early phase of strengthening compensation per employee growth was driven mainly by the wage drift, most of the momentum in recent quarters came from the rise in the annual growth of negotiated wages (see the box entitled "Recent developments in the wage drift in the euro area" in this issue of the Economic Bulletin). Together with the broadening of wage growth across sectors (see Chart 16), this has bolstered confidence in the wage growth outlook.

Chart 16

Growth in compensation per employee by main sector

(annual percentage changes)



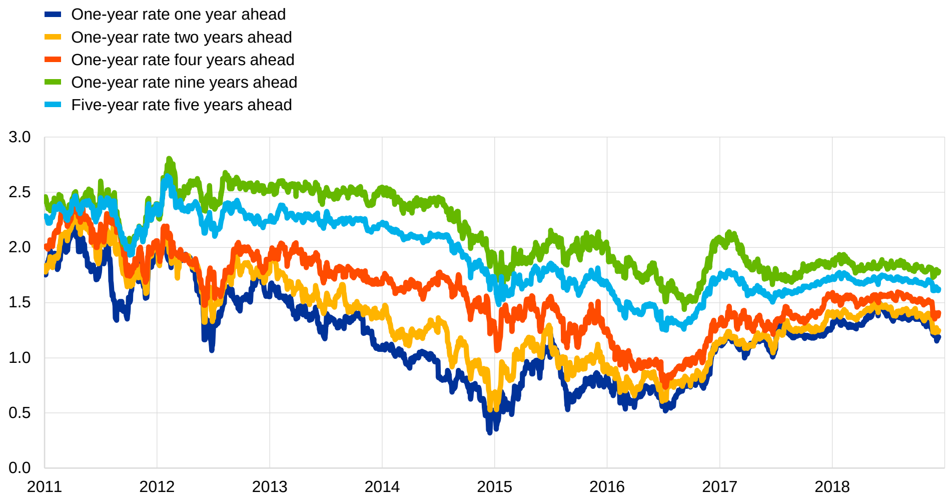
Sources: Eurostat and ECB calculations.
Notes: The latest observations are for the third quarter of 2018. “Non-market services” covers activities by government and private non-profit institutions in fields such as public administration, education and health (sections O to Q in the NACE Revision 2 breakdown). “Market services” is the remaining difference from total services (sections G to N and R to U in the NACE Revision 2 breakdown).

Market-based measures of longer-term inflation expectations have fallen somewhat, while survey-based measures have remained stable. The five-year forward inflation-linked swap rate five years ahead stood at 1.62% on 6 December 2018, around 7 basis points lower than the level which prevailed in mid-September (see Chart 17). The forward profile of market-based measures of inflation expectations continues to point towards a prolonged period of low inflation with a gradual return to inflation levels below, but close to, 2%.The risk-neutral probability of negative average inflation over the next five years implied by inflation options markets is negligible, which suggests that markets currently consider the risk of deflation to be very low. According to the ECB Survey of Professional Forecasters for the fourth quarter of 2018, longer-term inflation expectations have remained stable at 1.9%.

Chart 17

Market-based measures of inflation expectations

(annual percentage changes)

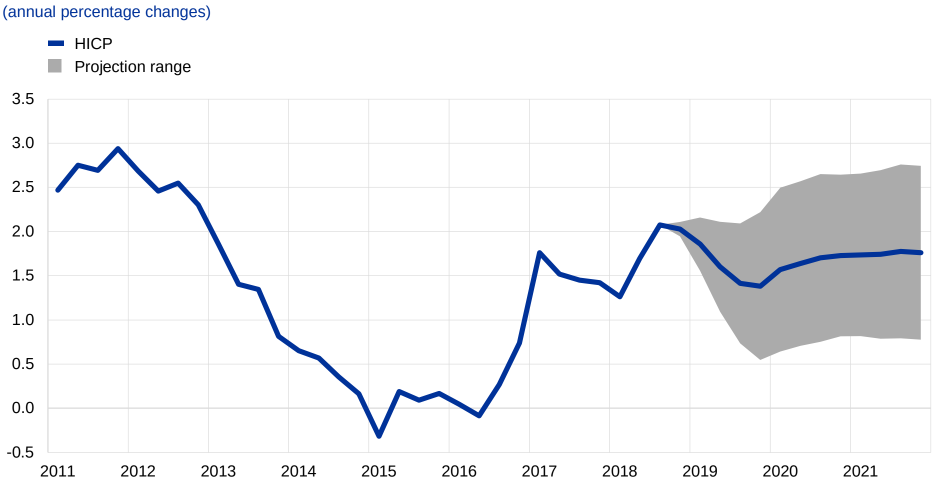


Sources: Thomson Reuters and ECB calculations.
Note: The latest observations are for 12 December 2018.

The December 2018 Eurosystem staff macroeconomic projections expect underlying inflation to increase gradually over the projection horizon. On the basis of the information available at mid-November, these projections expect headline HICP inflation to average 1.6% in 2019, 1.7% in 2020 and 1.8% in 2021, representing a downward revision of 0.1 percentage point in 2019 from the September 2018 ECB staff macroeconomic projections (see Chart 18). This pattern reflects a sharp decline in HICP energy inflation from its current high rates during the course of 2019, as the impact of strong past increases in oil prices fades, while HICP inflation excluding energy and food is expected to rise in line with the anticipated widening of the positive output gap and tightening labour market conditions. HICP inflation excluding energy and food is expected to rise from 1.4% in 2019 to 1.6% in 2020 and 1.8% in 2021.

Chart 18

Euro area HICP inflation (including projections)



Sources: Eurostat and the article entitled "December 2018 Eurosystem staff macroeconomic projections for the euro area", published on the ECB's website on 13 December 2018.
Notes: The latest observations are for the third quarter of 2018 (actual data) and the fourth quarter of 2021 (projections). The ranges shown around the central projections are based on the differences between actual outcomes and previous projections carried out over a number of years. The width of the ranges is twice the average absolute value of these differences. The method used for calculating the ranges, involving a correction for exceptional events, is documented in "New procedure for constructing Eurosystem and ECB staff projection ranges", ECB, December 2009.

5 Money and credit

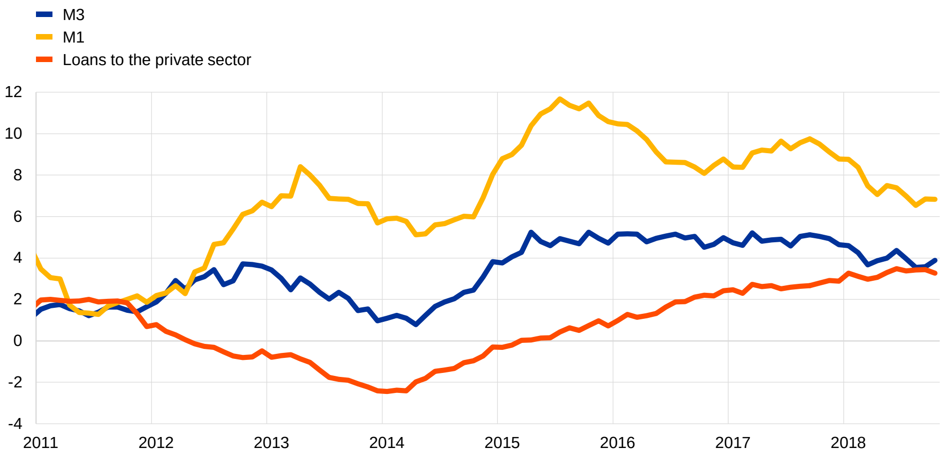
In October 2018 broad money growth picked up amid an ongoing shift towards more self-sustained sources of money creation as the monthly net asset purchases under the asset purchase programme (APP) are reduced. Lending to the private sector continued to grow and remained the largest driver of broad money growth, albeit with some signs of slowing down, mainly for loans to non-financial corporations (NFCs). At the same time, bank funding and lending conditions remained very favourable. In addition, the net issuance of debt securities by NFCs strengthened considerably in the third quarter of 2018, benefiting from bond market conditions that were still relatively favourable.

Broad money growth picked up in October, but remained below the level it had maintained until late 2017. The annual growth rate of M3 increased to 3.9% in October 2018 from 3.5% in September (see Chart 19). This development in part reflected a sizeable monthly flow and a base effect. Since late 2017, M3 growth has eased as the reduction in net asset purchases (from €80 billion to €60 billion in April 2017, to €30 billion in January 2018, and then to €15 billion in October 2018) meant that the APP had a smaller positive impact on M3 growth.[2] The narrow money aggregate M1, which includes the most liquid components of M3, continued to make a significant contribution to broad money growth, remaining stable at 6.8% in October. Money growth continued to receive support from sustained economic expansion and the low opportunity cost of holding the most liquid instruments in an environment of very low interest rates.

Chart 19

M3, M1 and loans to the private sector

(annual percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.
Notes: Loans are adjusted for loan sales, securitisation and notional cash pooling. The latest observation is for October 2018.

Overnight deposits remained the main contributor to M3 growth. The annual growth rate of overnight deposits remained at 7.3% in October, reflecting the steady expansion of overnight deposits held by households, while the annual growth of

[2] See, for example, the article entitled "The transmission of the ECB's recent non-standard monetary policy measures", *Economic Bulletin*, Issue 7, ECB, 2015.

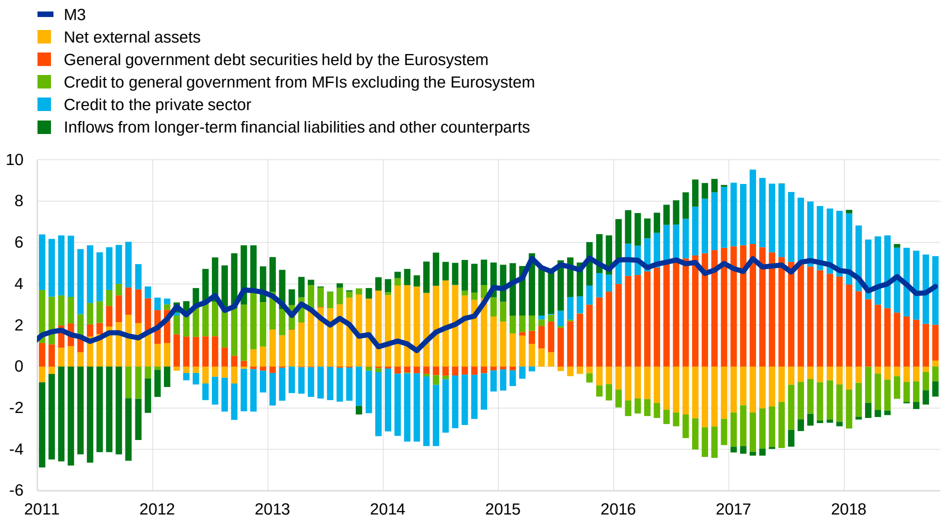
overnight deposits held by NFCs moderated. Currency in circulation grew steadily, thereby not pointing to any large-scale substitution of cash for deposits in an environment of very low or negative interest rates. Short-term deposits other than overnight deposits (i.e. M2 minus M1) continued to make a negative contribution to M3 growth, although the spread between the interest rates on short-term time deposits and overnight deposits has stabilised since late 2017. Marketable instruments (i.e. M3 minus M2), which are a small component of M3, also had a negative impact on M3 growth, given the currently low remuneration of these instruments.

Credit to the private sector is the largest driver of broad money growth (see Chart 20). From a counterpart perspective, the positive contribution to M3 growth from general government securities held by the Eurosystem decreased further (see the red parts of the bars in Chart 20) in the context of the aforementioned reduction in monthly net purchases under the APP. This has been largely offset by a moderate increase in the contribution from credit to the private sector since late 2017 (see the blue parts of the bars in Chart 20). This marks an ongoing shift towards more self-sustained sources of money creation, with credit to the private sector surpassing Eurosystem purchases of general government debt securities as the largest contributor to M3 growth in October. By contrast, government bond sales by euro area monetary financial institutions (MFIs) excluding the Eurosystem dampened M3 growth (see the light green parts of the bars in Chart 20). Finally, for the first time since June 2015 the contribution from net external assets (see the yellow parts of the bars in Chart 20), which among other things reflects investors' preferences for euro area assets, turned positive in October.

Chart 20

M3 and its counterparts

(annual percentage changes; contributions in percentage points; adjusted for seasonal and calendar effects)



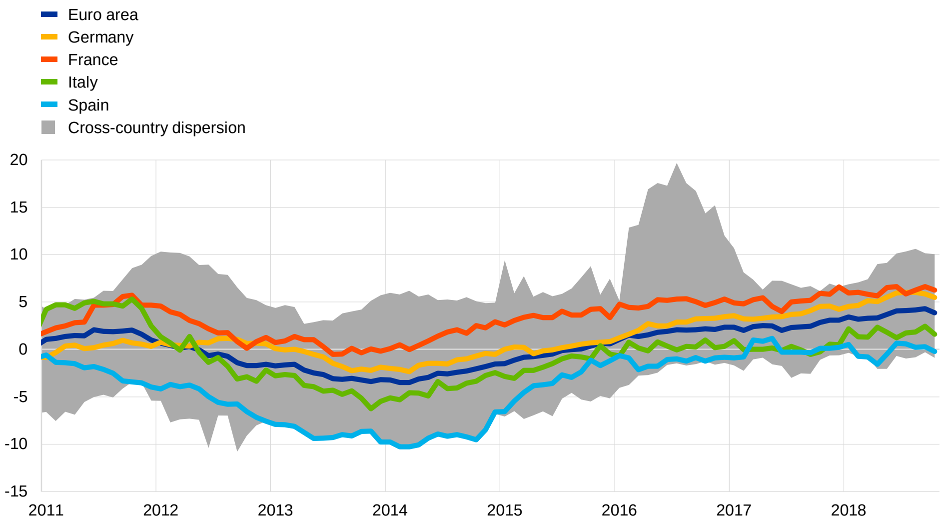
Source: ECB.
Notes: Credit to the private sector includes MFI loans to the private sector and MFI holdings of debt securities issued by the euro area private non-MFI sector. As such, it also covers purchases by the Eurosystem of non-MFI debt securities under the corporate sector purchase programme. The latest observation is for October 2018.

The increase in the growth of loans to the private sector observed since the beginning of 2014 paused in October. The annual growth rate of MFI loans to the private sector (adjusted for loan sales, securitisation and notional cash pooling) declined slightly to 3.3% in October, compared with 3.4% in September (see Chart 19). From a sectoral perspective, the annual growth rate of loans to NFCs moderated to 3.9% in October, down from 4.3% in September. This was in line with historical patterns of lagging co-movement with economic activity and remained heterogeneous across countries (see Chart 21). The annual growth rate of loans to households remained unchanged at 3.2% in October in a context of pronounced cross-country heterogeneity (see Chart 22). Lending to the private sector is supported by very favourable financing conditions, robust growth in business investment, improvements in labour markets, mature housing markets and growth in both residential investment and private consumption. In addition, banks have made progress on consolidating their balance sheets, improving profitability and reducing non-performing loans, although the level of such loans has remained high in some countries.

Chart 21

MFI loans to NFCs in selected euro area countries

(annual percentage changes)

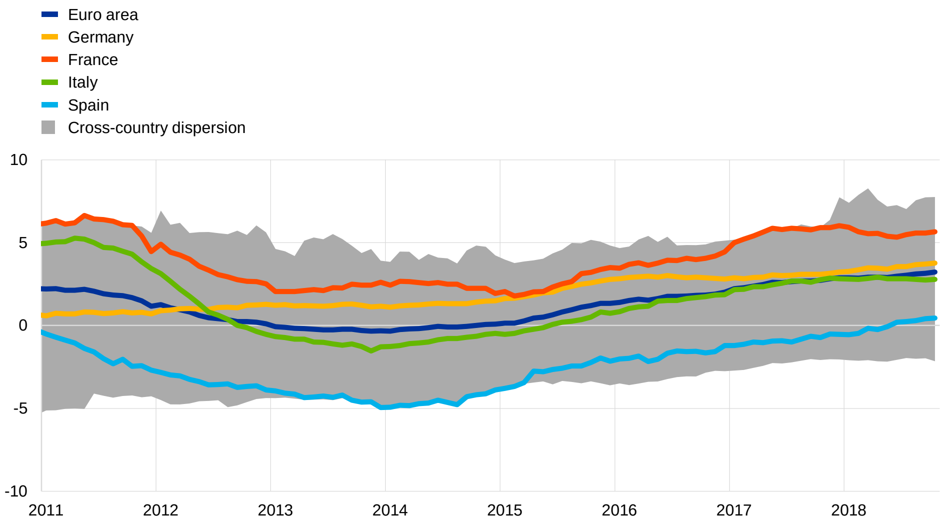


Source: ECB.
Notes: Loans are adjusted for loan sales, securitisation and notional cash pooling. The cross-country dispersion is calculated on the basis of minimum and maximum values using a fixed sample of 12 euro area countries. The latest observation is for October 2018.

Chart 22

MFI loans to households in selected euro area countries

(annual percentage changes)



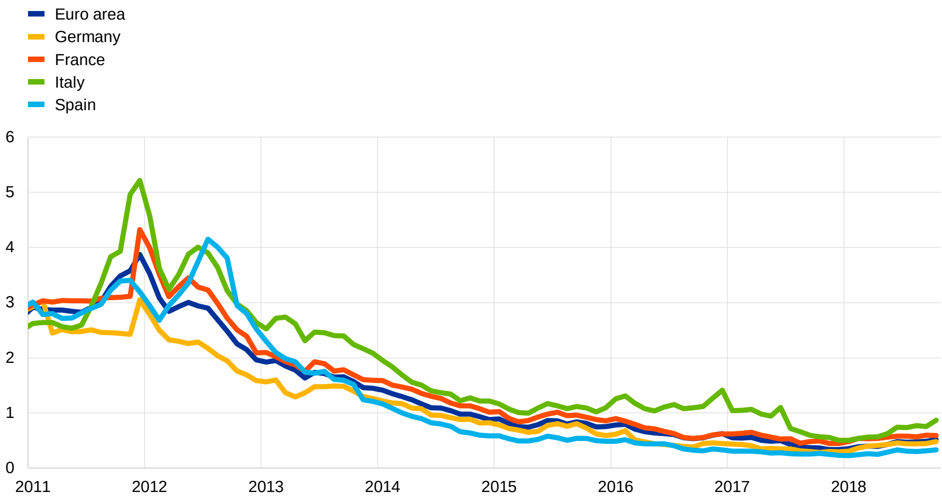
Source: ECB.
Notes: Loans are adjusted for loan sales and securitisation. The cross-country dispersion is calculated on the basis of minimum and maximum values using a fixed sample of 12 euro area countries. The latest observation is for October 2018.

Banks' funding conditions tightened somewhat, but remained favourable. In October the composite cost of debt financing for euro area banks increased slightly, continuing the pattern seen since the beginning of 2018 (see Chart 23). This development reflected higher bank bond yields – which have also become more heterogeneous across countries – against a background of increased political uncertainty. At the same time, the costs of deposit funding have remained broadly unchanged. The repercussions of the increase in the cost of funding through the issuance of debt securities for the overall composite cost of funding for banks have been rather contained, owing to the limited share of this type of funding in banks' funding structures. Overall, therefore, bank funding conditions have remained favourable, reflecting the ECB's accommodative monetary policy stance and the strengthening of banks' balance sheets.

Chart 23

Banks' composite cost of debt financing

(composite cost of deposit and unsecured market-based debt financing; percentages per annum)



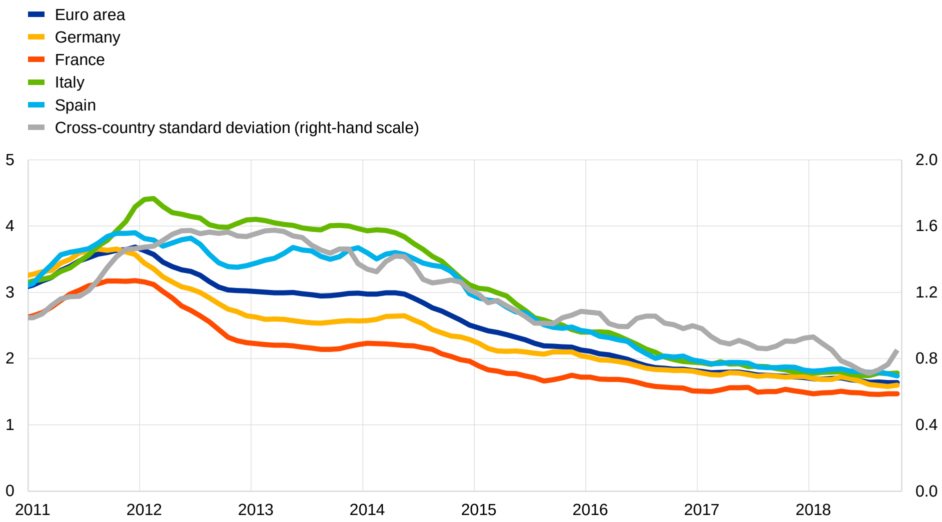
Sources: ECB, Markit iBoxx and ECB calculations.
Notes: The composite cost of deposits is calculated as an average of new business rates on overnight deposits, deposits with an agreed maturity and deposits redeemable at notice, weighted by their corresponding outstanding amounts. The latest observation is for October 2018.

Bank lending rates for NFCs and households remained close to their historical lows. The composite bank lending rate for NFCs (see Chart 24) remained broadly stable at 1.64% in October, close to the historical low of 1.62% seen in May 2018. Composite bank lending rates for loans to households for house purchase (see Chart 25) remained broadly unchanged at 1.80%, only slightly above the historical low of 1.78% observed in December 2016. In October 2018, the spread continued to narrow between the interest rates charged on very small loans (loans of up to €0.25 million, which are a proxy for loans to small firms) and those charged on large loans (loans of above €1 million, which are a proxy for loans to large firms). Moreover, between May 2014 and October 2018 composite lending rates on loans to NFCs and households fell by around 130 and 110 basis points respectively. The reduction in bank lending rates on NFC loans was particularly strong in those euro area countries most affected by the financial crisis. Overall, therefore, since the announcement of the ECB's credit easing measures in June 2014, the transmission of monetary policy has been restored and has become more homogenous across countries and firm sizes.

Chart 24

Composite lending rates for NFCs

(percentages per annum; three-month moving averages)

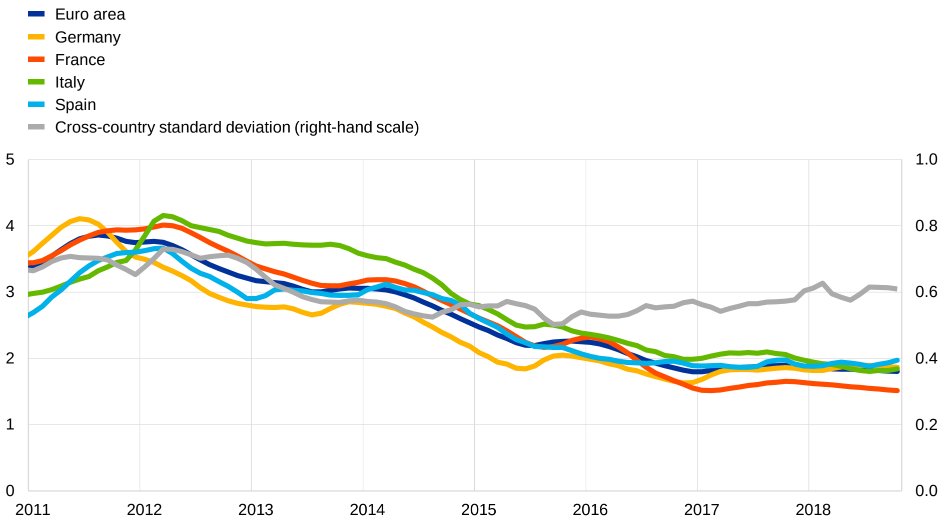


Source: ECB.
Notes: The indicator for the total cost of bank borrowing is calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes. The cross-country standard deviation is calculated using a fixed sample of 12 euro area countries. The latest observation is for October 2018.

Chart 25

Composite lending rates for house purchase

(percentages per annum; three-month moving averages)



Source: ECB.
Notes: The indicator for the total cost of bank borrowing is calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes. The cross-country standard deviation is calculated using a fixed sample of 12 euro area countries. The latest observation is for October 2018.

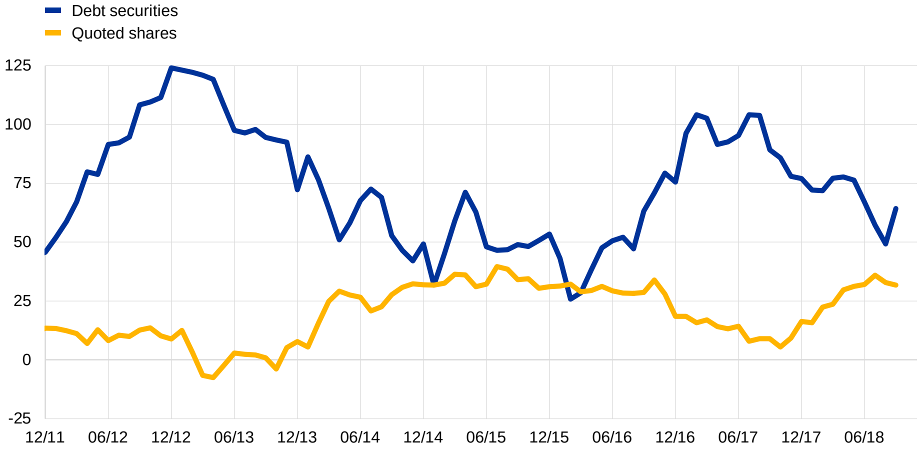
The annual flow of total external financing to euro area NFCs is estimated to have increased further in the third quarter of 2018. This development, which was broad-based across instruments, reflects a further strengthening of bank lending dynamics, supported inter alia by the continued easing of credit standards and a decline in the relative cost of bank lending. Overall, the recovery in NFCs' external financing since early 2014 has been supported by the pass-through of the monetary policy measures put in place, improving borrowing conditions and financing requirements related to the higher number of mergers and acquisitions. At the same time, NFCs' high retained earnings have reduced the need for external financing.

In the third quarter of 2018 the net issuance of debt securities by NFCs strengthened considerably, benefiting from bond market conditions that are still relatively favourable. Issuance activity picked up in September after having been virtually flat over the first two months of the quarter. In terms of annual flows (see Chart 26), the net issuance of debt securities rebounded in September from a two-year low in August, while the net issuance of quoted shares stabilised around the high levels recorded in 2015-16. Market data suggest that the net issuance of debt securities moderated in October and November 2018. The net issuance of listed shares was marginally negative in the third quarter of 2018, possibly owing to the increase in the cost of equity financing.

Chart 26

Net issuance of debt securities and quoted shares by euro area NFCs

(annual flows in EUR billions)



Source: ECB.
Notes: Monthly figures based on a 12-month rolling period. The latest observation is for September 2018.

For NFCs, the cost of financing has edged up marginally to stabilise at levels close to those recorded at the beginning of the year. In October the overall nominal cost of external financing for NFCs, comprising bank lending, debt issuance in the market and equity finance, stood at 4.7%, which was only marginally higher than in September. In November the cost of financing is estimated to have remained virtually constant. The current cost of external financing surpasses the historical low of August 2016 by around 48 basis points and remains substantially lower than the level seen in mid-2014, when market expectations regarding the introduction of the public sector purchase programme began to emerge.

6 Fiscal developments

The euro area general government budget deficit is projected to have declined significantly in 2018 but to increase somewhat next year. The fall in 2018 was mainly the result of favourable cyclical conditions and declining interest payments. The aggregate fiscal stance for the euro area is expected to be broadly neutral in 2018, to loosen in 2019 and 2020, and to turn neutral again in 2021. However, these fluctuations in the aggregate stance for the euro area mask significant differences across countries. For instance, in 2018 large windfalls in a few countries have compensated in the aggregate for procyclical fiscal loosening in vulnerable countries. In particular the countries with high debt levels would, on the contrary, benefit from additional consolidation efforts to set their public debt ratio firmly on a downward path.

The euro area general government budget deficit is projected to have declined significantly in 2018 but to increase somewhat next year. Based on the December 2018 Eurosystem staff macroeconomic projections,[3] the general government deficit ratio for the euro area is expected to fall from 1.0% of GDP in 2017[4] to 0.6% of GDP in 2021, with a temporary worsening in 2019. The overall improvement in the fiscal outlook is mainly driven by lower interest payments and favourable cyclical developments. This is partly offset by a lower cyclically adjusted primary balance from 2019 onwards (see Chart 27).

The outlook for the euro area general government deficit for the next two years has deteriorated compared with the September 2018 ECB staff projections. The higher deficit is partly the outcome of a significant worsening of the projected budgetary balance in Italy due to the fiscal expansion included in the draft budgetary plan, which would be in breach of the commitments under the Stability and Growth Pact (SGP). For the euro area, this deterioration is reflected in a somewhat higher primary expenditure and a lower cyclical component.

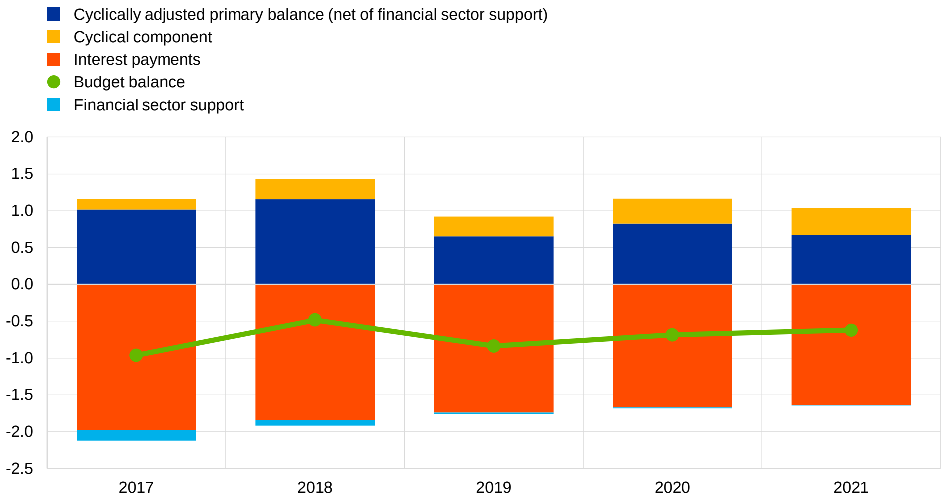
3 See the "December 2018 Eurosystem staff macroeconomic projections for the euro area", ECB, 2018.

4 As the projections usually take the most recent data revisions into account, there might be discrepancies compared with the latest validated Eurostat data.

Chart 27

Budget balance and its components

(percentage of GDP)



Sources: ECB and December 2018 Eurosystem staff macroeconomic projections.
Notes: The data refer to the aggregate general government sector of the euro area.

The aggregate fiscal stance for the euro area is expected to be broadly neutral in 2018, to loosen in 2019 and then to gradually return to neutral in 2021.[5] This profile is affected by discretionary measures which are projected to be expansionary both in 2018 and over the next two years. However, in 2018 large revenue windfalls due to buoyant direct tax collection in a few countries are expected to have more than compensated for this.

The decline in the euro area aggregate public debt-to-GDP ratio is projected to continue. According to the December 2018 Eurosystem staff macroeconomic projections, the aggregate general government debt-to-GDP ratio in the euro area is expected to decline from 86.8% of GDP in 2017[6] to 79.0% of GDP in 2021. The projected reduction in government debt is supported by both the negative interest rate-growth rate differential and primary surpluses (see Chart 28). Deficit-debt adjustments are expected to offset some of these effects. Over the projection horizon, the debt ratio should fall or broadly stabilise in all euro area countries but will continue to far exceed the reference value of 60% of GDP in a number of countries. Compared with the September 2018 projections, the decline in the aggregate euro area debt-to-GDP ratio is expected to be marginally more subdued due to a lower primary surplus path.

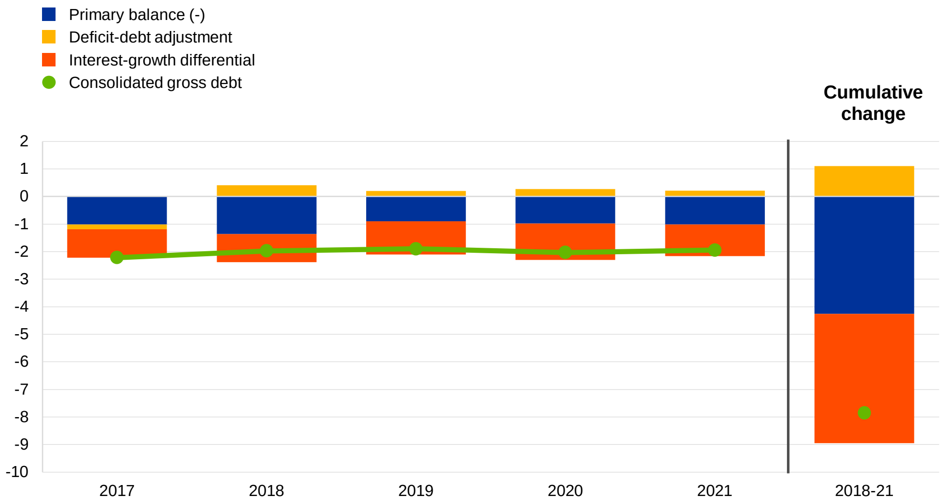
5 The fiscal stance reflects the direction and size of the stimulus from fiscal policies to the economy, beyond the automatic reaction of public finances to the business cycle. It is measured as the change in the cyclically adjusted primary balance ratio net of government support to the financial sector. For more details on the concept of the euro area fiscal stance, see the article entitled “The euro area fiscal stance”, *Economic Bulletin*, Issue 4, ECB, 2016.

6 As the projections usually take the most recent data revisions into account, there might be discrepancies compared with the latest validated Eurostat data.

Chart 28

Drivers of change in public debt

(percentage points of GDP)



Sources: ECB and December 2018 Eurosystem staff macroeconomic projections.
Notes: The data refer to the aggregate general government sector of the euro area.

Countries need to continue their fiscal efforts in full compliance with the SGP. For high debt countries in particular, further consolidation efforts are essential to set the public debt ratio firmly on a downward path, as their high debt levels render them vulnerable to any future downturns or renewed financial market instability. In the light of this, it is of concern that compliance with the SGP is weakest for those countries that are most vulnerable to shocks. In fact, according to the European Commission's projections, most of the countries that have not yet reached sound budgetary positions missed their commitments under the SGP in 2018 and are at risk of doing so again in 2019.[7] It is particularly worrying that the largest deviation from existing commitments is in Italy, a country with a markedly high debt ratio.

[7] For further details, see the box entitled "An assessment of draft budgetary plans for 2019" in this issue of the Economic Bulletin.

Boxes

1 Emerging market vulnerabilities – a comparison with previous crises

Prepared by Livia Chițu and Dominic Quint

Against the background of financial market volatility in some emerging market economies (EMEs) since April, this box reviews key vulnerabilities in EMEs. Specifically, it assesses their resilience to external shocks compared to previous crisis episodes.

Since April many EMEs have been subject to bouts of financial market volatility amid expectations of faster US monetary policy tightening and a stronger US dollar, coupled with rising uncertainty related to global trade tensions. Acute stress has been limited to Argentina and Turkey so far, but most EMEs have seen financial conditions tighten over the year. Fund flows data show that global investors have started to retrench from EMEs since April. At the same time, EME stock markets have declined sharply, unwinding the gains of the 2017 rally, and EME sovereign spreads have widened. There is, however, significant heterogeneity across EMEs, and so far investors seem to have differentiated between countries based on their fundamentals.

These developments have sparked concerns about the outlook for EMEs and raised questions as to whether these countries may be subject to a repeat of previous crisis experiences, such as the Asian crisis of the late 1990s. The Asian crisis, which was triggered by the devaluation of the Thai baht in July 1997, resulted in a reappraisal of risk and rapid contagion to several other countries in Asia. Those economies faced sudden stops in capital inflows and severe recessions, representing one illustration of widespread balance-of-payments problems coupled with financial sector weaknesses. While the causes of the Asian crisis were varied, a common characteristic of many of the countries affected was reliance on short-term external debt denominated in foreign currency coupled with pegged-exchange rate regimes and financial sector fragilities. Historically, EME crises have tended to be accompanied by periods of US dollar appreciation which exposed countries to large unhedged currency mismatches between their US dollar-denominated assets and liabilities (see Chart A).[8] Current circumstances, with ongoing US monetary policy normalisation and a strengthening US dollar, have heightened concerns that similar

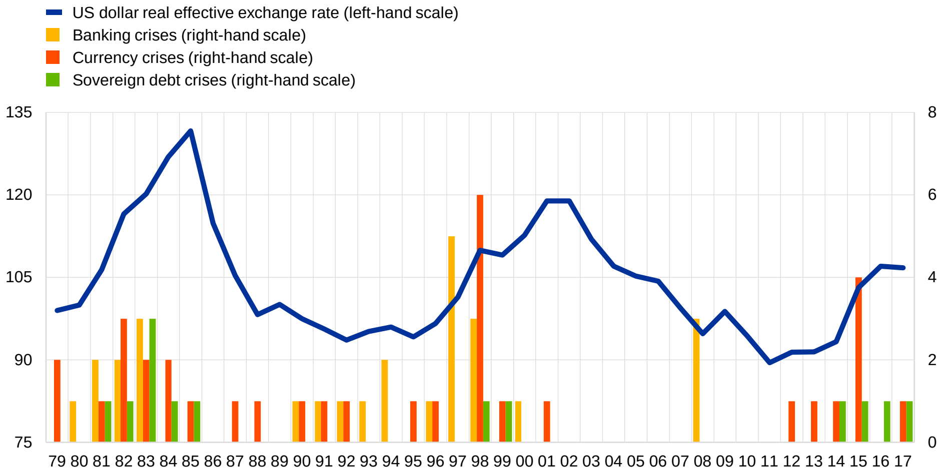
[8] For an in-depth discussion of the "original sin", i.e. the inability of countries to borrow abroad in their domestic currency, see Eichengreen, B, Hausmann, R. and Panizza, U., "Original Sin: The Pain, the Mystery and the Road to Redemption", paper prepared for the Inter-American Development Bank conference on "Currency and Maturity Matchmaking: Redeeming Debt from Original Sin", Washington, D.C., November 2002; and Eichengreen, B., Hausmann, R. and Panizza, U., "Currency Mismatches, Debt Intolerance and the Original Sin: Why They Are Not the Same and Why it Matters", in Edwards, S. (ed.), *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices and Consequences*, National Bureau of Economic Research, University of Chicago Press, 2007, pp. 121-170.

fragilities could leave some EMEs exposed to a repeat of such balance of payments concerns.

The potential risks for EMEs are important for the global outlook. Compared to two decades ago, EMEs play, in aggregate, a significantly more prominent role in the global economy. They account for more than half of global GDP (at purchasing power parity) and gross capital flows. Developments in these economies could therefore have a sizeable impact on other countries through a variety of channels, including trade, financial and confidence channels.

Chart A
The role of the US dollar in EMEs

(left-hand scale: index, 1980=100; right-hand scale: number of crises)

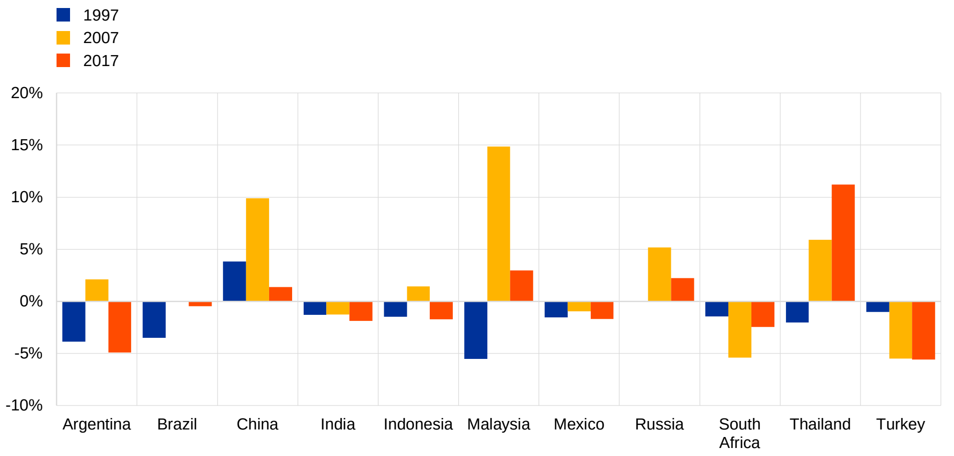


Sources: Laeven and Valencia (2012), Standard and Poor's, Bloomberg, Haver Analytics and ECB staff calculations.

Compared to twenty years ago, many EMEs have reduced their external vulnerabilities and improved their policy frameworks. Some EMEs have seen an improvement in their current account positions and some even run current account surpluses. Some oil exporting countries in particular have benefited from the oil price rise in the 2000s. Since the global financial crisis, however, current account positions have slightly widened again and there are still some countries with deficit positions (see Chart B). Policy frameworks have also evolved. A large proportion of EMEs have adopted inflation-targeting monetary policy frameworks, which can help to anchor inflation expectations and stabilise business cycles. Most EMEs now also have more flexible exchange rate regimes. In addition, many EMEs accumulated reserves in the aftermath of the Asian crisis and have continued to do so since the global financial crisis. The IMF risk-weighted metric of reserve adequacy, which benchmarks reserves not only against traditional metrics such as imports and short-term external debt but also against broad money to take into account the risk of capital flight, suggests that many EMEs appear better placed to cope with sudden stop or sudden flight shocks (see Chart C).[9] Nonetheless, there are some countries whose reserves are still below the suggested minimum reserve adequacy requirements.

Chart B

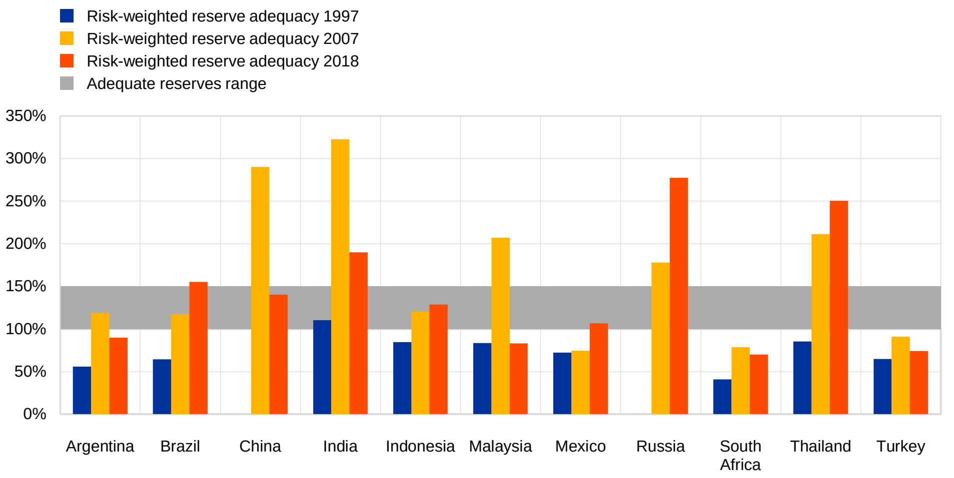
Current account balance



Sources: IMF and ECB staff calculations.
Note: The latest observations are for 2017.

Chart C

Adequacy of reserves



Sources: IMF and ECB staff calculations.
Notes: Reserve adequacy is computed on the basis of the IMF risk-weighted methodology, i.e. as a function of exports (to capture potential losses of reserves due to a drop in external demand or to a terms-of-trade shock), short and long-term debt (as a measure of interest payments and rollover risk) and broad money (as a measure of the scope for capital flight). The measure accounts for the exchange rate regime and capital account openness. A metric between 100% and 150% indicates that reserves are adequate. Owing to unavailability of data on short-term debt on a remaining maturity basis, the data shown for 1997 for Brazil, Indonesia, Mexico, Turkey and Malaysia are actually for 2001, 2001, 2001, 1999 and 2001, respectively.

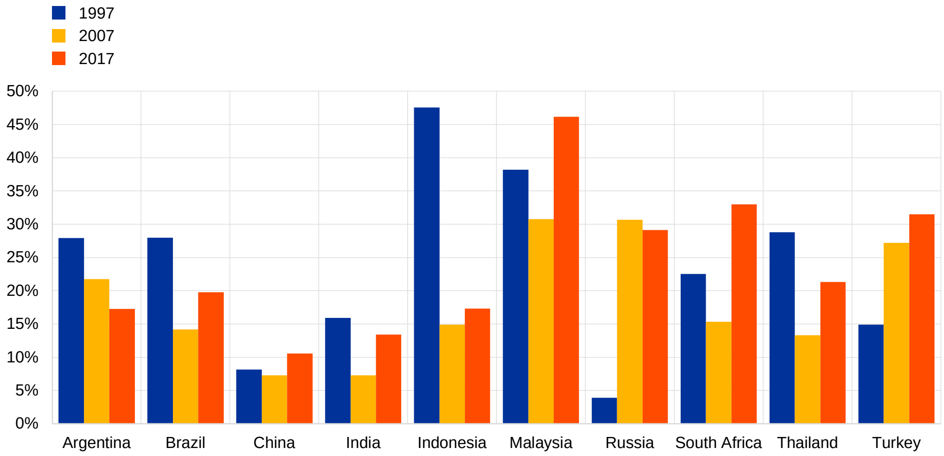
[9] One should, however, not overlook the costs of accumulating reserves. Traditionally, these costs are related to the sterilisation (or opportunity) costs of holding reserves and the cost to the global economy associated with the build-up of global imbalances, but for empirical evidence that reserve accumulation might also be inflationary owing to moral hazard and incentive effects, see Chițu, L., "Reserve accumulation, inflation and moral hazard: Evidence from a natural experiment", *Working Paper Series*, No 1880, ECB, February 2016.

Nonetheless, while most EMEs have reduced their reliance on foreign currency funding compared to the late 1990s, US dollar-denominated liabilities in EMEs have increased since the Great Recession. EMEs' stock of US dollar-denominated debt has risen over the past ten years as firms have taken advantage of favourable global financial conditions (see Chart D).[10] To the extent that these positions are unhedged, this represents a financial stability concern in the event of a further strengthening of the US dollar. Indeed, there is evidence from financial markets that, more recently, the growth in US dollar-denominated liabilities also appears to have been associated with increased sensitivity of financial conditions in EMEs to US financial developments. In the late 1990s tighter financial conditions in the United States tended to be transmitted strongly to EMEs, whereas this sensitivity diminished in the wake of the Asian crisis, before picking up again in recent years (see Chart E).

Chart D

US dollar-denominated gross external liabilities

(percentages of GDP)



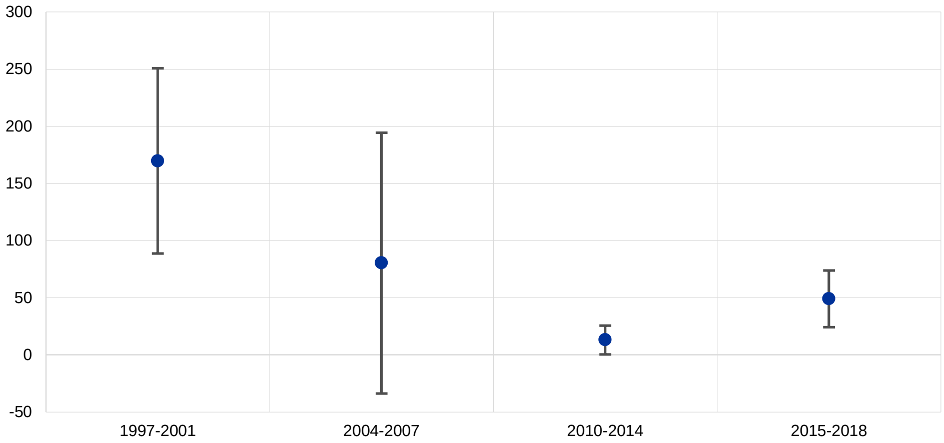
Sources: Bénétrix, Lane and Shambaugh (2015) and ECB staff calculations.

10 See Bénétrix, A.S., Lane, P.R. and Shambaugh, J.C., "International Currency Exposures, Valuation Effects, and the Global Financial Crisis", *Journal of International Economics,* Volume 96, Supplement 1, July 2015, pp. S98-S109.

Chart E

Response of EME sovereign spreads to US financial tightening

(basis points)



Sources: Bloomberg, Haver Analytics and ECB staff calculations.
Notes: The response, given in basis points after 22 business days with a 95% confidence interval, is based on local projections using a fixed-effects panel regression for JP Morgan Emerging Markets Bond Index (EMBI) global sovereign spreads. The explanatory variable is the Bloomberg US financial conditions index. The countries included in the panel are Argentina, Brazil, China, Mexico, Malaysia, the Philippines, Russia, Turkey, and South Africa. The latest observation is for 31 August 2018.

At the same time, domestic imbalances seem to have worsened in some EMEs, as illustrated by rising local currency debt issuance and shrinking policy space. While external vulnerabilities may have declined, other fragilities may have increased, as illustrated, for instance, by higher local currency debt issuance, rising private sector leverage and deteriorating fiscal positions. Debt-to-GDP ratios have significantly increased compared to their levels twenty years ago. In particular, debt rose rapidly in the aftermath of the Global Recession as a consequence of favourable global financial conditions. The bulk of the increase took place in the Chinese corporate sector. The credit-to-GDP ratio in China has risen to levels that may pose potential financial stability concerns.[11] In addition to the corporate sector, EME household leverage has risen, tripling compared to the mid-1990s (see Chart F).[12] Moreover, there is less fiscal and monetary policy room for manoeuvre, given that countries had to intervene with fiscal and monetary policy stimuli during the Great Recession. Fiscal space for commodity exporting countries deteriorated notably after commodity prices fell in 2014. Policy room for manoeuvre may be even more constrained in those EMEs with large and unhedged foreign currency-denominated debt.[13]

11 See, for example, Aldasoro, I., Borio, C. and Drehmann, M., "Early warning indicators of banking crises: expanding the family", *BIS Quarterly Review*, March 2018; and Dieppe, A., Gilhooly, R., Han, J., Korhonen, I. and Lodge, D. (eds.), "The transition of China to sustainable growth – implications for the global economy and the euro area", *Occasional Paper Series*, No 206, ECB, January 2018.

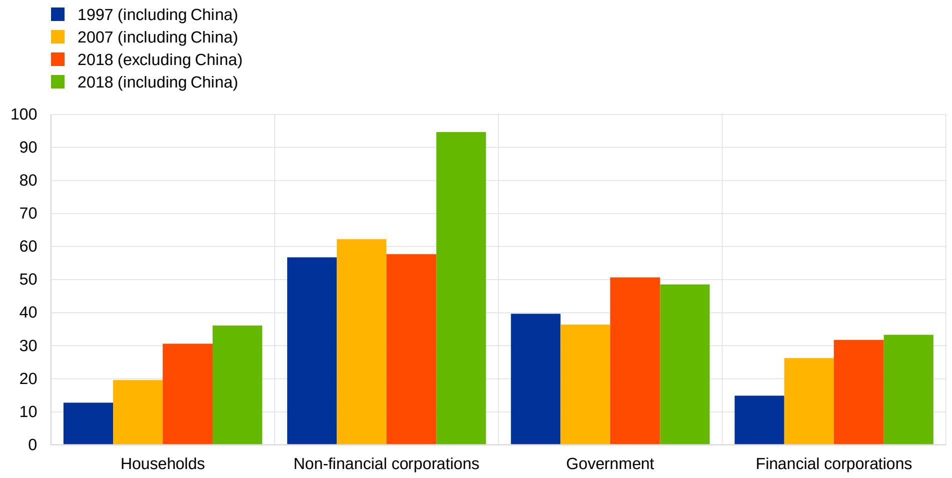
12 In some countries, this increase may arguably be partly a reflection of a developing financial system. While the ratio may not be seen as problematic in many advanced economies, EMEs tend to have lower debt tolerance. See, for example, "Fiscal policy, public debt and monetary policy in emerging market economies", *BIS Papers*, No 67, October 2012; and Reinhart, C., Rogoff, K. and Savastano, M., "Debt Intolerance", *Brookings Papers on Economic Activity*, Vol. 1, 2003, pp. 1-74.

13 For more details and empirical evidence, including on the "Fischer view" of optimal conduct of monetary policy in dollarised countries in times of crisis, see, for example, Chițu, L., "Was Unofficial Dollarisation/Euroisation an Amplifier of the 'Great Recession' of 2007-2009 in Emerging Economies?", *Comparative Economic Studies*, Vol. 55, No 2, June 2013, pp. 233-265.

Chart F

EME indebtedness by sector

(percentages of GDP)



Sources: Institute of International Finance and ECB calculations.
Notes: Figures are for the first quarter of the year concerned. The EME dataset comprises 30 emerging market countries (EM-30), including Argentina, Brazil, Chile, China, Colombia, the Czech Republic, Egypt, Ghana, Hong Kong, Hungary, India, Indonesia, Israel, Kenya, Lebanon, Malaysia, Mexico, Nigeria, Pakistan, the Philippines, Poland, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Thailand, Turkey, Ukraine and the United Arab Emirates.

In order to assess whether EMEs are less prone to a severe crisis today, we compute the probability of a crisis occurring in 2018 and contrast it with the probability of a crisis occurring in 1997. The crisis probability captures the overall vulnerability of a country, summarising EME fundamentals in one single dimension encompassing the most relevant macro-financial vulnerabilities, i.e. those helping predict severe systemic crises in EMEs and which are related to traditional balance-of-payment risks as well as domestic financial imbalances. More specifically, the parsimonious early warning model uses the best crisis predictors found in the early warning models literature, i.e. lagged values of GDP growth, inflation, current account to GDP, private credit to GDP, reserves to short-term debt. The one-year-ahead crisis probabilities are estimated with a binary logit model, where the dependent variable is a very severe crisis (currency, systemic banking or sovereign crisis) defined as in Laeven and Valencia (2012).[14] That being said, early warning models have limitations. The accuracy of the model is dependent upon potential feedback effects of changes in policies and expectations. Moreover, early warning models only incorporate indicators that were good predictors of past crises; they do not include new indicators that could be useful predictors of future crises. One such new indicator could be EME corporate sector leverage.

Overall, the model suggests that, while the picture is mixed across countries, EME fundamentals have broadly improved compared to the mid-1990s.

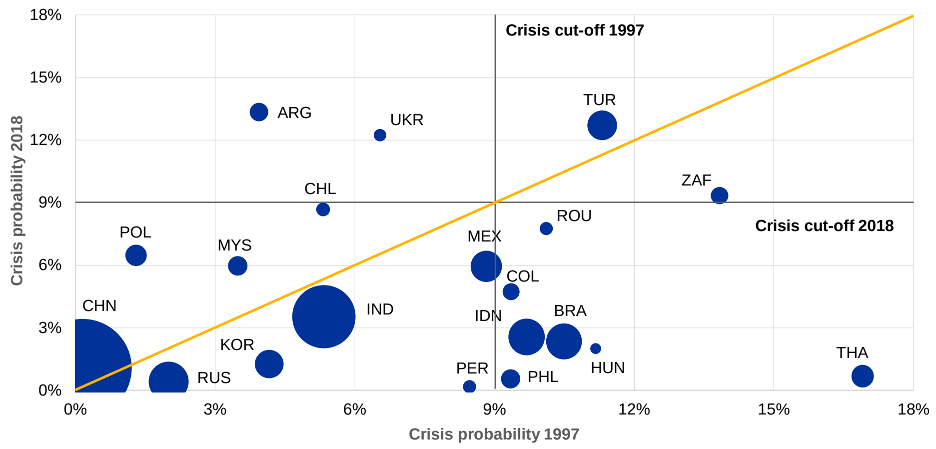
[14] The model uses a relatively long time sample of almost half of century, a well-established definition of crisis in the literature as the dependent variable (see Laeven, L. and Valencia, F., "Systemic Banking Crises Database: An Update", *IMF Working Papers*, No 12/163, June 2012) and a comprehensive country sample of 50 systemically important countries. The crisis probability for 2018 is based on 2017 data. The post-crisis bias is dealt with by excluding the crisis years. The optimum cut-off that divides the estimated probabilities obtained from the logit model into crisis and non-crisis observations is derived from Youden's J statistic. With an AUROC of 0.8163 with a standard error of just 0.048, the model can be judged as having predictive power.

Importantly, EMEs with sounder fundamentals account for a large share of the global economy. The empirical evidence suggests that the fundamentals of most EMEs have to some extent improved relative to 1997, in particular for countries with an increasing weight in the global economy (see Chart G). Overall, Asian EME fundamentals improved the most, suggesting that lessons had been learned after the 1997 crisis.[15] However, the model identifies Argentina and Turkey, which have recently experienced financial market turmoil, as being more vulnerable than in 1997. In addition, the example of China highlights the need to evaluate model results cautiously. The crisis probability predicted by the model for 2018 is relatively low because China has a moderate current account surplus, low inflation, strong growth, large foreign exchange reserves coverage and low levels of external debt. At the same time, China has seen a rapid rise in leverage over the past decade, a factor which might not be sufficiently picked up by the model.[16]

Chart G

EME crisis probabilities, 2018 against 1997

(percentages)



Source: ECB staff estimates.
Notes: The probability of a crisis (currency, sovereign or systemic banking crisis) occurring in 2018 or 1997 is estimated with a binary logit model where the crisis dependent variable is defined as in Laeven and Valencia (2012). In the absence of historical data to estimate crisis probabilities in 1997 for China and South Korea, the chart shows crisis probabilities as of 1998 and 1999, respectively. For Russia, Brazil and Turkey, past crisis probabilities are as of 1998 and 2001, respectively, corresponding to the years these countries experienced crises. The optimal cut-off for issuing a crisis signal is derived from Youden's J statistic. The sizes of the country bubbles reflect the respective countries' share in global GDP in purchasing power parity terms in 2017.

Overall, while most EMEs appear to have broadly sounder fundamentals and to be better placed today to withstand shocks than twenty years ago, risks remain. Although EMEs now have improved external positions, domestic risks seem to have been building up, in particular in the aftermath of the Global Recession. While some EMEs are still facing traditional balance-of-payments problems, others may face financial instability stemming from an overleveraged domestic financial sector and shrinking policy space.

[15] The early warning model does not signal a crisis for South Korea and Malaysia in 1997, which tends to support the hypothesis of a non-rational/non-fundamental contagion of those countries at that time.

[16] Fragilities in China are heightened because fast-rising credit has been accompanied by increased complexity and leverage in the financial system. For more details, see Dieppe, A., Gilhooly, R., Han, J., Korhonen, I. and Lodge, D. (eds.), op. cit.

2 Liquidity conditions and monetary policy operations in the period from 1 August to 30 October 2018

Prepared by Mª Carmen Castillo Lozoya and Elvira Fioretto

This box describes the ECB's monetary policy operations during the fifth and sixth reserve maintenance periods of 2018, which ran from 1 August to 18 September 2018 and from 19 September to 30 October 2018 respectively. Throughout this period the interest rates on the main refinancing operations (MROs), the marginal lending facility and the deposit facility remained unchanged at 0.00%, 0.25% and −0.40% respectively. In parallel, the Eurosystem continued to purchase public sector securities, covered bonds, asset-backed securities and corporate sector securities as part of its asset purchase programme (APP), with a target of €30 billion of purchases on average per month until the end of September and €15 billion as of October.

Liquidity needs

In the period under review, the average daily liquidity needs of the banking system, defined as the sum of net autonomous factors and reserve requirements, stood at €1,459.8 billion, an increase of €32.3 billion compared with the previous review period (i.e. the third and fourth maintenance periods of 2018). This rise in liquidity needs was largely the result of an increase in net autonomous factors, which grew on average by €29.8 billion to €1,333.1 billion during the review period, while minimum reserve requirements increased on average by €2.5 billion to €126.7 billion.

The growth in net autonomous factors was mainly due to an increase in liquidity-absorbing factors, partially offset by an increase in liquidity-providing factors. Among liquidity-absorbing factors, government deposits and banknotes in circulation accounted for the most significant changes, rising on average by €20 billion to €259.4 billion and by €16.6 billion to €1,193.1 billion respectively. These increases were partially offset by increases in the liquidity-providing factors, in particular net assets denominated in euro, which rose on average by €8.9 billion to €200.1 billion. Eurosystem liabilities to non-euro area residents in euro decreased on average by €9.5 billion, reflecting a less pronounced seasonal pattern than during the previous review period[17] and thus contributing positively to the (liquidity-providing) average net assets denominated in euro.

The day-to-day volatility of autonomous factors remained broadly unchanged from the previous review period. The daily fluctuations of autonomous factors came

[17] Eurosystem liabilities to non-euro area residents in euro mainly consist of euro-denominated deposits in accounts held by non-euro area central banks with the Eurosystem. Quarter-ends, and to a lesser extent month-ends, are typically affected by increases in these deposits, as commercial banks are more reluctant to accept cash, either in the unsecured or secured market, ahead of balance sheet reporting dates. On 30 September 2018 liabilities to non-euro area residents denominated in euro increased to €301.7 billion, compared to an average of €264.7 billion during the sixth maintenance period. This implied a less pronounced effect than that observed on 30 June 2018, when these liabilities increased to €348 billion, compared to an average of €281.4 billion in the fourth maintenance period.

primarily from government deposits and net assets denominated in euro, with higher volatility being observed around the September 2018 quarter-end and other month-end dates during the period under review.

Table A

Eurosystem liquidity conditions

Liabilities – liquidity needs (averages; EUR billions)

	Current review period: 1 August 2018 to 30 October 2018						Previous review period: 3 May 2018 to 31 July 2018	
	Fifth and sixth maintenance periods		Fifth maintenance period: 1 August to 18 September		Sixth maintenance period: 19 September to 30 October		Third and fourth maintenance periods	
Autonomous liquidity factors	**2,164.8**	**(+40.9)**	**2,150.1**	**(-17.2)**	**2,181.9**	**(+31.7)**	**2,123.9**	**(+43.8)**
Banknotes in circulation	1,193.1	(+16.6)	1,192.2	(+8.6)	1,194.3	(+2.1)	1,176.5	(+22.5)
Government deposits	259.4	(+20.0)	239.1	(-24.7)	283.1	(+44.1)	239.4	(+11.9)
Other autonomous factors	712.2	(+4.3)	718.9	(-1.1)	704.4	(-14.5)	708.0	(+9.4)
Current accounts	**1,358.0**	**(+26.2)**	**1,348.7**	**(+42.0)**	**1,369.0**	**(+20.3)**	**1,331.9**	**(+27.3)**
Monetary policy instruments	**779.7**	**(-0.4)**	**797.9**	**(+21.4)**	**758.5**	**(-39.4)**	**780.1**	**(-20.4)**
Minimum reserve requirements[1]	126.7	(+2.5)	126.7	(+2.0)	126.7	(-0.0)	124.2	(+0.0)
Deposit facility	653.0	(-2.9)	671.2	(+19.4)	631.8	(-39.4)	655.9	(-20.4)
Liquidity-absorbing fine-tuning operations	0.0	(+0.0)	0.0	(+0.0)	0.0	(+0.0)	0.0	(+0.0)

Assets – liquidity supply (averages; EUR billions)

	Current review period: 1 August 2018 to 30 October 2018						Previous review period: 3 May 2018 to 31 July 2018	
	Fifth and sixth maintenance periods		Fifth maintenance period: 1 August to 18 September		Sixth maintenance period: 19 September to 30 October		Third and fourth maintenance periods	
Autonomous liquidity factors	**831.9**	**(+10.9)**	**837.4**	**(+15.9)**	**825.5**	**(-11.9)**	**821.0**	**(-20.6)**
Net foreign assets	631.8	(+1.9)	637.5	(+2.4)	625.2	(-12.3)	629.8	(+1.0)
Net assets denominated in euro	200.1	(+8.9)	199.9	(+13.6)	200.3	(+0.4)	191.2	(-21.6)
Monetary policy instruments	**3,344.1**	**(+53.0)**	**3,332.7**	**(+27.9)**	**3,357.6**	**(+24.9)**	**3,291.1**	**(+71.3)**
Open market operations	3,344.0	(+53.0)	3,332.6	(+27.9)	3,357.5	(+24.9)	3,291.0	(+71.3)
Tender operations	739.1	(-14.0)	742.9	(-3.3)	734.7	(-8.2)	753.1	(-8.7)
MROs	4.8	(+2.9)	3.0	(+1.0)	6.9	(+3.9)	1.9	(+0.2)
Three-month LTROs	4.6	(-2.8)	5.4	(-1.9)	3.7	(-1.7)	7.4	(-0.3)
TLTRO-I operations	5.5	(-5.6)	8.9	(-0.6)	1.5	(-7.4)	11.1	(-1.9)
TLTRO-II operations	724.2	(-8.5)	725.6	(-1.8)	722.6	(-3.0)	732.7	(-6.6)
Outright portfolios	2,604.9	(+67.0)	2,589.7	(+31.2)	2,622.8	(+33.1)	2,537.9	(+79.9)
First covered bond purchase programme	4.5	(-0.2)	4.5	(-0.0)	4.5	(-0.0)	4.7	(-1.1)
Second covered bond purchase programme	4.0	(-0.2)	4.0	(-0.1)	4.0	(-0.0)	4.2	(-0.3)
Third covered bond purchase programme	258.4	(+3.8)	257.2	(+1.8)	259.9	(+2.7)	254.6	(+5.7)
Securities Markets Programme	74.2	(-9.3)	74.3	(-8.0)	74.0	(-0.3)	83.5	(-1.5)
Asset-backed securities purchase programme	27.3	(-0.2)	27.5	(-0.1)	27.1	(-0.4)	27.5	(+1.7)
Public sector purchase programme	2,067.8	(+63.6)	2,055.7	(+34.3)	2,081.9	(+26.2)	2,004.2	(+61.9)
Corporate sector purchase programme	168.7	(+9.5)	166.4	(+3.3)	171.4	(+5.0)	159.3	(+13.5)
Marginal lending facility	0.1	(-0.0)	0.1	(+0.0)	0.1	(-0.0)	0.1	(+0.0)

Other liquidity-based information (averages; EUR billions)

	Current review period: 1 August 2018 to 30 October 2018						Previous review period: 3 May 2018 to 31 July 2018	
	Fifth and sixth maintenance periods		Fifth maintenance period: 1 August to 18 September		Sixth maintenance period: 19 September to 30 October		Third and fourth maintenance periods	
Aggregate liquidity needs	1,459.8	(+32.3)	1,439.5	(-31.4)	1,483.4	(+43.9)	1,427.5	(+64.5)
Autonomous factors[2]	1,333.1	(+29.8)	1,312.8	(-33.5)	1,356.7	(+43.9)	1,303.3	(+64.4)
Excess liquidity	1,884.3	(+20.8)	1,893.1	(+59.4)	1,874.0	(-19.0)	1,863.5	(+6.8)

Interest rate developments (averages; percentages)

	Current review period: 1 August 2018 to 30 October 2018						Previous review period: 3 May 2018 to 31 July 2018	
	Fifth and sixth maintenance periods		Fifth maintenance period: 1 August to 18 September		Sixth maintenance period: 19 September to 30 October		Third and fourth maintenance periods	
MROs	0.00	(+0.00)	0.00	(+0.00)	0.00	(+0.00)	0.00	(+0.00)
Marginal lending facility	0.25	(+0.00)	0.25	(+0.00)	0.25	(+0.00)	0.25	(+0.00)
Deposit facility	-0.40	(+0.00)	-0.40	(+0.00)	-0.40	(+0.00)	-0.40	(+0.00)
EONIA	-0.363	(+0.00)	-0.359	(+0.00)	-0.366	(-0.01)	-0.363	(+0.00)

Source: ECB.
Notes: All figures in the table are rounded to the nearest €0.1 billion. Figures in brackets denote the change from the previous review or maintenance period.
1) "Minimum reserve requirements" is a memo item that does not appear on the Eurosystem balance sheet and therefore should not be included in the calculation of total liabilities.
2) The overall value of autonomous factors also includes "items in course of settlement".

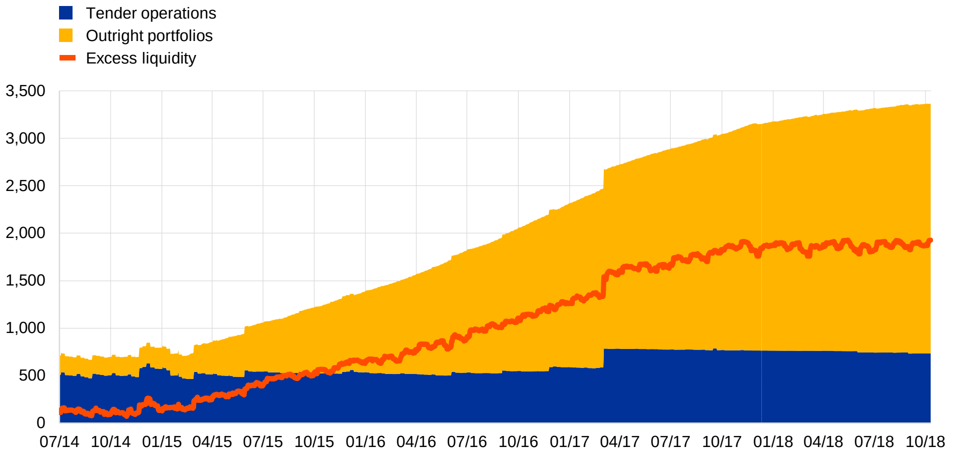
Liquidity provided through monetary policy instruments

The average amount of liquidity provided through open market operations – including both tender operations and APP purchases – increased by €53 billion to €3,344.1 billion (see Chart A). This increase was fully attributable to net APP purchases, while demand for tender operations decreased slightly.

Chart A

Evolution of open market operations and excess liquidity

(EUR billions)



Source: ECB.

The average amount of liquidity provided through tender operations declined slightly over the review period, by €14 billion to €739.1 billion. This decrease was entirely due to a lower average outstanding amount of targeted longer-term refinancing operations (TLTROs), which decreased by €14.1 billion. The decline in outstanding TLTRO funds was largely related to the maturing of the TLTRO-I operations and voluntary repayments of the first and second TLTRO-II operations in

September 2018, which amounted to a total of €12.6 billion. The average liquidity provided through MROs increased by €2.9 billion to €4.8 billion, which was almost fully offset by a decline in liquidity provided through three-month longer-term refinancing operations (LTROs), which fell on average by €2.8 billion to €4.6 billion.

Liquidity provided through the Eurosystem's monetary policy portfolios increased by €67 billion to €2,604.9 billion on average, on the back of ongoing net APP purchases. Liquidity provided by the public sector purchase programme, the third covered bond purchase programme and the corporate sector purchase programme rose on average by €63.6 billion, €3.8 billion and €9.5 billion respectively. However, the asset-backed securities purchase programme marginally declined on average by €0.2 billion on account of net redemptions of security holdings. Redemptions of bonds held under the Securities Markets Programme and the previous two covered bond purchase programmes totalled €9.7 billion.

Excess liquidity

As a consequence of the developments detailed above, average excess liquidity increased slightly compared with the previous review period, rising by €20.8 billion to €1,884.3 billion (see Chart A). This increase reflects the liquidity provided through the APP purchases, which was only partially absorbed by higher net autonomous factors, mainly in the sixth maintenance period. In fact, while excess liquidity grew by €59.4 billion in the fifth maintenance period, it declined again by €19 billion in the sixth maintenance period. This reversal was partly driven by the developments in net autonomous factors, which fell by €33.5 billion before rising again by €43.9 billion during the fifth and sixth maintenance periods, respectively. Regarding the allocation of excess liquidity holdings between current accounts and the deposit facility, average current account holdings grew by €26.2 billion to €1,358 billion, while average recourse to the deposit facility marginally declined by €2.9 billion to €653 billion.

Interest rate developments

Overnight unsecured and secured money market rates remained close to the ECB deposit facility rate, or slightly below it for specific collateral baskets in the secured money market segment. In the unsecured market, the euro overnight index average (EONIA) averaged −0.363%, unchanged from the previous review period. The EONIA fluctuated between a low of −0.371% observed on 12 September and on 17 October and a high of −0.342% on the last day of August 2018. Regarding the secured market, the spread between the average overnight repo rates for the standard and the extended collateral baskets in the general collateral (GC) pooling market[18] narrowed substantially in an environment of low trading volumes. Compared to the previous period, the average overnight repo rate for the standard collateral basket

[18] The GC Pooling market allows repurchase agreements to be traded on the Eurex platform against standardised baskets of collateral.

increased by 22 basis points to −0.419%, while for the extended collateral basket it declined by 10 basis points to −0.404%.

The September quarter-end decline in repo rates for collateral from most euro area countries was slightly more visible than at the March and June quarter-ends, but was still relatively moderate compared to the 2017 quarter-ends. While, at the end of June, overnight GC repo rates declined by only 2 basis points for French collateral and by only 5 basis points for German collateral, at the end of September the same repo rates decreased by 11 basis points and 15 basis points, respectively, to −0.61% and −0.65%. On the other hand, the GC repo rate for Italian collateral increased by 6 basis points to −0.33% at the end of September, which compares with a 3 basis points rise at the end of June. Repo rates for all euro area countries returned to previous levels immediately after the quarter-end. All in all, the Eurosystem public sector purchase programme securities lending facility continued to support the smooth functioning of repo markets.

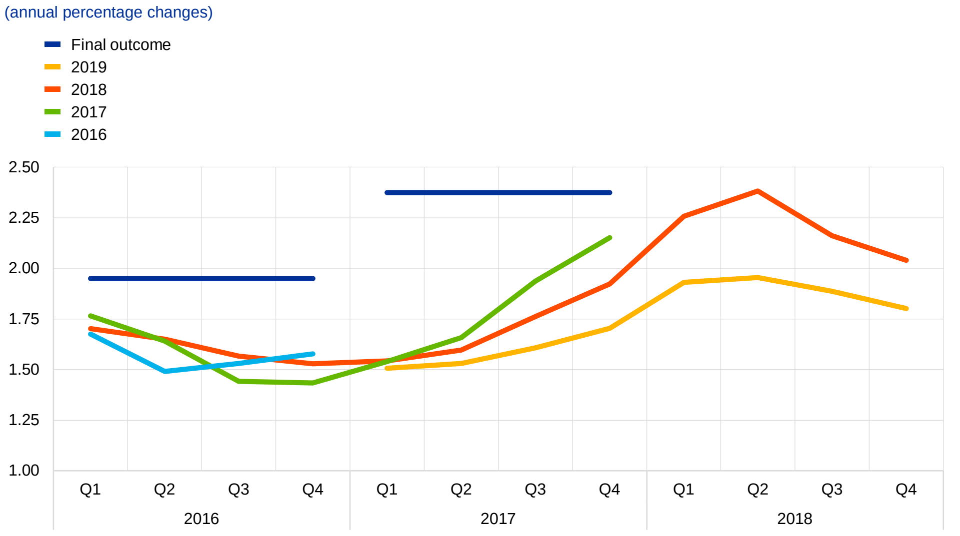
3 Understanding the slowdown in growth in 2018

Prepared by Maarten Dossche and Jaime Martinez-Martin

Growth in economic activity has moderated significantly in the euro area since the end of 2017. Indeed, quarter-on-quarter GDP growth in the euro area fell to 0.2% in the third quarter of 2018, down from 0.7% in the fourth quarter of 2017. This box assesses the factors which are contributing to that slowdown and looks at whether it should be considered a surprise. In particular, it looks at whether the underlying factors are temporary or of a more permanent nature, whether they have originated within the euro area or externally, and whether the slowdown has been driven by a weakness in demand or a tightening of supply conditions.

Chart A

Professional forecasters' GDP growth expectations



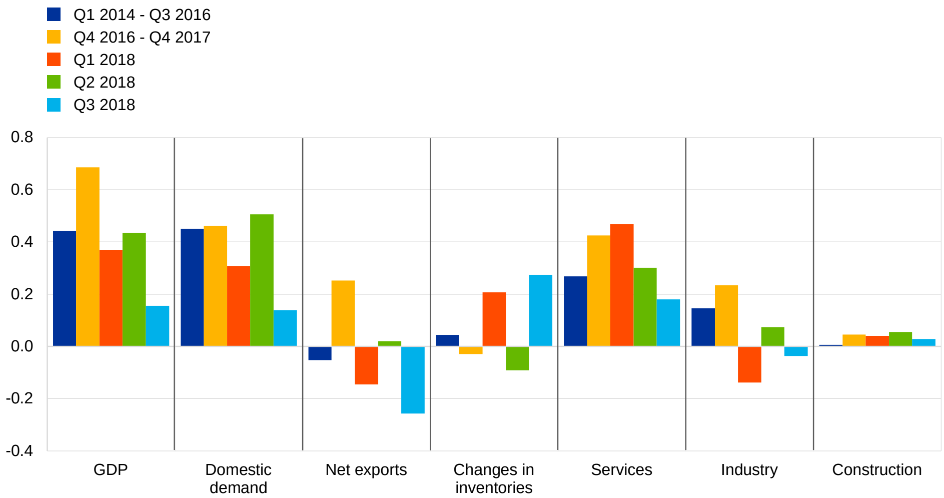
Sources: Eurostat and ECB.
Notes: The dark blue lines represent final estimates of annual GDP growth. All other lines represent growth forecasts for a particular year at various points in time.

Recent output growth has been disappointing when compared with growth forecasts in late 2017, but not when compared with earlier expectations. The strong acceleration in growth in 2017 was a favourable development that came as a surprise to most professional forecasters (see Chart A). That strengthening of growth, which coincided with world trade growth peaking at 5.2%, was driven mainly by net exports. Conversely, growth in domestic demand remained comparable to the levels seen in the first part of the economic expansion from 2014 to 2016 (see Chart B). Since early 2018, growth forecasts for 2018 and 2019 have gradually been revised downwards, but annual GDP growth in 2018 is still expected to be stronger than was forecast at the beginning of 2017.

Chart B

GDP growth: expenditure and production breakdown

(quarterly percentage changes; percentage point contributions)



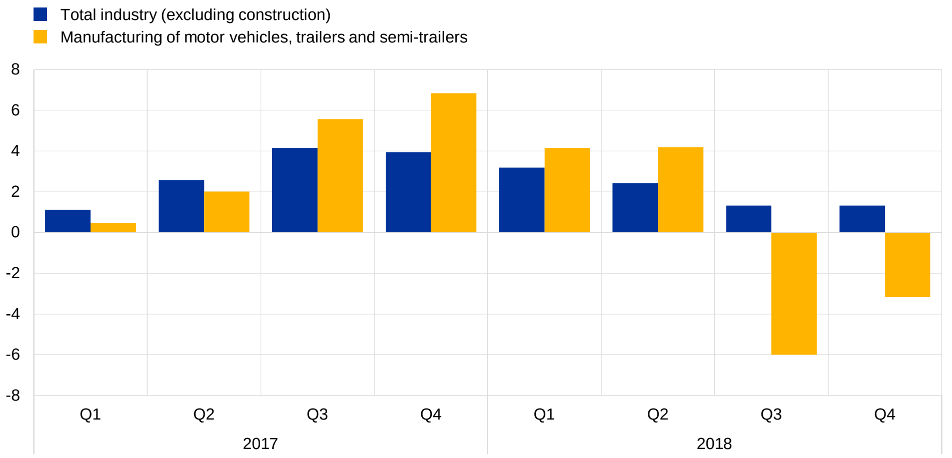
Sources: Eurostat and ECB calculations.
Note: Figures for the period from the first quarter of 2014 to the third quarter of 2016 and the period from the fourth quarter of 2016 to the fourth quarter of 2017 represent averages of the relevant quarterly data.

The slowdown in 2018 has been driven largely by external factors, in particular the weakness in external demand. Indeed, much like the strengthening of growth in 2017, the slowdown in 2018 has been driven by net exports (see Chart B). Trade dynamics have been normalising as global growth has fallen back towards potential levels. As the main producer of tradable goods, the industrial sector has been most affected by the decline in net exports. Meanwhile, growth in domestic demand has generally remained in line with the average contribution made since the start of the economic expansion. While in the third quarter of 2018 the temporary disruption to car production weighed on private consumption, the robustness of domestic demand reflects the virtuous circle between employment, labour income and consumption. Available evidence suggests that this virtuous circle has not, thus far, been disrupted by the recent loss of growth momentum.

Chart C

Industrial production

(annual percentage changes)



Sources: Eurostat and ECB calculations.
Note: Data for the fourth quarter of 2018 are based on monthly figures for October 2018 only.

Several temporary factors have also weighed on the growth profile. In the first half of 2018, weather conditions, sickness and industrial action affected output in a number of countries.[19] In the third quarter, there was also significant disruption to car production as a result of the introduction of new vehicle emissions standards on 1 September (see Chart C). Production slowed as carmakers tried to avoid accumulating stocks of untested models, which weighed heavily on economies with large automobile sectors (such as Germany). In fact, the German economy actually contracted in the third quarter, reducing quarterly euro area growth by at least 0.1 percentage point. This effect, however, is expected to be temporary. As the testing backlog clears, car production in the fourth quarter should gradually return to normal and the effect on output should dissipate. Indeed, the latest data suggest that car production has already started to normalise.[20]

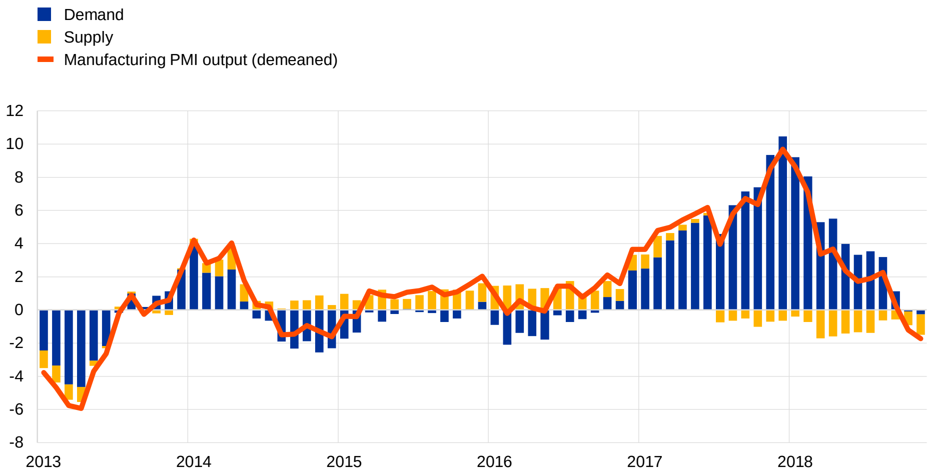
[19] See the box entitled "The recent slowdown in euro area output growth reflects both cyclical and temporary factors", *Economic Bulletin*, Issue 4, ECB, 2018.

[20] According to data from the German Association of the Automotive Industry up to November 2018.

Chart D

Decomposition of manufacturing PMI output

(diffusion index; contributions)



Sources: Markit and ECB calculations.
Notes: Historical decomposition of euro area manufacturing PMI using a sign-restricted SVAR with output and capacity utilisation from the manufacturing PMI. This model uses sign restrictions to identify demand and supply shocks, whereby the former are defined as shocks that push manufacturing PMI output and capacity utilisation in the same direction while the latter are defined as shocks that push manufacturing PMI output and capacity utilisation in opposite directions.

Despite that weakening of demand, the current high levels of capacity utilisation suggest that supply conditions in the manufacturing industry remain tight. A model-based decomposition of manufacturing PMI output suggests that the recent slowdown in activity is mainly related to a weakness in demand (see Chart D).[21] At the same time, supply constraints have gradually become more binding since mid-2017. Capacity utilisation has fallen only slightly as output growth has slowed. This pattern can clearly be observed in the manufacturing sector – especially in Germany and, to a lesser extent, France.

All in all, the recent slowdown in growth has not, thus far, called into question the fundamentals of the current economic expansion. The moderation follows unexpectedly strong external demand in 2017 and has been compounded by a number of temporary factors. In fact, a gradual slowdown in growth can even be considered normal as an expansion matures. At the same time, uncertainty about external developments has clearly increased the risks to the euro area's economic outlook. Consequently, the possible implications for domestic demand and the fundamentals of the expansion need to be monitored closely.

[21] In this framework, the recent temporary disruption to car production is also regarded as a decline in demand.

4 Compositional changes behind the growth in euro area employment during the recovery

Prepared by Katalin Bodnár

In the third quarter of 2018 the total number of people in employment in the euro area was 9.6 million higher than in the second quarter of 2013 (when it fell to its lowest point during the crisis). The increase in employment over the course of the recovery has more than offset the decline observed during the crisis. As a result, euro area employment is currently at its highest level ever, standing at 158.3 million.[22] This box describes the net employment growth in the euro area over the course of the recovery and compares it to the period from the first quarter of 1999 to the first quarter of 2008 (i.e. from the introduction of the euro to the start of the crisis), which was also characterised by a continuous increase in employment across the euro area as a whole.

In the recent recovery, the country composition of employment growth has been somewhat different from that observed during the pre-crisis period. The 9.6 million increase in the number of people employed in the euro area is similar to that seen in the five years before the crisis, during which an increase of 10 million was recorded.[23] The main difference is that Germany now accounts for a significantly larger percentage of employment growth than it did before the crisis, while the relative shares of the other large euro area countries – particularly Spain – have declined (see Chart A). This largely reflects the relative strength of the economic growth seen in those countries over the two periods. On a related note, while Spain was the euro area's main destination country for immigrants before the crisis, during the recovery Germany has been the country with the largest inflow of immigrants. Lithuania, Austria, Portugal and Slovakia have also increased their contributions to euro area employment growth during the recent recovery.

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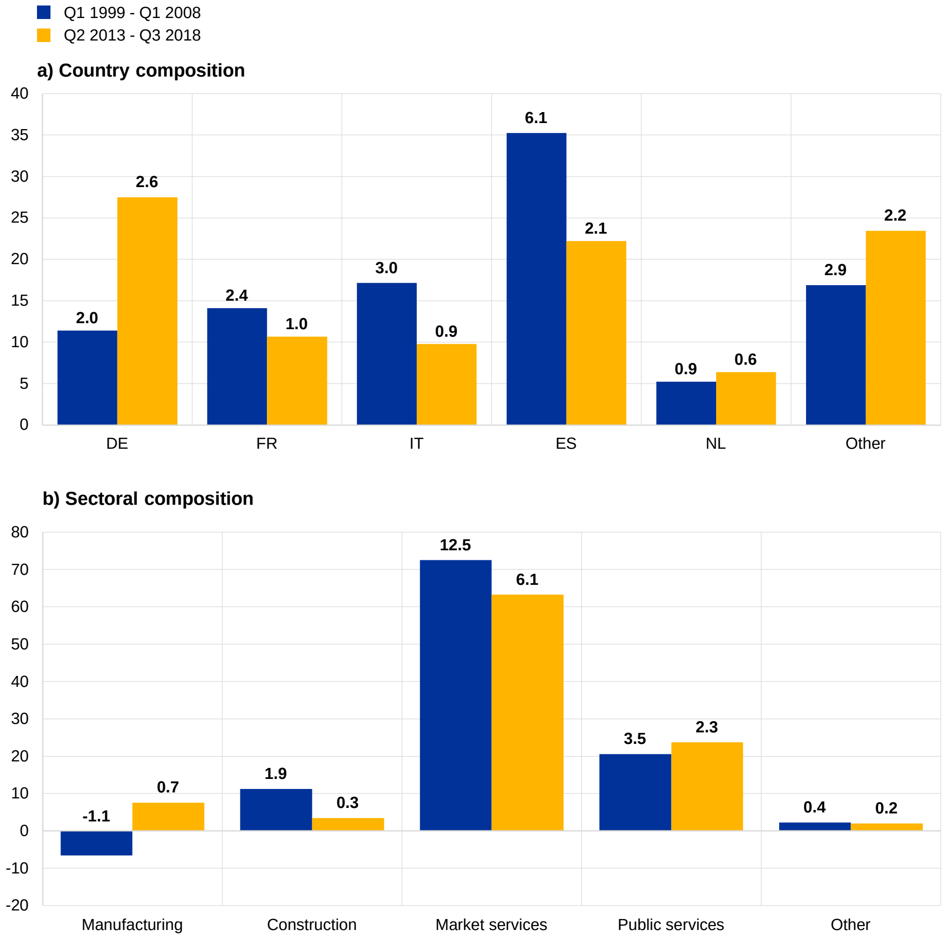
22 The figures reported here are based on data from the national accounts. These allow developments in euro area employment to be broken down by country and sector. Data from the EU Labour Force Survey (LFS) are used for a detailed breakdown of employment on the basis of personal characteristics and types of contract. While the dynamics of these two sets of statistics are similar, the resulting levels of employment and cumulative growth rates are somewhat different for methodological reasons. In the case of LFS data, for example, figures are based on a national concept, some sections of the population are not covered and employment data relate to the 15-64 or 15-74 age groups. In contrast, the national accounts data are based on a domestic concept, they contain an estimate of employment in the hidden economy and employment data cover people of all ages. Please see here for a detailed explanation. According to LFS data, the number of people in employment increased by 8.9 million between the first quarter of 2013 (its lowest point according to that dataset) and the second quarter of 2018 (the last available data point for those statistics).

23 See "The outlook for the euro area economy", speech by Mario Draghi, President of the ECB, at the Frankfurt European Banking Congress, Frankfurt am Main, 16 November 2018.

Chart A

Breakdown of cumulative employment growth by country and sector in the pre-crisis period and during the recovery

(y-axis: shares of cumulative employment growth in percentages; data labels: cumulative employment growth in millions)



Sources: Eurostat and national accounts.

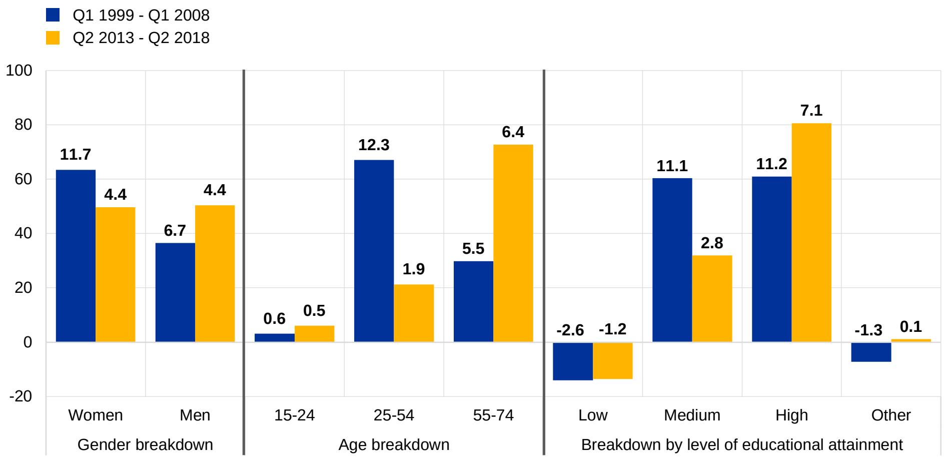
Market services drove employment growth in both periods, although it accounted for a smaller percentage of total employment growth during the recent recovery. In both periods, employment growth in market services was dominated by professional and administrative services and the trade and transport sectors. Meanwhile, the contribution made by construction has been smaller during the recent recovery than it was before the crisis. By contrast, employment in manufacturing has made a small positive contribution since the second quarter of 2013 after declining in the period before the crisis. Finally, the public sector has accounted for about one-fifth of cumulative employment growth during the recent recovery, much as it did in the pre-crisis period.

Employment growth has been fairly equally divided between men and women during the recent recovery (see Chart B). Before the crisis, women experienced very strong employment growth, in line with their rising participation rate and reflecting increases in their level of education, labour market reforms and the growing importance of services in the economy. However, more recently the female participation rate has risen less strongly as the factors that contributed to past increases have started to stabilise, and this is also reflected in women's contribution to employment growth. At the same time, male employment fell during the crisis and, although it has been recovering, it has yet to return to pre-crisis levels. Reflecting these trends, women's share of the stock of employment has levelled off recently at 46.3% (up from 42.6% in the first quarter of 1999 and slightly above the 45.9% that was seen in the second quarter of 2013).

Chart B

Breakdown of cumulative employment growth on the basis of personal characteristics in the pre-crisis period and during the recovery

(y-axis: shares of cumulative employment growth in percentages; data labels: cumulative employment growth in millions)



Sources: Eurostat and LFS.
Notes: As regards the level of educational attainment, "low" denotes less than primary, primary and lower secondary education, "medium" denotes upper secondary and post-secondary non-tertiary education, "high" denotes tertiary education, and "other" denotes a non-response. The negative percentage for "other" in the pre-crisis period most likely reflects an improving response rate in this period.

There has been a change in the age breakdown of cumulative employment growth, with older workers making a considerably larger contribution during the recent recovery (see Chart B). Before the crisis the prime-age population (i.e. people aged between 25 and 54) accounted for more than two-thirds of employment growth, but this group has only made up around one-fifth of employment growth in the recent recovery. In contrast, people aged between 55 and 74 have accounted for three-quarters of cumulative employment growth during the recent recovery, up from less than one-third before the crisis. The contribution of the young (i.e. people aged between 15 and 24) has been limited in the recent recovery, as it was in the pre-crisis period.

Demographics and pension reforms are likely to be the main explanatory factors underlying changes in the age breakdown of employment growth. These developments largely reflect changes in the labour supply. The number of older people has been rising as members of the "baby boomer" generation enter the 55-74 age category, while the number of people below the age of 55 has been falling.[24] At the

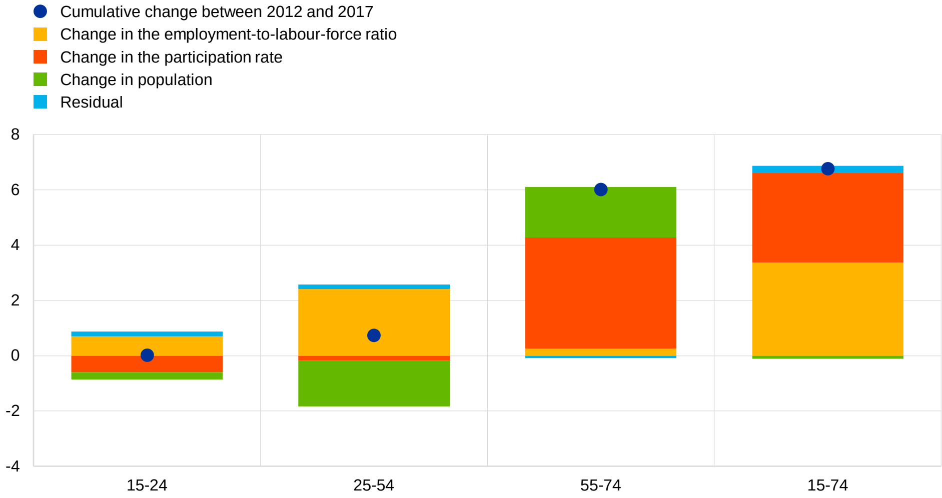
[24] See the box entitled "Recent developments in euro area labour supply", *Economic Bulletin*, Issue 6, ECB, 2017.

same time, the participation rate of older people has also risen considerably.[25] In the recent recovery, around one-third of the increase in employment of people aged 55 to 74 has been due to their increasing numbers, and two-thirds has been explained by their rising participation rate (see Chart C). One reason for the rising participation rate of the 55-74 age group is the increase in their education level, which is positively correlated with the participation rate. However, that only explains a small percentage of the overall increase in the participation rate. It seems more likely that the main factor driving this increase in participation has been the fact that statutory and effective pension ages have risen across the euro area.[26]

Chart C

Breakdown of cumulative employment growth by age group during the recovery

(percentage changes; percentage point contributions)



Sources: Eurostat, LFS and ECB calculations.
Note: These data are based on annual figures.

Employment growth in the recent recovery has been dominated by people educated to tertiary level. Indeed, people who have completed tertiary education have accounted for almost 80% of total employment growth in the current recovery, up from 60% pre-crisis, while the contribution made by people with a medium level of educational attainment has shrunk significantly. The employment of people with a low level of education has declined in the recent recovery, as it did in the pre-crisis period. These developments are also linked to changes in the population as the number of people with a low level of education declines and the number of people with a tertiary education increases.

Euro area employment growth during the recent recovery has been driven by full-time and mostly permanent contracts, with nearly 80% of all growth stemming from an increase in full-time employment. That being said, full-time employment remains below its pre-crisis level after falling sharply during the crisis.

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25 The participation rate of this age group has followed an increasing trend over time, standing at 22.4% in the first quarter of 1999, 33.6% in the second quarter of 2013 and 39% in the second quarter of 2018. See also the article entitled "Labour supply and employment growth", *Economic Bulletin*, Issue 1, ECB, 2018.

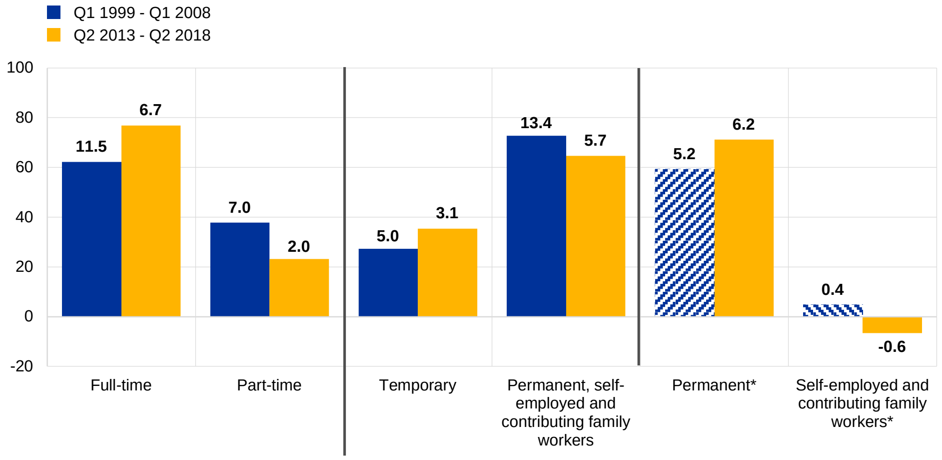
26 A simple shift-share analysis shows that this participation rate would still have increased considerably even if the composition in terms of educational level had remained unchanged.

Part-time employment rose throughout the crisis, and has continued to do so during the recovery, but its contribution to employment growth has recently declined while its share in total employment has flattened. This can be explained by a decline in the number of underemployed part-time workers (i.e. people who would like to work more hours), while the contribution made to employment growth by non-underemployed workers (i.e. people who are satisfied with their part-time hours) has been similar to that observed before the crisis.[27] At the same time, while employment growth is still concentrated in permanent positions, temporary employment now accounts for a larger percentage of employment growth, while self-employment is falling (see Chart D).

Chart D

Breakdown of cumulative employment growth on the basis of contract characteristics in the pre-crisis period and during the recovery

(y-axis: shares of cumulative employment growth in percentages; data labels: cumulative employment growth in millions)



Sources: Eurostat, LFS and ECB calculations.
Note: Data have been corrected for level shifts by ECB staff.
* Separate data for permanent contracts and self-employment and contributing family workers have only been available since 2005.

27 See the box entitled "Recent developments in part-time employment", *Economic Bulletin*, Issue 2, ECB, 2018.

5 Recent developments in the wage drift in the euro area

Prepared by Gerrit Koester and Justine Guillochon

The wage drift measures deviations between developments in actual wages and developments in negotiated wages. It is an important element in the macroeconomic analysis of employee compensation because it should be closely linked to cyclical developments in the labour market. In a tightening labour market, employers might be compelled to offer pay scales that are higher than those under collective agreements, to promote employees to higher bands within collectively agreed pay scales, or simply to pay bonuses on top of agreed wages as a way to reward and retain employees. Given recent protracted declines in unemployment and increasing signs of labour shortages, this box reviews the role of the wage drift in recent developments in employee compensation.

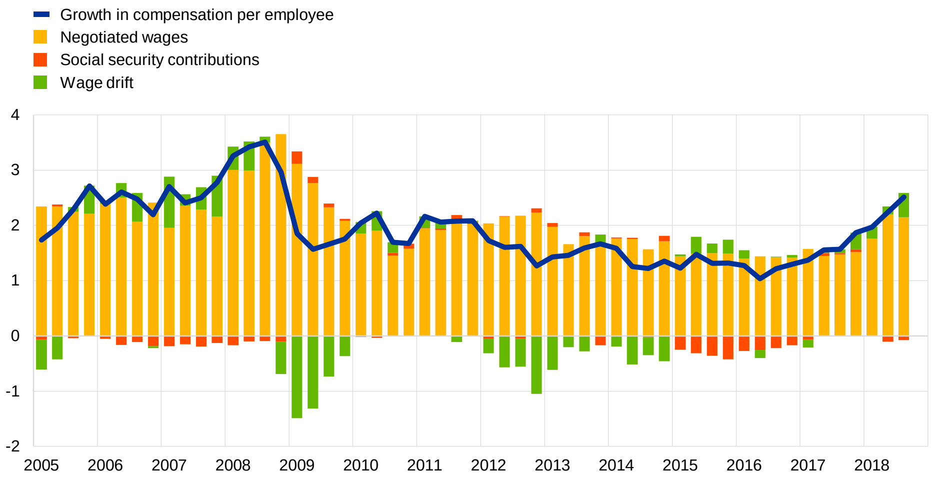
Aggregate wage drift is not observable, and is here derived as the difference between growth rates of gross wages and salaries per employee and those of negotiated wages. This implies that headline wage growth as measured by compensation per employee can be broken down into negotiated wage growth, the wage drift and the impact of changes in social security contributions, where the latter is defined as the difference between the annual rate of growth in compensation per employee and the annual rate of growth in gross wages and salaries per employee. The wage drift calculated in this way inevitably also picks up shifts in an economy's employment structure, in the extent to which companies are bound by collective agreements and in average hours worked per person – thus, more than just the influence of labour market developments on pay premia.

Wage drift was the main driver of higher wage growth during the early phase of wage growth strengthening, but is now also supported by negotiated wages. From the second quarter of 2016 to the fourth quarter of 2017, the 0.4 percentage point change in the wage drift was the largest single contribution to the increase in the growth of compensation per employee, which rose from 1.0% to 1.8% (see Chart A). Over that period growth in negotiated wages was largely flat, only starting to pick up in 2018, when it increased from 1.5% in the last quarter of 2017 to 2.1% in the third quarter of 2018.The recent increase in compensation per employee growth from 1.9% in the fourth quarter of 2017 to 2.5% in the third quarter of 2018 was hence strongly supported also by growth in negotiated wages.

Chart A

Decomposition of growth in compensation per employee

(annual percentage changes, percentage point contributions)



Sources: Eurostat, ECB and ECB calculations.
Note: The latest observation is for the third quarter of 2018.

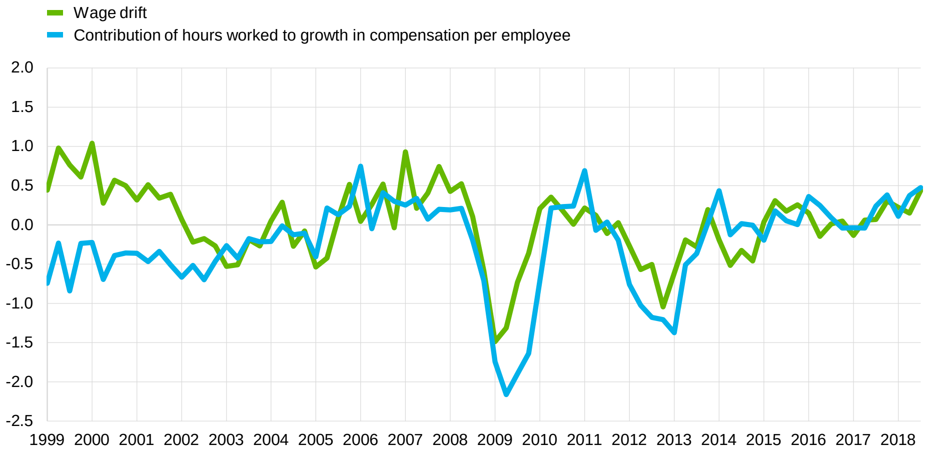
Changes in hours worked have not been decisive for the recent developments in the wage drift. Assuming that, on most occasions, growth in negotiated wages implicitly relates to remuneration per hour, the wage drift as calculated here can be affected by changes in average hours worked per employee, such as those resulting from overtime or shifting between full and part-time employment.[28] Comparing changes in the contribution of hours worked per employee to growth in compensation per employee with the wage drift shows that the substantial reductions in hours worked per employee in 2008-09 and 2012-13 were – unsurprisingly – reflected in the strongly negative contributions of the wage drift to overall wage growth. Since 2014, however, changes in hours worked per employee have been only loosely related to changes in the wage drift in the individual quarters, indicating that changes in hours worked play a limited role in developments in the aggregate wage drift.

[28] Assessing the wage drift is subject to a number of caveats. For example, euro area negotiated wage data, which are needed to calculate the wage drift, are computed based on non-harmonised country-level data. This could also affect the reliability of the calculated wage drift. Furthermore, the wage drift is computed as the difference between the annual growth rate of gross wages and salaries and the annual growth rate of negotiated wages, rather than as the contribution of negotiated wages to overall wage growth. This results from the fact that negotiated wages are – unlike data on compensation – typically not available in levels.

Chart B

Wage drift and the contribution of hours worked to growth in compensation per employee

(percentage point contributions)



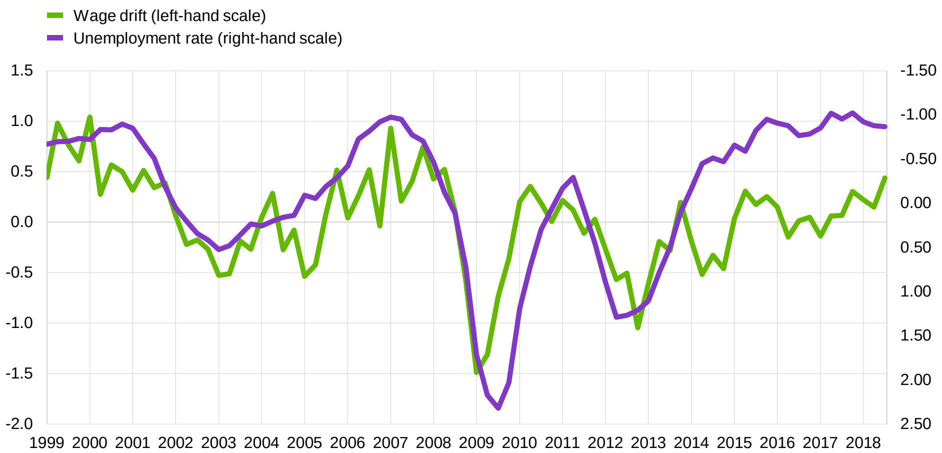
Sources: Eurostat, ECB and ECB calculations.
Note: The latest observation is for the third quarter of 2018.

The wage drift tends to react relatively quickly to changes in cyclical labour market conditions. As illustrated in Chart C, there is usually only a small lag in the response of the wage drift to changes in cyclical labour market conditions as measured by the change in the unemployment rate. The direct reaction of the wage drift to the cycle is in line with the use of bonuses and special pay in periods of the business cycle characterised by increasing productivity and profitability. However, it should be noted that the typical relationships between the wage drift and cyclical labour market developments were a lot less visible during the period of subdued wage growth from 2013 to 2016. During this period, wage restraint seems to have also been applied to flexible wage elements like bonuses.

Chart C

Wage drift over the cycle

(left-hand scale: percentage point contributions; right-hand scale: percentage points)



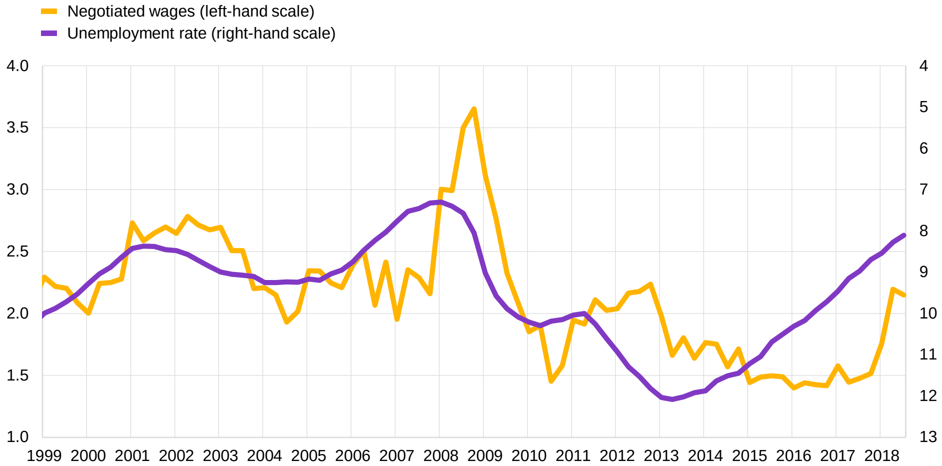
Sources: Eurostat, ECB and ECB calculations.
Notes: The latest observations are for the third quarter of2018. The unemployment rate series reflects the year-on-year change in the unemployment rate. The right-hand scale is inverted.

Growth in negotiated wages is typically more persistent than the wage drift. As such, it reacts less directly to changes in the unemployment rate but depends more on the level of that rate (see Chart D). In fact, in line with the broad signal that unemployment gives in respect of the state of the labour market and thus for the wage negotiation process, negotiated wages appear to react only to cumulative changes in the unemployment rate in one direction and therefore respond to cyclical labour market developments with a longer lag. Such a time lag and a higher persistence of negotiated wage growth is in line with bargaining processes in major euro area countries, which often fix wages for periods longer than one year. Moreover, overlapping calendars in sectoral wage negotiations imply that normally not all contracts are negotiated in the same year and that it may thus take some time for cyclical developments to be fully reflected in aggregate negotiated wage growth.

Chart D

Development of negotiated wage growth and the level of unemployment

(left-hand scale: annual percentage changes, right-hand scale: percentage)



Sources: Eurostat, ECB and ECB calculations.
Notes: The latest observation is for the third quarter of 2018. The right-hand scale is inverted.

The higher persistence in negotiated wage growth bolsters confidence that the recent increase in wage growth will be sustained. Growth in negotiated wages reflects the fixation of pay developments for some time ahead and is thus a foundation for actual pay developments. This adds to a more confident outlook for wage growth than if the upturn were driven just by the wage drift, which reacts more quickly to changes in the labour market. While it is, in general, not impossible that the wage drift could even turn negative if unexpected adverse macroeconomic developments were to materialise, their impact would also need to be unusually large to offset the positive effect of the recently higher growth in negotiated wages. Looking ahead, recent wage agreements and the broadening of wage growth across countries and sectors support the expectation of a further pick-up in wage growth.

6 An assessment of draft budgetary plans for 2019

Prepared by Stephan Haroutunian, Sebastian Hauptmeier and Nadine Leiner-Killinger

On 21 November 2018 the European Commission released its opinions on the draft budgetary plans (DBPs) of euro area governments for 2019, together with an analysis of the budgetary situation in the euro area as a whole. Each opinion includes an assessment of the compliance of the relevant plan with the Stability and Growth Pact (SGP). This exercise is important as it assesses whether countries have incorporated into their plans the country-specific recommendations for fiscal policies that were addressed to them under the 2018 European Semester, as adopted by the Economic and Financial Affairs Council on 13 July 2018.[29] These recommendations propose, among other things, that countries with high ratios of government debt to GDP aim for a sufficiently fast reduction in indebtedness. This would raise their resilience in a future economic downturn.[30]

The Commission opinions point to very heterogeneous fiscal developments across the euro area countries. On the one hand, based on its 2018 autumn economic forecast, the Commission considers ten of the draft budgetary plans – an unprecedented number – as compliant with the SGP.[31] This refers to the plans of Germany, Ireland, Greece, Cyprus, Lithuania, Luxembourg, Malta, the Netherlands, Austria and Finland (all under the SGP's preventive arm; see Chart A). These countries are projected to record sound fiscal positions in 2019 as captured by their medium-term budgetary objectives (MTOs).[32] The Commission also considers that the draft budgetary plans of a further three countries are "broadly compliant" with the SGP.[33] This refers to the plans of Estonia, Latvia and Slovakia. On the other hand, the draft budgetary plans of those countries farthest from sound fiscal positions pose the largest risks of non-compliance with the SGP. According to the Commission's economic forecast, these countries' structural efforts are projected to fall significantly short of their SGP commitments (see Chart B). This holds, notably, for most of the countries that are projected to record high government debt ratios of above 90% of GDP in 2019 (see Chart A).[34] Specifically, the draft budgetary plans of five countries

[29] See the country-specific recommendations for fiscal policies under the 2018 European Semester for more information. For more background and further detail, see the box entitled "Country-specific recommendations for fiscal policies under the 2018 European Semester", *Economic Bulletin*, Issue 4, ECB, June 2018.

[30] The review of draft budgetary plans included Greece, which participated in this exercise for the first time after having exited its financial adjustment programme in August.

[31] This is four more than the number of countries whose plans were found to be fully compliant last year.

[32] Greece does not have an MTO yet, but its surplus is assessed by the Commission as exceeding a new target that is to be established. According to the Commission's Vade Mecum on the Stability and Growth Pact, countries with a structural balance within the 0.25% of GDP margin of tolerance of the MTO are considered as having achieved their MTO.

[33] For countries subject to the SGP's preventive arm, draft budgetary plans are "broadly compliant" if, according to the Commission's forecast, the plan may result in some deviation from the MTO or the adjustment path towards it, but the shortfall relative to the requirement would not represent a significant deviation from it. Deviations from the fiscal targets under the preventive arm are classified as "significant" if they exceed 0.5% of GDP in one year or 0.25% of GDP on average in two consecutive years.

[34] Except for Slovenia, these countries are not expected to reduce their government debt towards the reference value of 60% of GDP, in line with the SGP's debt rule, in 2019.

are considered to pose a “risk of non-compliance with the SGP”.[35] This refers to the plan of Spain, which is currently under the SGP’s corrective arm – with an excessive deficit procedure (EDP) correction deadline in 2018 – and, under its preventive arm, the plans of Belgium, France, Portugal and Slovenia. The latter submitted its plan on a no-policy-change basis, because of its government having been newly elected. The Eurogroup invites the countries concerned “to consider in a timely manner the necessary additional measures to address the risks identified by the Commission and to ensure that their 2019 budget will be compliant with SGP provisions.”

In the case of Italy, the European Commission issued for the first time an opinion establishing the particularly serious non-compliance of a budgetary plan with SGP requirements.[36] Where a risk of particularly serious non-compliance with the provisions of the SGP is identified – that is, where a plan envisages structural efforts that fall clearly short of requirements – the Commission can ask the relevant member country to provide an updated budgetary plan. Such a request was issued to Italy on 23 October. The revised budgetary plan submitted by the Italian authorities on 13 November kept deficit targets unchanged, leading the Commission to confirm its assessment of particularly serious non-compliance on 21 November. At the same time, Italy's fiscal plans for 2019 were assessed by the Commission as a material change in the relevant factors as analysed by the Commission in the report under Article 126(3) of the Treaty on the Functioning of the European Union (TFEU), which was published in May 2018. As a result, on 21 November the Commission also issued a new report under Article 126(3) of the TFEU, based on data reported for 2017. In that report, the Commission came to the conclusion that the debt criterion should be considered as not complied with, paving the way for opening a debt-based EDP for Italy. The Eurogroup, in its statement of 3 December, supported the Commission’s assessment and recommended that Italy take the necessary measures to comply with the SGP. On 19 December the Commission sent a letter to the Italian authorities taking note of the fiscal measures set out by the government in a letter of 18 December and indicated that if these were adopted by the Italian Parliament before the end of the year, “this would allow the European Commission not to recommend the opening of an Excessive Deficit Procedure at this stage.”[37]

The continued failure to build fiscal buffers in countries with high government debt is a matter of concern because it raises the risk of these countries being forced to tighten fiscal policies in a future downturn. One of the major lessons from the last crisis is that sound fiscal positions provide countries with the fiscal space they may need to counter unforeseen shocks. Given the lack of follow-up to its recommendation of last year, the Eurogroup therefore “reiterates that a slow pace of debt reduction from high levels in a number of Member States remains a matter for concern and should be decisively addressed.” It also stressed that the “current

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35 For countries subject to the SGP’s preventive arm, the Commission assesses a draft budgetary plan as being “at risk of non-compliance with the SGP” if it forecasts a significant deviation from the MTO or the required adjustment path towards the MTO in 2019 and/or non-compliance with the debt reduction benchmark, where that benchmark is applicable.

36 This includes cases in which the improvement in the structural balance towards the country-specific MTO is forecast to fall significantly short of requirements, i.e. by more than 0.5 percentage point of GDP. This is the threshold for the significant deviation procedure under the SGP’s preventive arm.

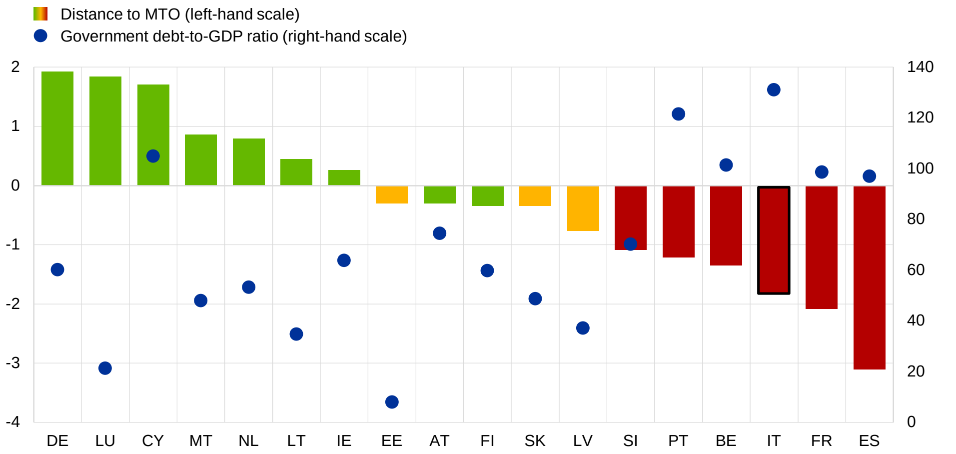
37 For details see the Commission press release.

economic conditions call for the urgent need to rebuild fiscal buffers, notably in Member States that have not reached their Medium-Term Budgetary Objectives."

Chart A

Government debt and differences between structural balances and MTOs in 2018

(percentage of GDP)



Sources: European Commission 2018 autumn economic forecast, ECB calculations.
Notes: The chart depicts the deviation of countries' structural balances in 2018 from their MTOs. Green (orange) bars relate to countries whose draft budgetary plan for 2019 is considered by the European Commission to be (broadly) compliant with the SGP. Red bars relate to countries whose draft budgetary plan for 2019 is considered by the European Commission to be at risk of non-compliance with the SGP. The black-framed red bar in the case of Italy reflects the opinion of the Commission that the draft budgetary plan poses a particularly serious risk of non-compliance with the SGP. Greece is not included in this chart as it currently does not have an MTO. Its DBP for 2019 was considered by the Commission as being compliant with the SGP.

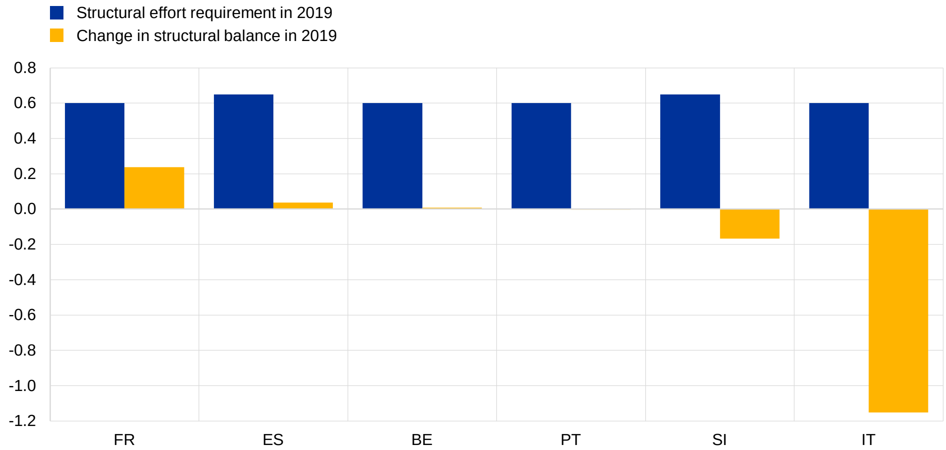
The reasons why some countries do not make sufficient progress towards sound fiscal positions need to be addressed. First, under the SGP's corrective arm, this requires a review of the "nominal strategies". Under such strategies, countries subject to an EDP fall short of their structural effort requirements while complying with their nominal headline deficit targets. Consequently, many countries exited their EDP after the crisis with still large structural deficits that make them vulnerable in a downturn. Second, under the SGP's preventive arm, the application of flexibility needs to be addressed.[38] According to the common position on flexibility, which was endorsed by the ECOFIN Council in early 2016, budgetary adjustment requirements over the economic cycle can be modulated according to a matrix that specifies that larger (smaller) fiscal efforts are required for Member States in economic good (bad) times and/or with high (low) levels of government debt. It also allows reduced structural efforts in exchange for additional structural reforms and investment. Both a special report by the European Court of Auditors (ECA) in 2018 on the preventive arm of the SGP as well as the 2018 Annual Report of the European Fiscal Board (EFB) stress that due to the cumulative effects of different forms of flexibility it is not ensured that Member States, especially high-debt ones, converge toward their MTOs within a reasonable time frame. This can put them in a precarious position when the next recession comes.

38 In May 2018 the Commission published its review of the flexibility under the SGP that had been introduced in 2015. The analysis – which focuses on the design rather than implementation of rules – suggests that the modulation of fiscal effort according to the "matrix of requirements" does not reduce the standard pace of the necessary fiscal adjustment and therefore supports the achievement of a sound budgetary position over the medium term, thus not weakening debt reduction. However, it also indicates that the actual fiscal effort of Member States has fallen short of the required effort.

Chart B

Recommended and projected structural balance adjustments for 2019 – DBPs at risk of non-compliance with the SGP and particularly serious risks of non-compliance

(percentage of GDP)



Sources: European Commission 2018 autumn economic forecast and country-specific recommendations for fiscal policies as adopted by the Economic and Financial Affairs Council on 13 July 2018.

Going forward, a fully functioning EU fiscal framework is essential for a further deepening of Economic and Monetary Union. The upcoming review of the regulations in the "six pack" and the "two pack", which were implemented to strengthen the rules in 2011 and 2013, respectively, is an opportunity to identify and remedy shortcomings in the current set of rules.

Statistics

Contents

Further information

ECB statistics can be accessed from the Statistical Data Warehouse (SDW):	http://sdw.ecb.europa.eu/
Data from the statistics section of the Economic Bulletin are available from the SDW:	http://sdw.ecb.europa.eu/reports.do?node=1000004813
A comprehensive Statistics Bulletin can be found in the SDW:	http://sdw.ecb.europa.eu/reports.do?node=1000004045
Methodological definitions can be found in the General Notes to the Statistics Bulletin:	http://sdw.ecb.europa.eu/reports.do?node=10000023
Details on calculations can be found in the Technical Notes to the Statistics Bulletin:	http://sdw.ecb.europa.eu/reports.do?node=10000022
Explanations of terms and abbreviations can be found in the ECB's statistics glossary:	http://www.ecb.europa.eu/home/glossary/html/glossa.en.html

Conventions used in the tables

-	data do not exist/data are not applicable
.	data are not yet available
...	nil or negligible
(p)	provisional
s.a.	seasonally adjusted
n.s.a.	non-seasonally adjusted

1 External environment

1.1 Main trading partners, GDP and CPI

	GDP [1] (period-on-period percentage changes)						CPI (annual percentage changes)						
	G20	United States	United Kingdom	Japan	China	Memo item: euro area	OECD countries		United States	United Kingdom (HICP)	Japan	China	Memo item: euro area [2] (HICP)
							Total	excluding food and energy					
	1	2	3	4	5	6	7	8	9	10	11	12	13
2015	3.5	2.9	2.3	1.2	6.9	2.1	0.7	1.7	0.1	0.0	0.8	1.4	0.0
2016	3.2	1.6	1.8	0.6	6.7	1.9	1.6	1.8	1.3	0.7	-0.1	2.0	0.2
2017	3.7	2.2	1.7	1.9	6.9	2.4	2.3	1.8	2.1	2.7	0.5	1.6	1.5
2017 Q4	0.9	0.6	0.4	0.4	1.5	0.7	2.3	1.9	2.1	3.0	0.6	1.8	1.4
2018 Q1	0.9	0.5	0.1	-0.3	1.5	0.4	2.2	1.9	2.2	2.7	1.3	2.2	1.3
Q2	1.0	1.0	0.4	0.7	1.7	0.4	2.5	2.0	2.7	2.4	0.7	1.8	1.7
Q3	.	0.9	0.6	-0.6	1.6	0.2	2.9	2.2	2.6	.	1.1	2.3	2.1
2018 June	-	-	-	-	-	-	2.8	2.0	2.9	2.4	0.7	1.9	2.0
July	-	-	-	-	-	-	2.9	2.1	2.9	2.5	0.9	2.1	2.1
Aug.	-	-	-	-	-	-	2.9	2.1	2.7	2.7	1.3	2.3	2.0
Sep.	-	-	-	-	-	-	2.9	2.3	2.3	2.4	1.2	2.5	2.1
Oct.	-	-	-	-	-	-	.	.	2.5	2.4	1.4	2.5	2.2
Nov. [3]	-	-	-	-	-	-	.	.	.	.	.	.	2.0

Sources: Eurostat (col. 3, 6, 10, 13); BIS (col. 9, 11, 12); OECD (col. 1, 2, 4, 5, 7, 8).
1) Quarterly data seasonally adjusted; annual data unadjusted.
2) Data refer to the changing composition of the euro area.
3) The figure for the euro area is an estimate based on provisional national data, as well as on early information on energy prices.

1.2 Main trading partners, Purchasing Managers' Index and world trade

	Purchasing Managers' Surveys (diffusion indices; s.a.)									Merchandise imports [1]		
	Composite Purchasing Managers' Index						Global Purchasing Managers' Index [2]					
	Global [2]	United States	United Kingdom	Japan	China	Memo item: euro area	Manufacturing	Services	New export orders	Global	Advanced economies	Emerging market economies
	1	2	3	4	5	6	7	8	9	10	11	12
2015	53.1	55.8	56.2	51.4	50.4	53.8	51.8	53.7	50.4	1.1	3.6	-0.6
2016	51.6	52.4	53.4	50.5	51.4	53.3	51.8	52.0	50.2	1.1	1.2	1.1
2017	53.3	54.3	54.7	52.5	51.8	56.4	53.9	53.8	52.8	5.6	3.1	7.3
2017 Q4	53.4	54.6	55.2	52.6	51.9	57.2	53.5	53.4	52.2	1.6	1.5	1.7
2018 Q1	53.6	54.6	53.4	52.1	53.0	57.0	53.8	53.5	52.4	1.2	0.6	1.6
Q2	53.9	55.9	54.3	52.3	52.5	54.7	53.2	54.2	50.3	-0.2	-0.9	0.2
Q3	53.1	54.8	53.9	51.5	52.1	54.3	52.6	53.2	49.8	2.0	0.7	2.8
2018 June	54.1	56.2	55.2	52.1	53.0	54.9	53.0	54.5	50.0	-0.2	-0.9	0.2
July	53.6	55.7	53.5	51.8	52.3	54.3	52.7	53.9	49.9	1.2	-0.5	2.2
Aug.	53.2	54.7	54.2	52.0	52.0	54.5	53.0	53.3	49.9	1.7	0.1	2.7
Sep.	52.5	53.9	54.1	50.7	52.1	54.1	52.3	52.5	49.6	2.0	0.7	2.8
Oct.	53.0	54.9	52.1	52.5	50.5	53.1	51.9	53.4	50.0	.	.	.
Nov.	53.3	54.7	50.7	52.4	51.9	52.7	52.1	53.7	49.9	.	.	.

Sources: Markit (col. 1-9); CPB Netherlands Bureau for Economic Policy Analysis and ECB calculations (col. 10-12).
1) Global and advanced economies exclude the euro area. Annual and quarterly data are period-on-period percentages; monthly data are 3-month-on-3-month percentages. All data are seasonally adjusted.
2) Excluding the euro area.

2 Financial developments

2.1 Money market interest rates
(percentages per annum; period averages)

	Euro area 1)					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2015	-0.11	-0.07	-0.02	0.05	0.17	0.32	0.09
2016	-0.32	-0.34	-0.26	-0.17	-0.03	0.74	-0.02
2017	-0.35	-0.37	-0.33	-0.26	-0.15	1.26	-0.02
2018 May	-0.36	-0.37	-0.33	-0.27	-0.19	2.34	-0.03
June	-0.36	-0.37	-0.32	-0.27	-0.18	2.33	-0.04
July	-0.36	-0.37	-0.32	-0.27	-0.18	2.34	-0.04
Aug.	-0.36	-0.37	-0.32	-0.27	-0.17	2.32	-0.04
Sep.	-0.36	-0.37	-0.32	-0.27	-0.17	2.35	-0.04
Oct.	-0.37	-0.37	-0.32	-0.26	-0.15	2.46	-0.08
Nov.	-0.36	-0.37	-0.32	-0.26	-0.15	2.65	-0.10

Source: ECB.
1) Data refer to the changing composition of the euro area, see the General Notes.

2.2 Yield curves
(End of period; rates in percentages per annum; spreads in percentage points)

	Spot rates					Spreads			Instantaneous forward rates			
	Euro area 1), 2)					Euro area 1), 2)	United States	United Kingdom	Euro area 1), 2)			
	3 months	1 year	2 years	5 years	10 years	10 years - 1 year	10 years - 1 year	10 years - 1 year	1 year	2 years	5 years	10 years
	1	2	3	4	5	6	7	8	9	10	11	12
2015	-0.45	-0.40	-0.35	0.02	0.77	1.17	1.66	1.68	-0.35	-0.22	0.82	1.98
2016	-0.93	-0.82	-0.80	-0.47	0.26	1.08	1.63	1.17	-0.78	-0.75	0.35	1.35
2017	-0.78	-0.74	-0.64	-0.17	0.52	1.26	0.67	0.83	-0.66	-0.39	0.66	1.56
2018 May	-0.63	-0.72	-0.69	-0.25	0.40	1.12	0.63	0.73	-0.76	-0.52	0.57	1.34
June	-0.62	-0.71	-0.68	-0.26	0.38	1.09	0.54	0.60	-0.75	-0.52	0.53	1.31
July	-0.62	-0.65	-0.59	-0.16	0.46	1.11	0.54	0.60	-0.64	-0.39	0.61	1.36
Aug.	-0.63	-0.67	-0.63	-0.23	0.37	1.04	0.41	0.71	-0.68	-0.46	0.50	1.28
Sep.	-0.62	-0.63	-0.55	-0.09	0.51	1.14	0.49	0.77	-0.59	-0.31	0.68	1.36
Oct.	-0.75	-0.73	-0.63	-0.17	0.43	1.17	0.48	0.67	-0.66	-0.37	0.60	1.31
Nov.	-0.67	-0.70	-0.64	-0.23	0.37	1.06	0.30	0.57	-0.68	-0.45	0.50	1.28

Source: ECB.
1) Data refer to the changing composition of the euro area, see the General Notes.
2) ECB calculations based on underlying data provided by EuroMTS and ratings provided by Fitch Ratings.

2.3 Stock market indices
(index levels in points; period averages)

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main industry indices											
	Broad index	50	Basic materials	Consumer services	Consumer goods	Oil and gas	Financials	Industrials	Technology	Utilities	Telecoms	Health care	Standard & Poor's 500	Nikkei 225
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2015	356.2	3,444.1	717.4	261.9	628.2	299.9	189.8	500.6	373.2	278.0	377.7	821.3	2,061.1	19,203.8
2016	321.6	3,003.7	620.7	250.9	600.1	278.9	148.7	496.0	375.8	248.6	326.9	770.9	2,094.7	16,920.5
2017	376.9	3,491.0	757.3	268.6	690.4	307.9	182.3	605.5	468.4	272.7	339.2	876.3	2,449.1	20,209.0
2018 May	392.3	3,537.1	806.4	272.3	735.3	351.0	182.5	653.1	527.3	287.9	302.6	819.1	2,701.5	22,590.1
June	383.4	3,442.8	797.5	273.1	719.5	346.7	169.0	647.2	543.6	279.9	290.9	828.1	2,754.4	22,562.9
July	383.8	3,460.9	793.5	273.8	711.4	353.1	169.4	647.6	536.6	287.9	291.0	838.8	2,793.6	22,309.1
Aug.	382.5	3,436.8	785.2	273.0	711.6	357.5	167.9	653.3	529.4	282.1	288.7	834.2	2,857.8	22,494.1
Sep.	376.4	3,365.2	779.9	265.1	692.5	356.4	168.0	649.7	511.7	278.1	274.6	807.2	2,901.5	23,159.3
Oct.	359.0	3,244.5	733.7	253.2	657.3	349.6	160.1	607.6	483.0	269.0	277.7	783.7	2,785.5	22,690.8
Nov.	351.3	3,186.4	692.3	258.1	649.3	328.6	157.2	589.4	459.6	277.1	293.9	757.5	2,723.2	21,967.9

Source: ECB.

2 Financial developments

2.4 MFI interest rates on loans to and deposits from households (new business) 1), 2)

(Percentages per annum; period average, unless otherwise indicated)

	Deposits				Revolving loans and overdrafts	Extended credit card credit	Loans for consumption			Loans to sole proprietors and unincorporated partnerships	Loans for house purchase					
	Overnight	Redeemable at notice of up to 3 months	With an agreed maturity of:				By initial period of rate fixation		APRC 3)		By initial period of rate fixation				APRC 3)	Composite cost-of-borrowing indicator
			Up to 2 years	Over 2 years			Floating rate and up to 1 year	Over 1 year			Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2017 Nov.	0.04	0.44	0.33	0.75	6.21	16.83	4.73	5.69	6.14	2.38	1.67	1.92	1.95	1.94	2.16	1.87
Dec.	0.04	0.44	0.34	0.73	6.09	16.86	4.47	5.39	5.80	2.31	1.68	1.86	1.92	1.87	2.15	1.83
2018 Jan.	0.04	0.44	0.36	0.69	6.16	16.92	5.02	5.83	6.28	2.30	1.67	1.87	1.91	1.90	2.14	1.84
Feb.	0.04	0.44	0.34	0.69	6.19	16.88	4.72	5.70	6.19	2.37	1.64	1.88	1.93	1.91	2.14	1.84
Mar.	0.04	0.45	0.35	0.67	6.14	16.89	4.71	5.57	6.05	2.34	1.63	1.84	1.95	1.91	2.14	1.84
Apr.	0.04	0.45	0.34	0.61	6.12	16.87	4.95	5.67	6.15	2.36	1.62	1.85	1.96	1.90	2.13	1.83
May	0.04	0.46	0.34	0.57	6.10	16.89	4.83	5.88	6.39	2.39	1.58	1.85	1.97	1.90	2.13	1.83
June	0.03	0.46	0.33	0.63	6.04	16.84	4.47	5.64	6.10	2.31	1.60	1.81	1.97	1.88	2.12	1.82
July	0.03	0.45	0.33	0.63	6.01	16.80	4.85	5.75	6.22	2.40	1.63	1.83	1.93	1.85	2.12	1.81
Aug.	0.03	0.45	0.30	0.63	6.02	16.78	5.44	5.88	6.41	2.39	1.63	1.83	1.92	1.85	2.12	1.81
Sep.	0.03	0.45	0.30	0.69	6.05	16.71	5.30	5.74	6.27	2.37	1.60	1.82	1.91	1.85	2.09	1.79
Oct. (p)	0.03	0.45	0.29	0.73	5.98	16.74	5.04	5.72	6.19	2.44	1.59	1.80	1.91	1.87	2.09	1.80

Source: ECB.
1) Data refer to the changing composition of the euro area.
2) Including non-profit institutions serving households.
3) Annual percentage rate of charge (APRC).

2.5 MFI interest rates on loans to and deposits from non-financial corporations (new business) 1), 2)

(Percentages per annum; period average, unless otherwise indicated)

	Deposits			Revolving loans and overdrafts	Other loans by size and initial period of rate fixation									Composite cost-of-borrowing indicator
	Overnight	With an agreed maturity of:			up to EUR 0.25 million			over EUR 0.25 and up to 1 million			over EUR 1 million			
		Up to 2 years	Over 2 years		Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 year	Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 year	Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 year	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2017 Nov.	0.04	0.08	0.30	2.36	2.43	2.61	2.37	1.71	1.62	1.72	1.23	1.33	1.57	1.71
Dec.	0.04	0.06	0.32	2.35	2.40	2.46	2.31	1.70	1.67	1.71	1.34	1.28	1.53	1.71
2018 Jan.	0.04	0.05	0.39	2.35	2.39	2.52	2.33	1.65	1.61	1.72	1.12	1.37	1.60	1.67
Feb.	0.04	0.09	0.43	2.37	2.37	2.48	2.33	1.66	1.62	1.74	1.18	1.34	1.64	1.70
Mar.	0.04	0.08	0.40	2.33	2.39	2.53	2.34	1.67	1.61	1.70	1.26	1.39	1.66	1.73
Apr.	0.04	0.06	0.31	2.32	2.36	2.42	2.33	1.67	1.61	1.74	1.23	1.29	1.65	1.70
May	0.03	0.08	0.43	2.28	2.31	2.47	2.37	1.65	1.61	1.74	1.08	1.22	1.65	1.62
June	0.04	0.07	0.74	2.29	2.27	2.44	2.31	1.64	1.56	1.70	1.21	1.33	1.70	1.68
July	0.03	0.08	0.38	2.27	2.16	2.41	2.28	1.67	1.59	1.68	1.14	1.30	1.66	1.63
Aug.	0.03	0.08	0.60	2.25	2.21	2.42	2.35	1.66	1.63	1.74	1.10	1.27	1.69	1.64
Sep.	0.03	0.09	0.44	2.22	2.21	2.34	2.32	1.65	1.55	1.69	1.12	1.40	1.68	1.65
Oct. (p)	0.03	0.08	0.52	2.22	2.14	2.42	2.33	1.65	1.62	1.71	1.23	1.10	1.66	1.64

Source: ECB.
1) Data refer to the changing composition of the euro area.
2) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector.

2 Financial developments

2.6 Debt securities issued by euro area residents, by sector of the issuer and initial maturity
(EUR billions; transactions during the month and end-of-period outstanding amounts; nominal values)

	Outstanding amounts							Gross issues [1]						
	Total	MFIs (including Euro-system)	Non-MFI corporations			General government		Total	MFIs (including Euro-system)	Non-MFI corporations			General government	
			Financial corporations other than MFIs	FVCs	Non-financial corporations	Central govern-ment	Other general govern-ment			Financial corporations other than MFIs	FVCs	Non-financial corporations	Central govern-ment	Other general govern-ment
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
							Short-term							
2015	1,269	517	147	.	62	478	65	347	161	37	.	33	82	34
2016	1,241	518	136	.	59	466	62	349	161	45	.	31	79	33
2017	1,241	519	156	.	70	438	57	368	167	55	.	37	79	31
2018 May	1,318	539	170	.	99	445	66	387	182	42	.	44	79	41
June	1,307	523	177	.	90	457	59	388	157	71	.	43	82	36
July	1,310	526	175	.	96	453	60	434	191	75	.	48	79	42
Aug.	1,306	525	174	.	95	447	65	405	201	58	.	31	82	33
Sep.	1,282	531	166	.	89	444	52	364	156	66	.	42	72	28
Oct.	1,271	524	163	.	92	439	53	402	175	66	.	47	77	38
							Long-term							
2015	15,250	3,786	3,244	.	1,102	6,481	637	215	68	45	.	14	80	9
2016	15,393	3,695	3,217	.	1,197	6,643	641	220	62	53	.	19	78	8
2017	15,362	3,560	3,081	.	1,258	6,821	642	247	66	74	.	17	83	7
2018 May	15,534	3,586	3,127	.	1,273	6,927	621	202	49	53	.	17	80	3
June	15,540	3,572	3,137	.	1,266	6,944	620	229	64	71	.	14	72	7
July	15,555	3,570	3,133	.	1,275	6,956	621	220	54	55	.	17	87	8
Aug.	15,563	3,578	3,141	.	1,258	6,964	622	131	50	38	.	2	38	3
Sep.	15,688	3,616	3,159	.	1,283	7,007	623	253	79	56	.	31	82	4
Oct.	15,741	3,673	3,178	.	1,282	6,980	628	210	60	57	.	14	69	9

Source: ECB.
1) For the purpose of comparison, annual data refer to the average monthly figure over the year.

2.7 Growth rates and outstanding amounts of debt securities and listed shares
(EUR billions; percentage changes)

	Debt securities							Listed shares			
	Total	MFIs (including Eurosystem)	Non-MFI corporations			General government		Total	MFIs	Financial corporations other than MFIs	Non-financial corporations
			Financial corporations other than MFIs	FVCs	Non-financial corporations	Central government	Other general government				
	1	2	3	4	5	6	7	8	9	10	11
						Oustanding amount					
2015	16,518.8	4,303.2	3,390.4	.	1,163.8	6,958.9	702.4	6,814.4	584.3	968.3	5,261.9
2016	16,633.9	4,213.3	3,353.0	.	1,255.9	7,108.1	703.5	7,089.5	537.6	1,080.2	5,471.6
2017	16,603.0	4,079.8	3,236.7	.	1,327.9	7,258.9	699.8	7,954.8	612.5	1,249.5	6,092.8
2018 May	16,852.5	4,125.8	3,296.4	.	1,371.9	7,371.5	686.8	8,028.1	531.2	1,289.8	6,207.1
June	16,846.6	4,095.3	3,313.6	.	1,356.4	7,401.4	679.8	7,959.8	543.5	1,267.0	6,149.3
July	16,865.3	4,096.0	3,308.3	.	1,370.9	7,409.1	681.0	8,168.6	576.1	1,293.7	6,298.8
Aug.	16,869.4	4,102.6	3,315.0	.	1,353.3	7,411.0	687.5	8,020.0	521.1	1,282.6	6,216.3
Sep.	16,969.9	4,147.0	3,324.9	.	1,372.3	7,451.0	674.8	7,955.8	543.5	1,294.0	6,118.3
Oct.	17,011.9	4,197.0	3,340.7	.	1,373.6	7,419.1	681.5	7,548.9	515.4	1,202.0	5,831.6
						Growth rate					
2015	0.2	-7.0	5.5	.	4.9	1.8	0.6	1.1	4.2	1.8	0.6
2016	0.4	-3.0	-1.1	.	6.5	2.2	-0.1	0.5	1.2	0.9	0.4
2017	1.3	-0.5	-0.1	.	6.2	2.2	0.5	1.1	6.1	2.8	0.3
2018 May	1.1	-0.1	0.4	.	5.9	1.6	-1.9	1.4	1.6	5.4	0.5
June	1.2	-0.6	1.9	.	5.2	1.8	-4.0	1.3	1.6	5.0	0.5
July	1.2	-0.8	0.6	.	4.4	2.4	-2.5	1.2	0.4	4.8	0.6
Aug.	1.3	-0.2	0.9	.	3.8	2.2	-2.6	1.2	0.5	4.7	0.5
Sep.	1.7	0.9	0.9	.	4.9	2.4	-3.7	1.1	0.5	3.9	0.5
Oct.	1.8	0.9	1.6	.	4.5	2.4	-3.1	1.0	0.5	3.1	0.6

Source: ECB.

2.8 Effective exchange rates [1)]
(period averages; index: 1999 Q1=100)

	EER-19						EER-38	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM [2)]	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2015	91.7	87.6	88.6	82.9	81.6	88.4	105.7	87.0
2016	94.4	89.5	90.9	85.0	79.8	89.3	109.7	88.9
2017	96.6	91.4	92.0	85.9	79.7	90.0	112.0	90.0
2017 Q4	98.6	93.2	93.6	87.5	80.3	91.4	115.0	92.0
2018 Q1	99.6	94.0	94.4	88.1	81.3	91.9	117.0	93.4
Q2	98.4	93.1	93.2	87.2	80.4	91.0	117.0	93.4
Q3	99.2	93.7	93.4	.	.	.	119.2	94.8
2018 June	97.9	92.6	92.4	-	-	-	116.7	93.0
July	99.2	93.8	93.5	-	-	-	118.2	94.2
Aug.	99.0	93.4	93.2	-	-	-	119.0	94.6
Sep.	99.5	94.0	93.6	-	-	-	120.4	95.6
Oct.	98.9	93.4	92.9	-	-	-	119.0	94.4
Nov.	98.3	92.9	92.3	-	-	-	117.9	93.5
	Percentage change versus previous month							
2018 Nov.	-0.6	-0.6	-0.7	-	-	-	-0.9	-1.0
	Percentage change versus previous year							
2018 Nov.	-0.2	-0.2	-1.2	-	-	-	2.6	1.6

Source: ECB.
1) For a definition of the trading partner groups and other information see the General Notes to the Statistics Bulletin.
2) ULCM-deflated series are available only for the EER-18 trading partner group.

2.9 Bilateral exchange rates
(period averages; units of national currency per euro)

	Chinese renminbi	Croatian kuna	Czech koruna	Danish krone	Hungarian forint	Japanese yen	Polish zloty	Pound sterling	Romanian leu	Swedish krona	Swiss franc	US Dollar
	1	2	3	4	5	6	7	8	9	10	11	12
2015	6.973	7.614	27.279	7.459	309.996	134.314	4.184	0.726	4.4454	9.353	1.068	1.110
2016	7.352	7.533	27.034	7.445	311.438	120.197	4.363	0.819	4.4904	9.469	1.090	1.107
2017	7.629	7.464	26.326	7.439	309.193	126.711	4.257	0.877	4.5688	9.635	1.112	1.130
2017 Q4	7.789	7.533	25.650	7.443	311.597	132.897	4.232	0.887	4.6189	9.793	1.162	1.177
2018 Q1	7.815	7.438	25.402	7.447	311.027	133.166	4.179	0.883	4.6553	9.971	1.165	1.229
Q2	7.602	7.398	25.599	7.448	317.199	130.045	4.262	0.876	4.6532	10.330	1.174	1.191
Q3	7.915	7.417	25.718	7.455	324.107	129.606	4.303	0.892	4.6471	10.405	1.144	1.163
2018 June	7.551	7.382	25.778	7.449	322.697	128.529	4.304	0.879	4.6623	10.279	1.156	1.168
July	7.850	7.397	25.850	7.452	324.597	130.232	4.324	0.887	4.6504	10.308	1.162	1.169
Aug.	7.909	7.426	25.681	7.456	323.021	128.200	4.286	0.897	4.6439	10.467	1.141	1.155
Sep.	7.993	7.429	25.614	7.458	324.818	130.535	4.301	0.893	4.6471	10.443	1.129	1.166
Oct.	7.948	7.425	25.819	7.460	323.843	129.617	4.305	0.883	4.6658	10.384	1.141	1.148
Nov.	7.888	7.428	25.935	7.461	322.330	128.789	4.302	0.881	4.6610	10.292	1.138	1.137
	Percentage change versus previous month											
2018 Nov.	-0.8	0.0	0.4	0.0	-0.5	-0.6	-0.1	-0.2	-0.1	-0.9	-0.3	-1.0
	Percentage change versus previous year											
2018 Nov.	1.5	-1.6	1.6	0.3	3.3	-2.7	1.8	-0.8	0.6	4.5	-2.3	-3.2

Source: ECB.

2 Financial developments

2.10 Euro area balance of payments, financial account
(EUR billions, unless otherwise indicated; outstanding amounts at end of period; transactions during period)

	Total [1]			Direct investment		Portfolio investment		Net financial derivatives	Other investment		Reserve assets	Memo: Gross external debt
	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities		
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts (international investment position)											
2017 Q3	24,839.7	25,633.3	-793.6	10,775.6	8,756.8	8,386.5	10,955.4	-62.2	5,065.0	5,921.1	674.8	14,129.9
Q4	24,835.5	25,544.2	-708.7	10,671.6	8,769.0	8,550.7	10,950.1	-55.6	4,999.1	5,825.1	669.7	13,898.7
2018 Q1	24,850.9	25,602.9	-752.0	10,593.7	8,682.3	8,529.5	10,919.5	-77.1	5,131.4	6,001.1	673.4	14,118.9
Q2	25,408.4	25,943.9	-535.5	10,732.7	8,687.8	8,742.0	10,994.5	-84.8	5,328.5	6,261.6	690.0	14,295.2
	Outstanding amounts as a percentage of GDP											
2018 Q2	222.8	227.5	-4.7	94.1	76.2	76.7	96.4	-0.7	46.7	54.9	6.1	125.4
	Transactions											
2017 Q4	81.9	-37.3	119.3	33.9	45.5	86.2	18.8	4.5	-44.4	-101.7	1.9	-
2018 Q1	453.5	328.1	125.4	63.0	-60.4	194.7	176.7	-4.5	188.9	211.8	11.4	-
Q2	98.7	14.8	83.8	-59.6	-122.8	-1.9	-42.4	40.5	113.0	180.0	6.6	-
Q3	89.2	-17.2	106.4	-19.4	5.7	45.2	-55.4	21.2	41.0	32.5	1.2	-
2018 Apr.	104.8	113.2	-8.4	21.9	-21.2	8.3	-22.5	12.1	66.2	156.9	-3.6	-
May	133.1	103.3	29.8	-23.6	-16.4	-2.9	-53.1	15.5	141.6	172.7	2.3	-
June	-139.2	-201.7	62.5	-57.9	-85.2	-7.3	33.1	12.9	-94.8	-149.6	7.9	-
July	104.3	95.9	8.4	-1.0	16.9	42.9	8.5	5.7	61.1	70.5	-4.3	-
Aug.	19.8	-10.3	30.1	10.3	7.5	20.7	-53.4	7.8	-22.3	35.7	3.3	-
Sep.	-34.9	-102.8	67.9	-28.7	-18.6	-18.5	-10.5	7.7	2.2	-73.6	2.3	-
	12-month cumulated transactions											
2018 Sep.	723.3	288.4	434.9	17.9	-131.9	324.2	97.7	61.7	298.5	322.6	21.0	-
	12-month cumulated transactions as a percentage of GDP											
2018 Sep.	6.3	2.5	3.8	0.2	-1.1	2.8	0.9	0.5	2.6	2.8	0.2	-

Source: ECB.
1) Net financial derivatives are included in total assets.

3 Economic activity

3.1 GDP and expenditure components

(quarterly data seasonally adjusted; annual data unadjusted)

	GDP											
	Total	Domestic demand								External balance [1]		
		Total	Private consumption	Government consumption	Gross fixed capital formation				Changes in inventories [2]	Total	Exports [1]	Imports [1]
						Total construction	Total machinery	Intellectual property products				
	1	2	3	4	5	6	7	8	9	10	11	12
Current prices (EUR billions)												
2015	10,534.2	10,060.1	5,743.1	2,172.5	2,110.8	1,014.6	640.4	449.7	33.6	474.1	4,865.1	4,391.1
2016	10,827.5	10,349.6	5,877.4	2,223.3	2,210.9	1,053.2	679.3	472.3	38.1	477.9	4,941.4	4,463.5
2017	11,205.8	10,683.0	6,058.2	2,279.5	2,302.9	1,121.6	716.3	459.2	42.4	522.8	5,293.6	4,770.8
2017 Q4	2,844.2	2,703.4	1,531.0	576.1	588.3	287.3	185.4	114.2	7.9	140.8	1,361.4	1,220.6
2018 Q1	2,865.1	2,725.0	1,543.6	578.1	592.1	291.4	184.2	115.0	11.2	140.0	1,356.6	1,216.6
Q2	2,889.6	2,757.0	1,553.2	585.2	603.8	297.8	188.7	115.9	14.8	132.6	1,378.0	1,245.3
Q3	2,905.1	2,784.5	1,561.7	587.6	610.2	300.5	191.2	117.1	24.9	120.7	1,387.6	1,266.9
as a percentage of GDP												
2017	100.0	95.3	54.1	20.3	20.6	10.0	6.4	4.1	0.4	4.7	-	-
Chain-linked volumes (prices for the previous year)												
quarter-on-quarter percentage changes												
2017 Q4	0.7	0.3	0.2	0.2	1.2	0.1	2.6	1.8	-	-	2.2	1.6
2018 Q1	0.4	0.5	0.5	0.0	0.1	0.6	-0.7	0.2	-	-	-0.7	-0.5
Q2	0.4	0.4	0.2	0.4	1.5	1.3	2.5	0.5	-	-	1.0	1.1
Q3	0.2	0.4	0.1	0.2	0.2	0.0	0.5	0.2	-	-	-0.1	0.5
annual percentage changes												
2015	2.1	2.4	1.8	1.3	4.9	0.4	5.6	15.6	-	-	6.5	7.6
2016	1.9	2.4	2.0	1.8	4.0	2.7	5.8	4.3	-	-	3.0	4.2
2017	2.4	1.7	1.6	1.2	2.6	3.9	5.0	-3.6	-	-	5.2	3.9
2017 Q4	2.7	1.3	1.6	1.2	2.5	3.9	6.9	-6.8	-	-	6.4	3.7
2018 Q1	2.4	1.9	1.7	1.0	3.5	3.4	5.5	0.4	-	-	3.8	2.7
Q2	2.2	1.6	1.4	1.1	3.0	4.1	6.4	-4.7	-	-	3.8	2.7
Q3	1.6	1.7	1.0	0.9	3.1	2.0	4.9	2.9	-	-	2.4	2.8
contributions to quarter-on-quarter percentage changes in GDP; percentage points												
2017 Q4	0.7	0.3	0.1	0.0	0.2	0.0	0.2	0.1	-0.1	0.4	-	-
2018 Q1	0.4	0.5	0.3	0.0	0.0	0.1	0.0	0.0	0.2	-0.1	-	-
Q2	0.4	0.4	0.1	0.1	0.3	0.1	0.2	0.0	-0.1	0.0	-	-
Q3	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.3	-0.3	-	-
contributions to annual percentage changes in GDP; percentage points												
2015	2.1	2.3	1.0	0.3	1.0	0.0	0.3	0.6	0.0	-0.2	-	-
2016	1.9	2.3	1.1	0.4	0.8	0.3	0.4	0.2	0.1	-0.4	-	-
2017	2.4	1.6	0.9	0.2	0.5	0.4	0.3	-0.2	0.0	0.8	-	-
2017 Q4	2.7	1.3	0.8	0.2	0.5	0.4	0.4	-0.3	-0.3	1.4	-	-
2018 Q1	2.4	1.8	0.9	0.2	0.7	0.3	0.3	0.0	-0.1	0.6	-	-
Q2	2.2	1.5	0.8	0.2	0.6	0.4	0.4	-0.2	-0.1	0.7	-	-
Q3	1.6	1.7	0.6	0.2	0.6	0.2	0.3	0.1	0.3	0.0	-	-

Sources: Eurostat and ECB calculations.

1) Exports and imports cover goods and services and include cross-border intra-euro area trade.

2) Including acquisitions less disposals of valuables.

3.2 Value added by economic activity
(quarterly data seasonally adjusted; annual data unadjusted)

	Gross value added (basic prices)											Taxes less subsidies on products
	Total	Agriculture, forestry and fishing	Manufacturing energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services	
	1	2	3	4	5	6	7	8	9	10	11	12
	Current prices (EUR billions)											
2015	9,461.6	159.5	1,901.3	468.0	1,784.9	433.5	470.2	1,078.0	1,031.0	1,805.1	330.2	1,072.6
2016	9,715.8	158.6	1,962.6	486.8	1,836.0	452.7	464.1	1,098.7	1,069.3	1,849.8	337.2	1,111.7
2017	10,048.5	171.3	2,032.8	512.8	1,916.8	469.4	455.8	1,129.7	1,118.5	1,897.1	344.2	1,157.3
2017 Q4	2,551.4	43.7	520.0	131.5	486.3	119.0	114.0	285.3	284.8	479.7	86.9	292.8
2018 Q1	2,568.5	43.1	518.5	134.3	489.9	120.9	114.4	287.5	289.1	483.1	87.6	296.6
Q2	2,589.5	42.9	521.1	137.1	494.2	122.4	114.2	289.5	292.0	488.3	87.7	300.1
Q3	2,603.6	43.7	523.1	139.4	496.4	123.5	114.5	291.3	293.3	490.5	88.0	301.5
	as a percentage of value added											
2017	100.0	1.7	20.2	5.1	19.1	4.7	4.5	11.2	11.1	18.9	3.4	-
	Chain-linked volumes (prices for the previous year)											
	quarter-on-quarter percentage changes											
2017 Q4	0.7	0.8	1.2	1.2	0.7	0.3	0.3	0.3	0.8	0.3	0.2	0.6
2018 Q1	0.4	0.7	-0.7	0.8	0.8	1.7	-0.4	0.6	1.0	0.3	0.1	0.3
Q2	0.4	-0.5	0.4	1.1	0.5	1.4	0.6	0.0	0.7	0.2	-0.1	0.6
Q3	0.2	-0.3	-0.2	0.6	0.2	0.9	0.3	0.4	0.0	0.2	0.0	0.1
	annual percentage changes											
2015	1.9	-0.2	3.6	0.8	2.2	3.6	0.0	0.7	3.0	0.8	1.2	3.5
2016	1.9	-1.4	3.4	1.5	1.7	3.9	0.6	0.3	2.5	1.3	0.9	2.7
2017	2.4	0.8	3.1	3.2	3.1	4.3	-0.6	1.1	4.0	1.1	0.9	2.4
2017 Q4	2.8	2.5	3.9	4.3	3.4	3.7	0.0	1.3	4.4	1.2	1.0	2.1
2018 Q1	2.5	1.8	3.1	3.8	2.9	4.8	0.0	1.5	3.4	1.4	1.2	1.6
Q2	2.2	1.3	2.4	3.7	2.6	5.1	0.5	1.2	3.2	1.2	0.6	1.8
Q3	1.6	0.7	0.8	3.7	2.2	4.4	0.9	1.3	2.5	1.0	0.3	1.6
	contributions to quarter-on-quarter percentage changes in value added; percentage points											
2017 Q4	0.7	0.0	0.3	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	-
2018 Q1	0.4	0.0	-0.1	0.0	0.2	0.1	0.0	0.1	0.1	0.1	0.0	-
Q2	0.4	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	-
Q3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
	contributions to annual percentage changes in value added; percentage points											
2015	1.9	0.0	0.7	0.0	0.4	0.2	0.0	0.1	0.3	0.2	0.0	-
2016	1.9	0.0	0.7	0.1	0.3	0.2	0.0	0.0	0.3	0.2	0.0	-
2017	2.4	0.0	0.6	0.2	0.6	0.2	0.0	0.1	0.4	0.2	0.0	-
2017 Q4	2.8	0.0	0.8	0.2	0.6	0.2	0.0	0.2	0.5	0.2	0.0	-
2018 Q1	2.5	0.0	0.6	0.2	0.5	0.2	0.0	0.2	0.4	0.3	0.0	-
Q2	2.2	0.0	0.5	0.2	0.5	0.2	0.0	0.1	0.4	0.2	0.0	-
Q3	1.6	0.0	0.2	0.2	0.4	0.2	0.0	0.1	0.3	0.2	0.0	-

Sources: Eurostat and ECB calculations.

3 Economic activity

3.3 Employment [1)]
(quarterly data seasonally adjusted; annual data unadjusted)

	Total	By employment status		By economic activity									
		Employ-ees	Self-employed	Agricul-ture, forestry and fishing	Manufac-turing, energy and utilities	Con-struc-tion	Trade, transport, accom-modation and food services	Infor-mation and com-munica-tion	Finance and insur-ance	Real estate	Professional, business and support services	Public adminis-tration, edu-cation, health and social work	Arts, entertainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12	13
							Persons employed						
							as a percentage of total persons employed						
2015	100.0	85.2	14.8	3.3	14.9	6.0	24.9	2.7	2.6	1.0	13.3	24.3	7.0
2016	100.0	85.5	14.5	3.2	14.8	6.0	24.9	2.8	2.6	1.0	13.5	24.2	7.0
2017	100.0	85.8	14.2	3.2	14.7	6.0	24.9	2.8	2.5	1.0	13.7	24.2	7.0
							annual percentage changes						
2015	1.0	1.3	-0.3	-1.1	0.1	0.1	1.4	1.5	-0.4	1.1	2.8	1.1	0.6
2016	1.4	1.7	-0.3	-0.4	0.8	0.4	1.7	3.0	-0.2	1.9	2.7	1.4	0.7
2017	1.6	2.0	-0.5	-0.6	1.2	1.8	1.7	3.1	-1.2	1.5	3.1	1.3	1.4
2017 Q4	1.6	2.0	-0.7	-1.3	1.4	2.5	1.5	3.0	-1.6	1.7	3.4	1.3	1.1
2018 Q1	1.5	1.9	-0.8	-0.9	1.6	2.1	1.5	2.6	-1.0	1.6	3.1	1.2	0.5
Q2	1.5	1.8	-0.4	-0.5	1.6	2.6	1.3	2.6	-0.9	1.6	3.0	1.2	0.8
Q3	1.3	1.6	-0.3	0.2	1.2	2.5	1.4	3.2	-1.2	1.0	2.5	1.1	-0.8
							Hours worked						
							as a percentage of total hours worked						
2015	100.0	80.3	19.7	4.4	15.4	6.7	25.7	2.9	2.7	1.0	13.0	21.9	6.2
2016	100.0	80.6	19.4	4.3	15.3	6.7	25.8	3.0	2.6	1.0	13.2	21.9	6.2
2017	100.0	81.0	19.0	4.2	15.3	6.7	25.8	3.0	2.6	1.0	13.4	21.8	6.2
							annual percentage changes						
2015	1.2	1.4	0.1	-0.4	0.5	0.6	1.1	2.7	-0.2	1.4	3.0	1.2	1.1
2016	1.5	1.9	-0.3	-0.3	0.9	0.7	1.7	2.8	0.2	2.3	2.9	1.4	0.8
2017	1.4	1.9	-0.8	-1.0	1.2	1.9	1.4	3.0	-1.7	2.1	3.0	1.1	0.8
2017 Q4	1.8	2.4	-0.6	-0.7	2.0	3.6	1.5	3.1	-1.8	3.6	3.7	1.4	0.7
2018 Q1	1.4	2.0	-0.9	-1.1	1.7	2.4	1.2	2.3	-1.0	3.0	3.2	1.2	0.2
Q2	1.7	2.2	-0.5	0.3	1.8	2.7	1.1	3.0	-0.5	1.5	3.6	1.4	0.7
Q3	1.6	2.1	-0.2	0.4	1.7	3.3	1.3	3.6	-0.9	1.3	3.1	1.2	0.2
							Hours worked per person employed						
							annual percentage changes						
2015	0.1	0.2	0.4	0.7	0.4	0.5	-0.3	1.1	0.1	0.3	0.2	0.1	0.5
2016	0.1	0.2	0.0	0.2	0.1	0.3	0.0	-0.1	0.4	0.4	0.1	0.1	0.1
2017	-0.2	-0.1	-0.3	-0.4	0.0	0.1	-0.3	-0.1	-0.5	0.6	-0.1	-0.2	-0.6
2017 Q4	0.2	0.4	0.1	0.6	0.7	1.1	0.0	0.0	-0.3	1.9	0.2	0.1	-0.5
2018 Q1	-0.1	0.1	-0.2	-0.2	0.1	0.3	-0.3	-0.2	0.0	1.3	0.1	-0.1	-0.3
Q2	0.2	0.4	-0.1	0.7	0.3	0.1	-0.2	0.4	0.4	-0.1	0.6	0.2	-0.1
Q3	0.3	0.5	0.1	0.1	0.4	0.8	0.0	0.4	0.3	0.3	0.6	0.1	1.0

Sources: Eurostat and ECB calculations.
1) Data for employment are based on the ESA 2010.

3 Economic activity

3.4 Labour force, unemployment and job vacancies
(seasonally adjusted, unless otherwise indicated)

	Labour force, millions 1)	Under-employment, % of labour force 1)	Unemployment											Job vacancy rate 2)
			Total		Long-term unemployment, % of labour force 1)	By age				By gender				
						Adult		Youth		Male		Female		
			Millions	% of labour force		Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	% of total posts
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
% of total in 2016			100.0			81.7		18.3		52.2		47.8		
2015	160.730	4.6	17.470	10.9	5.6	14.305	9.8	3.165	22.3	9.262	10.7	8.208	11.1	1.5
2016	162.029	4.3	16.252	10.0	5.0	13.289	9.0	2.963	20.9	8.482	9.7	7.770	10.4	1.7
2017	162.659	4.1	14.763	9.1	4.4	12.095	8.1	2.668	18.8	7.637	8.7	7.126	9.5	1.9
2017 Q4	163.133	3.9	14.184	8.7	4.2	11.637	7.8	2.547	17.9	7.318	8.3	6.866	9.1	2.0
2018 Q1	162.591	4.0	13.932	8.5	4.2	11.429	7.7	2.503	17.6	7.190	8.2	6.742	8.9	2.1
Q2	163.179	3.9	13.506	8.3	3.9	11.062	7.4	2.444	17.1	6.966	7.9	6.540	8.7	2.1
Q3	.	.	13.198	8.1	.	10.752	7.2	2.446	17.0	6.819	7.8	6.378	8.5	.
2018 May	-	-	13.443	8.2	-	11.014	7.4	2.429	17.0	6.930	7.9	6.513	8.6	-
June	-	-	13.408	8.2	-	10.970	7.4	2.438	17.1	6.912	7.9	6.496	8.6	-
July	-	-	13.269	8.1	-	10.846	7.3	2.423	17.0	6.851	7.8	6.417	8.5	-
Aug.	-	-	13.164	8.1	-	10.722	7.2	2.443	17.0	6.800	7.8	6.364	8.4	-
Sep.	-	-	13.160	8.1	-	10.689	7.2	2.471	17.1	6.806	7.8	6.354	8.4	-
Oct.	-	-	13.172	8.1	-	10.669	7.2	2.503	17.3	6.796	7.7	6.375	8.4	-

Sources: Eurostat and ECB calculations.
1) Not seasonally adjusted.
2) The job vacancy rate is equal to the number of job vacancies divided by the sum of the number of occupied posts and the number of job vacancies, expressed as a percentage.

3.5 Short-term business statistics

	Industrial production						Construction production	ECB indicator on industrial new orders	Retail sales				New passenger car registrations
	Total (excluding construction)		Main Industrial Groupings						Total	Food, beverages, tobacco	Non-food	Fuel	
		Manufacturing	Intermediate goods	Capital goods	Consumer goods	Energy							
	1	2	3	4	5	6	7	8	9	10	11	12	13
% of total in 2015	100.0	88.7	32.1	34.5	21.8	11.6	100.0	100.0	100.0	40.4	52.5	7.1	100.0
	annual percentage changes												
2015	2.6	2.9	1.4	7.0	2.3	0.5	-0.6	3.4	2.9	1.6	4.0	2.7	8.8
2016	1.6	1.8	1.8	1.9	1.7	0.5	3.1	0.5	1.6	1.0	2.1	1.4	7.2
2017	2.9	3.2	3.7	3.9	1.5	1.1	2.9	7.9	2.3	1.4	3.3	0.9	5.6
2017 Q4	4.2	4.8	5.3	6.1	2.1	-0.3	2.9	9.5	2.0	0.8	3.0	0.1	6.3
2018 Q1	3.1	3.4	3.1	4.3	2.4	0.6	2.6	6.5	1.6	1.6	1.9	0.2	5.3
Q2	2.4	2.8	1.9	4.5	2.1	-1.9	2.7	3.8	1.7	1.2	2.3	0.9	3.2
Q3	0.8	0.9	-0.2	2.0	1.3	-1.0	3.5	1.9	1.2	1.0	1.4	0.2	3.4
2018 May	2.9	3.2	2.7	4.2	3.1	-1.5	2.2	4.5	1.6	2.1	1.5	0.4	2.8
June	2.5	3.1	2.0	4.9	2.1	-2.7	3.4	3.0	1.6	1.9	1.5	1.2	3.9
July	0.5	0.6	0.1	1.8	-0.3	-1.2	2.2	2.1	1.0	1.0	1.0	-0.3	7.7
Aug.	1.2	1.5	-0.2	1.9	3.5	-0.7	2.2	2.4	2.2	1.8	2.7	-0.1	30.9
Sep.	0.8	0.9	-0.4	2.2	0.9	-1.0	4.6	1.2	0.3	0.2	0.4	1.2	-21.2
Oct.	1.2	1.5	-0.4	3.7	1.0	-3.1	.	.	1.7	2.3	1.7	1.5	-11.8
	month-on-month percentage changes (s.a.)												
2018 May	1.3	1.3	1.3	0.7	2.5	-0.1	0.4	1.8	0.3	1.4	-0.8	0.4	1.9
June	-0.7	-0.7	-0.4	-2.1	-1.0	0.5	0.7	-1.8	0.4	0.4	0.1	1.1	-0.2
July	-0.6	-0.7	-0.8	1.3	-1.2	0.7	0.0	-1.0	-0.6	-1.0	-0.1	-1.2	2.1
Aug.	1.2	1.2	0.5	2.0	1.9	1.7	-0.6	2.7	0.4	0.4	0.6	-0.7	21.5
Sep.	-0.6	-0.4	-0.3	-0.3	-1.0	-1.9	2.0	-0.5	-0.5	-0.2	-0.7	0.8	-37.2
Oct.	0.2	0.2	0.2	1.0	-0.2	-1.7	.	.	0.3	0.6	-0.1	1.0	9.1

Sources: Eurostat, ECB calculations, ECB experimental statistics (col. 8) and European Automobile Manufacturers Association (col. 13).

3 Economic activity

3.6 Opinion surveys
(seasonally adjusted)

	European Commission Business and Consumer Surveys (percentage balances, unless otherwise indicated)								Purchasing Managers' Surveys (diffusion indices)			
	Economic sentiment indicator (long-term average = 100)	Manufacturing industry		Consumer confidence indicator	Construction confidence indicator	Retail trade confid-ence indicator	Service industries		Purchasing Managers' Index (PMI) for manu-facturing	Manu-facturing output	Business activity for services	Composite output
		Industrial confidence indicator	Capacity utilisation (%)				Services confidence indicator	Capacity utilisation (%)				
	1	2	3	4	5	6	7	8	9	10	11	12
1999-14	99.8	-5.8	80.7	-12.7	-14.5	-9.5	6.9	-	51.1	52.4	52.9	52.7
2015	103.8	-2.8	81.3	-6.2	-22.4	1.0	8.7	88.5	52.2	53.4	54.0	53.8
2016	104.2	-2.6	81.8	-7.7	-16.4	0.3	10.6	89.0	52.5	53.6	53.1	53.3
2017	110.8	5.0	83.3	-2.5	-4.0	2.1	14.1	89.9	57.4	58.5	55.6	56.4
2017 Q4	114.3	8.9	84.2	-0.2	1.7	3.9	16.1	90.1	59.7	60.7	56.0	57.2
2018 Q1	114.0	8.5	84.4	0.5	4.7	2.8	16.3	90.3	58.2	58.9	56.4	57.0
Q2	112.5	7.0	84.2	0.0	5.8	0.3	14.5	90.4	55.6	55.1	54.5	54.7
Q3	111.5	5.4	84.0	-1.8	6.7	1.5	14.8	90.4	54.3	54.0	54.4	54.3
2018 June	112.3	6.9	-	-0.6	5.6	0.7	14.4	-	54.9	54.2	55.2	54.9
July	112.1	5.8	84.2	-0.5	5.4	0.3	15.3	90.6	55.1	54.4	54.2	54.3
Aug.	111.6	5.6	-	-1.9	6.4	1.9	14.4	-	54.6	54.7	54.4	54.5
Sep.	110.9	4.7	-	-2.9	8.3	2.4	14.7	-	53.2	52.7	54.7	54.1
Oct.	109.7	3.0	83.9	-2.7	7.9	-0.8	13.3	90.1	52.0	51.3	53.7	53.1
Nov.	109.5	3.4	-	-3.9	7.9	-0.6	13.3	-	51.8	50.7	53.4	52.7

Sources: European Commission (Directorate-General for Economic and Financial Affairs) (col. 1-8) and Markit (col. 9-12).

3.7 Summary accounts for households and non-financial corporations
(current prices, unless otherwise indicated; not seasonally adjusted)

	Households							Non-financial corporations					
	Saving ratio (gross) 1)	Debt ratio	Real gross disposable income	Financial investment	Non-financial investment (gross)	Net worth 2)	Hous-ing wealth	Profit share 3)	Saving ratio (net)	Debt ratio 4)	Financial investment	Non-financial investment (gross)	Finan-cing
	Percentage of gross disposable income (adjusted)		Annual percentage changes					Percentage of net value added		Percent-age of GDP	Annual percentage changes		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2015	12.5	93.9	1.7	2.1	1.2	3.0	1.8	33.9	6.2	138.4	5.1	7.7	2.9
2016	12.4	94.1	1.8	2.1	6.2	3.4	2.7	34.3	6.8	139.0	4.8	6.1	3.0
2017	11.9	93.9	1.3	1.9	7.0	4.3	4.6	34.8	8.4	136.7	3.5	5.3	1.8
2017 Q3	11.9	93.9	1.5	1.9	7.1	4.1	3.9	34.4	7.3	136.9	4.0	3.0	2.3
Q4	11.9	93.9	1.5	1.9	7.1	4.3	4.6	34.8	8.4	136.7	3.5	1.0	1.8
2018 Q1	11.9	93.6	1.7	1.9	5.8	4.0	5.1	35.0	8.5	136.2	3.0	-1.3	1.4
Q2	12.0	93.7	1.8	1.9	8.1	4.0	4.9	35.2	8.5	136.5	3.2	1.3	1.5

Sources: ECB and Eurostat.

1) Based on four-quarter cumulated sums of both saving and gross disposable income (adjusted for the change in the net equity of households in pension fund reserves).
2) Financial assets (net of financial liabilities) and non-financial assets. Non-financial assets consist mainly of housing wealth (residential structures and land). They also include non-financial assets of unincorporated enterprises classified within the household sector.
3) The profit share uses net entrepreneurial income, which is broadly equivalent to current profits in business accounting.
4) Based on the outstanding amount of loans, debt securities, trade credits and pension scheme liabilities.

3 Economic activity

3.8 Euro area balance of payments, current and capital accounts
(EUR billions; seasonally adjusted unless otherwise indicated; transactions)

	Current account											Capital account [1]	
	Total			Goods		Services		Primary income		Secondary income			
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	11	12	13
2017 Q4	1,001.8	905.8	96.0	583.3	494.3	218.8	187.8	170.5	160.7	29.3	63.1	12.1	10.5
2018 Q1	994.7	888.8	105.8	577.4	491.6	216.9	187.4	172.3	150.9	28.1	58.9	9.0	6.4
Q2	1,019.4	925.4	94.0	583.9	505.1	218.1	189.8	190.1	166.5	27.2	63.9	8.0	6.6
Q3	997.5	936.6	60.9	583.0	526.1	219.6	191.7	166.8	150.2	28.0	68.6	7.6	5.5
2018 Apr.	337.9	302.7	35.2	192.0	165.7	72.5	63.3	64.2	52.5	9.1	21.2	2.4	2.3
May	334.8	304.0	30.7	193.0	168.0	72.5	63.2	60.2	52.8	9.2	20.0	2.6	2.3
June	346.7	318.7	28.0	198.9	171.4	73.1	63.3	65.8	61.3	8.9	22.7	3.1	2.1
July	329.0	309.4	19.6	192.2	173.4	73.2	62.9	54.6	50.2	9.0	23.0	2.7	1.7
Aug.	333.8	309.6	24.3	195.8	174.0	72.9	64.1	55.7	48.8	9.4	22.7	2.7	1.7
Sep.	334.6	317.6	17.0	195.0	178.6	73.4	64.8	56.5	51.3	9.6	22.9	2.2	2.2
	12-month cumulated transactions												
2018 Sep.	4,013.3	3,656.7	356.7	2,327.5	2,017.1	873.4	756.7	699.7	628.3	112.6	254.5	36.7	29.1
	12-month cumulated transactions as a percentage of GDP												
2018 Sep.	34.9	31.8	3.1	20.2	17.5	7.6	6.6	6.1	5.5	1.0	2.2	0.3	0.3

1) The capital account is not seasonally adjusted.

3.9 Euro area external trade in goods [1], values and volumes by product group [2]
(seasonally adjusted, unless otherwise indicated)

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
			Total				Memo item:	Total				Memo items:	
	Exports	Imports		Intermediate goods	Capital goods	Consumption goods	Manufacturing		Intermediate goods	Capital goods	Consumption goods	Manufacturing	Oil
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Values (EUR billions; annual percentage changes for columns 1 and 2)												
2017 Q4	6.2	8.1	562.0	268.4	116.1	166.8	471.7	502.3	286.1	81.8	125.6	363.0	58.8
2018 Q1	2.0	2.3	560.7	270.3	113.7	167.7	469.5	504.5	291.5	81.6	123.6	358.1	65.1
Q2	4.3	5.8	565.6	270.9	117.2	166.5	473.3	514.8	300.7	79.4	126.6	363.3	65.6
Q3	4.6	9.6	572.2	.	.	.	475.7	529.6	.	.	.	368.9	.
2018 Apr.	8.1	8.5	187.2	88.9	39.4	55.2	156.5	169.5	98.3	26.0	42.5	119.8	21.1
May	-0.9	0.7	187.6	90.3	38.2	54.7	157.3	171.0	99.2	26.7	42.0	122.1	21.4
June	6.0	8.8	190.8	91.7	39.7	56.5	159.5	174.3	103.2	26.7	42.1	121.4	23.0
July	9.3	13.8	189.2	91.6	38.6	55.2	155.9	176.8	103.4	28.5	42.1	124.0	22.7
Aug.	5.7	8.7	193.0	93.6	38.7	56.6	161.4	176.2	103.1	28.1	42.0	122.9	23.0
Sep.	-0.9	6.4	190.0	.	.	.	158.4	176.6	.	.	.	122.0	.
	Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)												
2017 Q4	4.6	4.6	126.6	125.8	125.6	130.4	127.0	115.0	115.0	114.3	115.8	119.3	105.9
2018 Q1	2.2	2.5	125.8	125.5	123.2	131.4	126.1	114.5	114.8	113.8	115.2	117.7	110.2
Q2	3.0	2.5	125.6	124.2	126.4	129.3	126.2	115.1	115.3	111.4	118.0	119.0	101.6
Q3	.	.	.	.	.	.	.	.	.	.	.	.	.
2018 Mar.	-2.7	-0.8	125.8	123.4	123.8	133.5	126.2	115.0	114.6	116.2	117.1	118.5	106.3
Apr.	8.0	7.9	125.6	123.3	127.6	129.7	125.7	115.0	115.5	109.1	119.0	118.1	104.4
May	-2.0	-1.8	124.9	124.5	123.6	126.7	125.8	115.5	114.8	113.6	118.2	120.9	99.1
June	3.5	1.9	126.3	124.9	128.0	131.4	127.1	114.8	115.6	111.6	116.8	118.1	101.4
July	6.3	6.5	124.7	124.5	124.1	127.3	123.7	115.9	115.4	118.3	115.7	120.1	100.0
Aug.	1.9	0.0	126.9	126.9	123.8	130.1	127.7	115.0	115.0	115.7	114.1	118.4	102.3

Sources: ECB and Eurostat.
1) Differences between ECB's b.o.p. goods (Table 3.8) and Eurostat's trade in goods (Table 3.9) are mainly due to different definitions.
2) Product groups as classified in the Broad Economic Categories.

4 Prices and costs

4.1 Harmonised Index of Consumer Prices [1)]

(annual percentage changes, unless otherwise indicated)

	Total					Total (s.a.; percentage change vis-à-vis previous period) [2)]						Memo item: Administered prices	
	Index: 2015 = 100	Total		Goods	Services	Total	Processed food	Unpro-cessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Adminis-tered prices
			Total excluding food and energy										
	1	2	3	4	5	6	7	8	9	10	11	12	13
% of total in 2018	100.0	100.0	70.7	55.6	44.4	100.0	12.1	7.5	26.3	9.7	44.4	86.6	13.4
2015	100.0	0.0	0.8	-0.8	1.2	-	-	-	-	-	-	-0.1	1.0
2016	100.2	0.2	0.9	-0.4	1.1	-	-	-	-	-	-	0.2	0.3
2017	101.8	1.5	1.0	1.7	1.4	-	-	-	-	-	-	1.6	1.0
2017 Q4	102.4	1.4	0.9	1.6	1.2	0.5	0.6	1.1	0.1	2.6	0.1	1.5	1.2
2018 Q1	102.3	1.3	1.0	1.2	1.3	0.5	0.7	0.1	0.1	1.9	0.5	1.2	1.9
Q2	103.7	1.7	0.9	2.0	1.3	0.5	0.8	0.8	0.1	1.9	0.4	1.7	1.6
Q3	103.9	2.1	1.0	2.7	1.3	0.6	0.3	0.8	0.1	2.7	0.3	2.0	2.4
2018 June	104.0	2.0	0.9	2.5	1.3	0.2	0.2	0.2	0.1	0.9	0.0	2.0	1.6
July	103.6	2.1	1.1	2.8	1.4	0.2	0.1	0.0	0.1	0.7	0.2	2.1	2.4
Aug.	103.8	2.0	0.9	2.6	1.3	0.1	0.1	0.4	0.0	0.5	0.0	2.0	2.3
Sep.	104.3	2.1	0.9	2.7	1.3	0.2	0.0	0.8	0.0	1.2	0.1	2.0	2.4
Oct.	104.5	2.2	1.1	2.8	1.5	0.2	0.1	-0.3	0.1	1.8	0.1	2.1	2.8
Nov. [3)]	104.3	2.0	1.0	.	1.3	0.0	0.1	-0.2	0.0	0.0	-0.1	.	.

	Goods						Services					
	Food (including alcoholic beverages and tobacco)			Industrial goods			Housing		Transport	Communi-cation	Recreation and personal care	Miscel-laneous
	Total	Processed food	Unpro-cessed food	Total	Non-energy industrial goods	Energy		Rents				
	14	15	16	17	18	19	20	21	22	23	24	25
% of total in 2018	19.6	12.1	7.5	36.0	26.3	9.7	10.6	6.4	7.3	3.2	15.3	8.1
2015	1.0	0.6	1.6	-1.8	0.3	-6.8	1.2	1.1	1.3	-0.8	1.5	1.2
2016	0.9	0.6	1.4	-1.1	0.4	-5.1	1.1	1.1	0.8	0.0	1.4	1.2
2017	1.8	1.6	2.2	1.6	0.4	4.9	1.3	1.2	2.1	-1.5	2.1	0.7
2017 Q4	2.2	2.1	2.3	1.3	0.4	3.5	1.2	1.2	1.7	-1.7	2.0	0.4
2018 Q1	1.7	2.6	0.3	0.9	0.5	2.1	1.3	1.3	1.7	-1.0	1.8	1.2
Q2	2.6	2.7	2.3	1.7	0.3	5.5	1.2	1.2	1.3	-0.7	1.8	1.3
Q3	2.5	2.3	2.8	2.8	0.4	9.4	1.1	1.1	1.4	-0.8	1.9	1.3
2018 June	2.7	2.6	2.9	2.4	0.4	8.0	1.1	1.0	1.5	-0.8	1.7	1.3
July	2.5	2.4	2.6	2.9	0.5	9.5	1.1	1.1	1.3	-0.6	2.1	1.4
Aug.	2.4	2.4	2.5	2.7	0.3	9.2	1.1	1.1	1.6	-0.8	1.8	1.2
Sep.	2.6	2.2	3.2	2.8	0.3	9.5	1.1	1.1	1.3	-1.2	1.9	1.3
Oct.	2.2	2.2	2.1	3.1	0.4	10.7	1.2	1.1	1.8	-1.5	2.0	1.7
Nov. [3)]	2.0	2.0	1.8	.	0.4	9.1	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.

1) Data refer to the changing composition of the euro area.

2) In May 2016 the ECB started publishing enhanced seasonally adjusted HICP series for the euro area, following a review of the seasonal adjustment approach as described in Box 1, *Economic Bulletin*, Issue 3, ECB, 2016 (https://www.ecb.europa.eu/pub/pdf/ecbu/eb201603.en.pdf).

3) Estimate based on provisional national data, as well as on early information on energy prices.

4 Prices and costs

4.2 Industry, construction and property prices
(annual percentage changes, unless otherwise indicated)

	Industrial producer prices excluding construction 1)										Con-struction	Residential property prices 2)	Experimental indicator of commercial property prices 2)
	Total (index: 2015 = 100)	Total		Industry excluding construction and energy						Energy			
			Manu-facturing	Total	Intermediate goods	Capital goods	Consumer goods						
							Total	Food, beverages and tobacco	Non-food				
	1	2	3	4	5	6	7	8	9	10	11	12	13
% of total in 2015	100.0	100.0	77.3	72.1	28.9	20.7	22.5	16.5	5.9	27.9			
2015	100.0	-2.6	-2.3	-0.5	-1.2	0.6	-0.6	-1.0	0.2	-8.6	0.3	1.7	2.3
2016	97.9	-2.1	-1.4	-0.5	-1.6	0.5	0.0	0.0	0.0	-6.9	0.5	3.4	5.0
2017	100.8	3.0	3.0	2.1	3.2	0.9	1.9	2.8	0.2	5.7	2.1	3.7	5.1
2017 Q4	101.7	2.5	2.5	2.0	3.2	1.0	1.5	2.0	0.3	3.6	2.4	3.9	6.6
2018 Q1	102.4	1.7	1.6	1.5	2.4	0.9	0.8	1.0	0.5	2.0	2.3	4.3	4.5
Q2	103.1	2.8	2.6	1.4	2.5	1.0	0.3	0.1	0.6	6.7	2.3	4.2	2.3
Q3	104.9	4.3	3.2	1.5	3.1	1.1	0.1	-0.3	0.7	12.4	.	.	.
2018 May	103.3	3.0	2.8	1.4	2.5	1.0	0.3	0.1	0.7	7.5	-	-	-
June	103.7	3.6	3.3	1.5	3.1	1.0	0.2	-0.2	0.6	9.3	-	-	-
July	104.4	4.2	3.3	1.6	3.2	1.0	0.1	-0.2	0.7	12.0	-	-	-
Aug.	104.8	4.3	3.3	1.6	3.3	1.1	0.1	-0.3	0.7	12.3	-	-	-
Sep.	105.4	4.6	3.0	1.5	2.8	1.1	0.0	-0.4	0.7	12.9	-	-	-
Oct.	106.2	4.9	3.2	1.5	2.6	1.2	0.2	-0.3	0.8	14.6	-	-	-

Sources: Eurostat, ECB calculations, and ECB calculations based on MSCI data and national sources (col. 13).
1) Domestic sales only.
2) Experimental data based on non-harmonised sources (see https://www.ecb.europa.eu/stats/ecb_statistics/governance_and_quality_framework/html/experimental-data.en.html for further details).

4.3 Commodity prices and GDP deflators
(annual percentage changes, unless otherwise indicated)

	GDP deflators								Oil prices (EUR per barrel)	Non-energy commodity prices (EUR)					
	Total (s.a.; index: 2010 = 100)	Total	Domestic demand				Exports 1)	Imports 1)		Import-weighted 2)			Use-weighted 2)		
			Total	Private consump-tion	Govern-ment consump-tion	Gross fixed capital formation				Total	Food	Non-food	Total	Food	Non-food
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
% of total										100.0	45.4	54.6	100.0	50.4	49.6
2015	106.0	1.4	0.4	0.3	0.5	0.7	0.4	-1.9	47.1	-0.3	3.7	-4.5	-0.3	1.7	-2.9
2016	106.9	0.8	0.5	0.4	0.5	0.7	-1.4	-2.5	39.9	-2.0	-1.4	-2.8	-3.1	-3.7	-2.3
2017	108.0	1.1	1.5	1.4	1.4	1.5	1.9	2.9	48.1	5.8	-3.5	16.6	6.7	-1.6	17.8
2017 Q4	108.5	1.3	1.5	1.4	1.6	1.6	1.2	1.8	52.2	-3.5	-11.4	4.9	-1.8	-8.7	6.8
2018 Q1	108.9	1.4	1.4	1.2	1.5	1.7	0.4	0.3	54.6	-8.9	-14.6	-3.2	-7.6	-12.9	-1.4
Q2	109.4	1.4	1.8	1.4	1.9	1.9	1.1	2.0	62.6	2.1	-6.0	10.3	1.9	-6.3	11.7
Q3	109.8	1.4	2.2	1.8	1.9	2.2	2.3	4.0	64.8	2.0	-3.4	7.1	3.1	-2.2	8.8
2018 June	-	-	-	-	-	-	-	-	64.4	6.1	-4.7	17.4	5.7	-5.0	18.7
July	-	-	-	-	-	-	-	-	63.7	2.1	-6.3	10.5	2.4	-5.9	12.2
Aug.	-	-	-	-	-	-	-	-	63.3	3.1	-0.8	6.7	4.6	0.7	8.7
Sep.	-	-	-	-	-	-	-	-	67.6	0.8	-3.0	4.2	2.3	-1.0	5.7
Oct.	-	-	-	-	-	-	-	-	70.1	2.6	-0.9	5.7	2.9	-0.4	6.4
Nov.	-	-	-	-	-	-	-	-	57.4	1.8	-0.8	4.1	1.7	-1.1	4.8

Sources: Eurostat, ECB calculations and Bloomberg (col. 9).
1) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.
2) Import-weighted: weighted according to 2009-11 average import structure; use-weighted: weighted according to 2009-11 average domestic demand structure.

4 Prices and costs

4.4 Price-related opinion surveys
(seasonally adjusted)

	European Commission Business and Consumer Surveys (percentage balances)					Purchasing Managers' Surveys (diffusion indices)			
	Selling price expectations (for next three months)				Consumer price trends over past 12 months	Input prices		Prices charged	
	Manu-facturing	Retail trade	Services	Construction		Manu-facturing	Services	Manu-facturing	Services
	1	2	3	4	5	6	7	8	9
1999-14	4.4	-	-	-3.1	33.5	57.2	56.5	-	49.8
2015	-3.1	3.1	2.3	-13.2	-0.2	48.9	53.5	49.6	50.2
2016	-1.0	2.2	4.1	-7.2	0.2	49.8	53.9	49.3	49.0
2017	8.7	5.0	6.7	2.6	12.3	64.6	56.3	55.1	50.2
2017 Q4	10.9	7.1	8.2	8.2	13.8	67.9	56.9	56.3	50.8
2018 Q1	12.5	6.7	8.9	10.9	17.4	68.4	57.2	57.9	51.4
Q2	9.8	6.7	9.0	12.2	18.5	65.6	57.6	56.5	50.6
Q3	10.6	7.3	8.9	12.5	21.0	65.2	58.4	55.5	50.0
2018 June	10.1	6.8	9.0	12.5	21.1	67.6	58.6	55.7	51.1
July	9.6	6.8	9.0	12.3	20.7	66.6	57.9	55.6	50.3
Aug.	10.5	7.8	9.3	13.2	19.6	65.3	58.1	55.1	50.3
Sep.	11.6	7.3	8.3	12.0	22.6	63.6	59.1	55.7	49.5
Oct.	9.7	8.9	8.5	12.9	24.4	65.1	58.5	54.8	49.5
Nov.	11.3	7.2	9.7	12.3	23.8	63.6	58.9	54.7	49.4

Sources: European Commission (Directorate-General for Economic and Financial Affairs) and Markit.

4.5 Labour cost indices
(annual percentage changes, unless otherwise indicated)

	Total (index: 2012 = 100)	Total	By component		For selected economic activities		Memo item: Indicator of negotiated wages [1]
			Wages and salaries	Employers' social contributions	Business economy	Mainly non-business economy	
	1	2	3	4	5	6	7
% of total in 2012	100.0	100.0	74.6	25.4	69.3	30.7	
2015	104.1	1.6	1.9	0.7	1.5	1.6	1.5
2016	105.5	1.4	1.4	1.1	1.3	1.6	1.4
2017	107.4	1.8	1.8	1.7	1.9	1.5	1.5
2017 Q4	114.0	1.5	1.6	1.4	1.8	1.0	1.5
2018 Q1	102.6	2.1	1.8	2.8	2.3	1.5	1.8
Q2	113.7	2.2	1.9	2.9	2.5	1.6	2.2
Q3	.	.	.	.	.	.	2.1

Sources: Eurostat and ECB calculations.
1) Experimental data based on non-harmonised sources (see https://www.ecb.europa.eu/stats/ecb_statistics/governance_and_quality_framework/html/experimental-data.en.html for further details).

4.6 Unit labour costs, compensation per labour input and labour productivity

(annual percentage changes, unless otherwise indicated; quarterly data seasonally adjusted; annual data unadjusted)

	Total (index: 2010 =100)	Total	By economic activity									
			Agriculture, forestry and fishing	Manu-facturing, energy and utilities	Con-struction	Trade, transport, accom-modation and food services	Information and commu-nication	Finance and insurance	Real estate	Professional, business and support services	Public ad-ministration, education, health and social work	Arts, enter-tainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12
						Unit labour costs						
2015	104.6	0.4	0.4	-1.5	0.6	0.4	0.7	0.5	2.4	1.3	1.4	1.2
2016	105.3	0.6	1.3	-1.3	0.6	1.3	-0.7	1.4	3.8	0.6	1.4	1.5
2017	106.1	0.8	0.2	-0.4	-0.1	0.3	0.8	-0.5	4.4	2.2	1.6	1.8
2017 Q4	106.5	0.8	-1.4	-0.6	-0.1	-0.1	1.6	-1.4	4.4	2.3	1.7	1.7
2018 Q1	107.0	1.1	0.2	0.0	-0.4	0.6	0.6	0.8	3.3	2.4	1.7	1.6
Q2	107.6	1.6	0.8	1.3	0.4	0.8	0.2	0.6	3.1	2.8	2.1	2.5
Q3	108.4	2.2	1.3	2.8	0.8	1.5	1.0	0.5	3.4	3.2	2.4	2.7
						Compensation per employee						
2015	108.0	1.4	1.3	2.0	1.2	1.3	2.7	0.8	2.0	1.6	1.1	1.8
2016	109.3	1.2	0.2	1.3	1.8	1.3	0.2	2.2	2.2	0.4	1.3	1.7
2017	111.1	1.6	1.6	1.5	1.2	1.6	1.9	0.0	4.0	3.1	1.5	1.3
2017 Q4	112.1	1.9	2.3	1.9	1.6	1.8	2.3	0.1	4.1	3.3	1.6	1.6
2018 Q1	112.6	2.0	3.0	1.6	1.2	2.0	2.8	1.8	3.2	2.7	1.9	2.2
Q2	113.3	2.2	2.6	2.1	1.5	2.1	2.7	1.9	2.6	3.0	2.2	2.4
Q3	114.1	2.5	1.8	2.3	2.0	2.3	2.1	2.7	3.7	3.2	2.3	3.8
						Labour productivity per person employed						
2015	103.3	1.0	0.9	3.5	0.7	0.9	2.0	0.3	-0.4	0.2	-0.3	0.6
2016	103.9	0.6	-1.0	2.6	1.1	0.0	0.9	0.7	-1.5	-0.2	-0.1	0.3
2017	104.7	0.8	1.3	1.9	1.3	1.4	1.1	0.6	-0.4	0.8	-0.2	-0.5
2017 Q4	105.3	1.1	3.8	2.5	1.7	1.9	0.7	1.6	-0.3	1.0	-0.1	-0.1
2018 Q1	105.3	0.9	2.8	1.5	1.6	1.4	2.2	1.0	-0.1	0.3	0.2	0.7
Q2	105.3	0.6	1.7	0.8	1.1	1.3	2.5	1.3	-0.4	0.2	0.0	-0.1
Q3	105.3	0.3	0.5	-0.5	1.2	0.8	1.1	2.1	0.2	0.0	-0.1	1.1
						Compensation per hour worked						
2015	109.7	1.2	1.4	1.6	0.7	1.3	1.5	0.7	1.4	1.1	1.2	1.5
2016	110.8	1.0	-0.4	1.2	1.7	0.9	0.2	1.8	1.9	0.0	1.3	1.5
2017	112.6	1.7	1.3	1.5	1.0	1.9	1.8	0.5	3.3	2.8	1.6	1.7
2017 Q4	113.2	1.5	1.5	1.1	0.6	1.6	2.1	0.3	2.0	2.8	1.4	1.8
2018 Q1	113.8	1.9	2.9	1.4	0.3	2.2	2.9	1.9	1.9	2.3	1.9	2.0
Q2	114.3	1.9	1.0	1.9	0.9	2.0	2.0	1.5	2.1	2.3	1.9	1.9
Q3	114.8	2.0	1.9	1.7	1.2	2.2	1.8	2.4	2.5	2.5	2.1	2.0
						Hourly labour productivity						
2015	105.2	0.9	0.2	3.1	0.2	1.1	0.9	0.2	-0.7	0.0	-0.4	0.1
2016	105.7	0.5	-1.2	2.5	0.8	0.0	1.0	0.3	-2.0	-0.4	-0.2	0.2
2017	106.8	1.0	1.7	1.9	1.2	1.7	1.2	1.1	-0.9	0.9	0.0	0.1
2017 Q4	107.1	0.9	3.2	1.9	0.7	1.9	0.7	1.9	-2.1	0.7	-0.2	0.4
2018 Q1	107.2	0.9	3.0	1.4	1.3	1.7	2.4	1.0	-1.4	0.2	0.3	1.0
Q2	107.0	0.5	1.0	0.6	1.0	1.5	2.0	0.9	-0.3	-0.4	-0.2	-0.1
Q3	106.7	0.0	0.4	-0.9	0.4	0.9	0.8	1.8	0.0	-0.6	-0.2	0.1

Sources: Eurostat and ECB calculations.

5 Money and credit

5.1 Monetary aggregates [1)]

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	M3											
	M2							M3-M2				
	M1			M2-M1								
	Currency in circulation	Overnight deposits		Deposits with an agreed maturity of up to 2 years	Deposits redeemable at notice of up to 3 months			Repos	Money market fund shares	Debt securities with a maturity of up to 2 years		
	1	2	3	4	5	6	7	8	9	10	11	12
						Outstanding amounts						
2015	1,037.3	5,574.7	6,612.0	1,445.6	2,159.4	3,605.0	10,217.0	73.7	486.7	74.7	635.1	10,852.1
2016	1,075.3	6,082.8	7,158.1	1,329.3	2,221.0	3,550.3	10,708.4	69.6	524.4	91.9	685.9	11,394.3
2017	1,111.6	6,637.2	7,748.8	1,196.9	2,260.8	3,457.7	11,206.5	74.7	510.6	75.9	661.2	11,867.8
2017 Q4	1,111.6	6,637.2	7,748.8	1,196.9	2,260.8	3,457.7	11,206.5	74.7	510.6	75.9	661.2	11,867.8
2018 Q1	1,116.9	6,744.0	7,860.9	1,170.3	2,259.8	3,430.1	11,291.1	71.4	509.4	65.7	646.5	11,937.5
Q2	1,133.6	6,892.4	8,025.9	1,178.1	2,270.8	3,448.8	11,474.8	73.7	507.4	70.8	652.0	12,126.7
Q3	1,150.5	7,010.1	8,160.6	1,126.6	2,285.0	3,411.6	11,572.2	71.4	495.4	65.0	631.9	12,204.1
2018 May	1,128.6	6,844.3	7,972.9	1,164.7	2,266.4	3,431.1	11,404.0	71.9	506.0	66.7	644.5	12,048.5
June	1,133.6	6,892.4	8,025.9	1,178.1	2,270.8	3,448.8	11,474.8	73.7	507.4	70.8	652.0	12,126.7
July	1,137.3	6,916.3	8,053.5	1,155.9	2,277.2	3,433.0	11,486.5	68.5	508.4	65.5	642.5	12,129.0
Aug.	1,143.8	6,951.5	8,095.3	1,140.1	2,281.1	3,421.2	11,516.5	71.8	501.7	69.2	642.7	12,159.2
Sep.	1,150.5	7,010.1	8,160.6	1,126.6	2,285.0	3,411.6	11,572.2	71.4	495.4	65.0	631.9	12,204.1
Oct. (p)	1,154.4	7,047.2	8,201.6	1,143.7	2,285.3	3,429.0	11,630.6	72.0	501.8	67.3	641.2	12,271.8
						Transactions						
2015	66.5	565.9	632.4	-132.2	12.3	-119.9	512.5	-47.2	49.6	-27.0	-24.5	488.0
2016	38.1	541.7	579.8	-107.3	16.1	-91.2	488.5	-4.3	37.5	18.1	51.4	539.9
2017	36.4	590.8	627.1	-109.3	36.2	-73.1	554.0	6.6	-13.8	-19.1	-26.3	527.7
2017 Q4	7.7	119.4	127.0	-18.8	9.5	-9.3	117.8	7.6	-19.1	-8.3	-19.9	97.9
2018 Q1	5.3	103.6	108.9	-25.0	7.6	-17.3	91.5	-3.1	-1.1	-9.2	-13.4	78.2
Q2	16.6	137.8	154.4	4.5	10.2	14.7	169.1	-0.9	-1.6	3.3	0.8	169.9
Q3	16.0	115.9	131.9	-51.7	14.2	-37.6	94.3	-2.4	-12.2	-5.4	-19.9	74.4
2018 May	5.7	66.0	71.7	-1.6	2.0	0.4	72.0	-5.0	-4.9	-7.2	-17.1	54.9
June	4.9	47.3	52.3	13.7	3.9	17.6	69.9	1.9	1.7	3.9	7.5	77.4
July	2.7	24.8	27.5	-21.2	6.4	-14.8	12.7	-5.1	0.8	-5.1	-9.4	3.2
Aug.	6.5	33.7	40.3	-16.4	3.9	-12.5	27.7	3.2	-6.7	3.4	-0.1	27.7
Sep.	6.8	57.4	64.2	-14.1	3.9	-10.2	53.9	-0.5	-6.2	-3.8	-10.5	43.5
Oct. (p)	3.9	33.8	37.7	12.3	3.1	15.4	53.1	0.4	6.4	1.1	7.8	60.9
						Growth rates						
2015	6.9	11.3	10.6	-8.4	0.6	-3.2	5.3	-39.0	11.3	-25.6	-3.7	4.7
2016	3.7	9.7	8.8	-7.5	0.7	-2.5	4.8	-5.8	7.7	24.1	8.1	5.0
2017	3.4	9.7	8.8	-8.3	1.6	-2.1	5.2	9.5	-2.6	-20.9	-3.8	4.6
2017 Q4	3.4	9.7	8.8	-8.3	1.6	-2.1	5.2	9.5	-2.6	-20.9	-3.8	4.6
2018 Q1	2.5	8.4	7.5	-8.8	1.7	-2.2	4.4	-1.6	-4.7	-25.7	-7.0	3.7
Q2	3.5	8.1	7.4	-5.6	1.7	-0.9	4.7	5.3	-1.1	-13.6	-2.0	4.4
Q3	4.1	7.3	6.8	-7.5	1.8	-1.4	4.3	2.0	-6.4	-23.3	-7.7	3.6
2018 May	3.3	8.2	7.5	-7.5	1.7	-1.6	4.6	-3.4	-3.0	-21.2	-5.3	4.0
June	3.5	8.1	7.4	-5.6	1.7	-0.9	4.7	5.3	-1.1	-13.6	-2.0	4.4
July	3.6	7.6	7.0	-6.5	1.9	-1.1	4.4	-1.8	-1.3	-19.3	-3.6	4.0
Aug.	3.9	7.0	6.5	-7.6	1.8	-1.5	4.0	-2.5	-3.3	-10.6	-4.1	3.5
Sep.	4.1	7.3	6.8	-7.5	1.8	-1.4	4.3	2.0	-6.4	-23.3	-7.7	3.6
Oct. (p)	4.1	7.3	6.8	-6.0	1.7	-1.0	4.4	-0.6	-4.3	-12.0	-4.8	3.9

Source: ECB.

1) Data refer to the changing composition of the euro area.

5.2 Deposits in M3 [1]

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	Non-financial corporations [2]					Households [3]					Financial corporations other than MFIs and ICPFs [2]	Insurance corporations and pension funds	Other general government [4]
	Total	Overnight	With an agreed maturity of up to 2 years	Redeemable at notice of up to 3 months	Repos	Total	Overnight	With an agreed maturity of up to 2 years	Redeemable at notice of up to 3 months	Repos			
	1	2	3	4	5	6	7	8	9	10	11	12	13
						Outstanding amounts							
2015	1,960.9	1,512.5	323.5	116.9	8.1	5,753.0	3,061.3	695.3	1,993.5	2.9	946.9	226.7	365.9
2016	2,093.3	1,630.4	295.1	159.6	8.2	6,055.5	3,402.3	644.9	2,006.3	2.1	970.6	199.5	383.8
2017	2,255.6	1,801.7	285.8	159.1	9.1	6,304.9	3,698.7	561.9	2,043.6	0.7	993.9	204.0	411.1
2017 Q4	2,255.6	1,801.7	285.8	159.1	9.1	6,304.9	3,698.7	561.9	2,043.6	0.7	993.9	204.0	411.1
2018 Q1	2,260.5	1,821.6	274.0	157.2	7.6	6,376.4	3,787.5	543.5	2,043.8	1.6	983.2	210.4	415.1
Q2	2,296.8	1,855.2	277.8	156.7	7.0	6,462.3	3,870.1	535.2	2,055.9	1.1	1,010.5	219.8	425.6
Q3	2,323.7	1,891.5	268.0	157.4	6.8	6,538.7	3,945.4	524.6	2,067.6	1.1	982.2	211.8	436.8
2018 May	2,293.2	1,858.0	271.7	156.6	6.9	6,435.0	3,844.6	537.1	2,052.0	1.3	984.9	214.6	419.6
June	2,296.8	1,855.2	277.8	156.7	7.0	6,462.3	3,870.1	535.2	2,055.9	1.1	1,010.5	219.8	425.6
July	2,296.6	1,860.7	272.0	156.6	7.4	6,490.0	3,894.7	532.0	2,061.5	1.8	989.9	216.0	425.2
Aug.	2,305.8	1,872.8	268.8	157.5	6.7	6,515.4	3,921.6	528.2	2,063.8	1.8	974.8	214.3	434.2
Sep.	2,323.7	1,891.5	268.0	157.4	6.8	6,538.7	3,945.4	524.6	2,067.6	1.1	982.2	211.8	436.8
Oct. (p)	2,316.7	1,892.0	274.7	144.0	5.9	6,587.1	3,984.0	521.6	2,080.4	1.1	992.6	208.3	443.6
						Transactions							
2015	90.3	127.8	-31.4	4.9	-11.1	196.1	304.7	-109.6	1.4	-0.4	83.4	-1.1	30.1
2016	131.8	156.6	-25.2	0.3	0.1	300.4	333.9	-46.5	13.9	-0.9	23.3	-28.4	19.1
2017	179.1	181.3	-3.1	-0.1	1.0	254.8	304.4	-81.6	33.4	-1.3	56.3	6.4	27.6
2017 Q4	37.6	32.5	0.4	0.9	3.8	53.0	67.4	-20.4	7.2	-1.2	29.0	2.8	-4.7
2018 Q1	7.8	22.1	-10.9	-2.0	-1.4	73.7	81.9	-18.1	9.0	0.9	-8.8	6.7	3.8
Q2	28.8	29.0	1.0	-0.7	-0.7	83.6	81.7	-9.1	11.6	-0.5	20.1	9.0	10.0
Q3	26.4	36.0	-10.0	0.6	-0.2	76.3	75.4	-10.7	11.6	0.0	-29.8	-8.1	11.1
2018 May	17.7	19.5	-1.5	0.6	-0.8	26.4	28.5	-3.8	2.0	-0.3	12.8	3.3	1.0
June	2.8	-3.4	6.1	0.0	0.1	27.3	25.5	-1.5	3.6	-0.2	25.6	5.3	5.8
July	0.9	6.2	-5.5	-0.1	0.4	28.1	24.8	-3.1	5.6	0.8	-20.2	-3.7	-0.3
Aug.	8.4	11.6	-3.5	0.9	-0.7	25.0	26.7	-3.9	2.3	0.0	-16.2	-1.8	9.0
Sep.	17.2	18.2	-1.0	-0.1	0.1	23.2	23.9	-3.7	3.8	-0.8	6.5	-2.6	2.4
Oct. (p)	3.2	1.3	4.3	-1.4	-0.9	38.3	37.2	-4.0	5.0	0.1	6.2	-3.8	5.7
						Growth rates							
2015	4.8	9.2	-8.8	4.4	-58.0	3.5	11.1	-13.6	0.1	-12.2	9.7	-0.5	9.0
2016	6.8	10.4	-7.9	0.3	1.4	5.2	10.9	-6.7	0.7	-29.3	2.4	-12.5	5.2
2017	8.6	11.2	-1.1	-0.1	12.5	4.2	9.0	-12.7	1.7	-65.5	5.9	3.2	7.2
2017 Q4	8.6	11.2	-1.1	-0.1	12.5	4.2	9.0	-12.7	1.7	-65.5	5.9	3.2	7.2
2018 Q1	5.3	8.0	-7.8	-0.2	19.2	4.0	8.3	-12.5	1.7	-42.0	4.4	10.4	5.5
Q2	4.8	7.1	-5.5	-1.2	7.0	4.4	8.6	-10.9	1.8	-53.9	5.8	12.8	5.8
Q3	4.5	6.8	-6.8	-0.7	27.4	4.6	8.4	-10.0	1.9	-45.8	1.0	5.2	4.9
2018 May	5.6	8.5	-7.7	-0.9	7.7	4.2	8.5	-11.6	1.7	-48.4	3.8	10.8	4.6
June	4.8	7.1	-5.5	-1.2	7.0	4.4	8.6	-10.9	1.8	-53.9	5.8	12.8	5.8
July	4.5	6.8	-6.5	-1.0	20.4	4.6	8.7	-10.4	1.9	-13.6	2.0	11.6	3.8
Aug.	4.2	6.5	-7.2	-0.7	13.8	4.6	8.6	-10.4	1.9	-10.7	-1.7	8.1	4.7
Sep.	4.5	6.8	-6.8	-0.7	27.4	4.6	8.4	-10.0	1.9	-45.8	1.0	5.2	4.9
Oct. (p)	4.1	6.0	-4.0	-2.0	5.7	4.7	8.4	-9.6	2.0	-45.3	3.0	2.8	5.9

Source: ECB.

1) Data refer to the changing composition of the euro area.

2) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector. These entities are included in MFI balance sheet statistics with financial corporations other than MFIs and insurance corporations and pension funds (ICPFs).

3) Including non-profit institutions serving households.

4) Refers to the general government sector excluding central government.

5 Money and credit

5.3 Credit to euro area residents [1]

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	Credit to general government			Credit to other euro area residents								
	Total	Loans	Debt securities	Total	Loans						Debt securities	Equity and non-money market fund investment fund shares
					Total		To non-financial corporations [3]	To households [4]	To financial corporations other than MFIs and ICPFs [3]	To insurance corporations and pension funds		
						Adjusted loans [2]						
	1	2	3	4	5	6	7	8	9	10	11	12
						Outstanding amounts						
2015	3,898.4	1,114.1	2,781.8	12,601.6	10,510.6	10,806.0	4,287.1	5,309.7	789.3	124.5	1,309.5	781.5
2016	4,389.4	1,084.1	3,292.1	12,881.0	10,710.9	10,981.6	4,311.4	5,449.4	836.5	113.5	1,387.5	782.6
2017	4,625.9	1,033.3	3,578.7	13,116.7	10,874.3	11,170.8	4,326.4	5,599.1	839.2	109.6	1,442.5	799.8
2017 Q4	4,625.9	1,033.3	3,578.7	13,116.7	10,874.3	11,170.8	4,326.4	5,599.1	839.2	109.6	1,442.5	799.8
2018 Q1	4,605.0	1,023.1	3,568.0	13,196.5	10,941.2	11,233.7	4,343.7	5,633.0	851.7	112.8	1,467.8	787.5
Q2	4,600.8	1,017.7	3,568.8	13,278.0	10,990.7	11,328.2	4,358.0	5,659.7	853.2	119.8	1,498.5	788.8
Q3	4,627.4	1,003.5	3,609.9	13,363.1	11,064.6	11,398.2	4,396.9	5,701.3	841.9	124.4	1,513.8	784.8
2018 May	4,582.2	1,023.9	3,544.1	13,297.0	11,007.6	11,301.8	4,380.9	5,649.9	857.1	119.7	1,489.9	799.5
June	4,600.8	1,017.7	3,568.8	13,278.0	10,990.7	11,328.2	4,358.0	5,659.7	853.2	119.8	1,498.5	788.8
July	4,621.6	1,010.4	3,596.8	13,325.6	11,023.4	11,351.6	4,381.8	5,674.6	846.6	120.4	1,512.1	790.1
Aug.	4,612.1	1,004.0	3,593.9	13,352.8	11,054.9	11,383.1	4,394.3	5,693.2	847.2	120.2	1,515.4	782.6
Sep.	4,627.4	1,003.5	3,609.9	13,363.1	11,064.6	11,398.2	4,396.9	5,701.3	841.9	124.4	1,513.8	784.8
Oct. (p)	4,609.1	1,000.6	3,594.5	13,393.6	11,089.9	11,422.6	4,403.4	5,715.9	849.7	120.8	1,524.5	779.2
						Transactions						
2015	294.1	-21.2	315.0	84.9	57.9	77.4	-11.4	97.2	-22.3	-5.6	25.8	1.1
2016	486.0	-34.4	520.3	319.4	235.7	259.6	82.5	121.1	43.2	-11.0	80.1	3.6
2017	289.6	-43.0	332.0	361.8	273.3	315.2	83.0	173.5	20.3	-3.6	64.6	23.9
2017 Q4	87.7	-14.0	101.5	90.3	76.1	93.8	31.8	48.1	-2.0	-1.8	9.4	4.8
2018 Q1	-30.6	-9.7	-20.8	112.6	94.6	94.5	38.2	39.4	13.8	3.2	27.9	-9.8
Q2	32.3	-6.0	37.9	87.5	55.9	104.2	17.0	35.2	-3.2	6.9	31.1	0.5
Q3	50.3	-16.1	66.7	103.7	91.2	88.3	48.9	49.9	-12.1	4.5	16.7	-4.2
2018 May	24.1	1.2	22.5	49.4	42.3	45.3	23.7	9.9	6.6	2.0	6.4	0.7
June	9.2	-6.2	15.5	-9.6	-8.7	35.5	-20.8	13.7	-1.8	0.2	9.2	-10.0
July	29.0	-5.8	34.8	49.9	37.6	28.4	26.0	17.0	-5.9	0.5	13.4	-1.1
Aug.	14.6	-6.5	21.2	30.0	31.1	30.4	13.6	18.0	-0.3	-0.2	4.3	-5.4
Sep.	6.7	-3.7	10.7	23.8	22.5	29.4	9.4	14.9	-6.0	4.2	-1.0	2.3
Oct. (p)	-12.6	-3.3	-9.3	32.4	21.6	20.4	4.8	15.3	5.2	-3.7	12.1	-1.3
						Growth rates						
2015	8.2	-1.9	12.7	0.7	0.6	0.7	-0.3	1.9	-2.7	-4.3	2.0	0.1
2016	12.4	-3.1	18.7	2.5	2.3	2.4	1.9	2.3	5.5	-8.9	6.1	0.5
2017	6.6	-4.0	10.2	2.8	2.6	2.9	1.9	3.2	2.5	-3.2	4.7	3.1
2017 Q4	6.6	-4.0	10.2	2.8	2.6	2.9	1.9	3.2	2.5	-3.2	4.7	3.1
2018 Q1	3.9	-3.9	6.4	2.6	2.6	3.0	2.3	3.0	1.9	-0.4	4.0	0.0
Q2	3.9	-3.9	6.4	2.8	2.9	3.5	2.5	3.0	3.0	6.8	4.9	-1.3
Q3	3.1	-4.4	5.3	3.0	2.9	3.4	3.2	3.1	-0.4	11.6	5.9	-1.1
2018 May	3.4	-3.6	5.6	3.2	3.0	3.3	2.8	3.1	3.6	8.0	4.6	2.0
June	3.9	-3.9	6.4	2.8	2.9	3.5	2.5	3.0	3.0	6.8	4.9	-1.3
July	3.8	-3.9	6.2	3.0	3.0	3.4	3.0	3.3	1.3	5.5	4.9	-1.1
Aug.	3.3	-4.4	5.6	3.0	3.0	3.4	3.1	3.2	0.8	4.6	6.1	-1.8
Sep.	3.1	-4.4	5.3	3.0	2.9	3.4	3.2	3.1	-0.4	11.6	5.9	-1.1
Oct. (p)	2.6	-4.2	4.7	3.0	2.8	3.3	2.8	3.2	-0.5	7.3	7.2	-1.5

Source: ECB.

1) Data refer to the changing composition of the euro area.

2) Adjusted for loan sales and securitisation (resulting in derecognition from the MFI statistical balance sheet) as well as for positions arising from notional cash pooling services provided by MFIs.

3) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector. These entities are included in MFI balance sheet statistics with financial corporations other than MFIs and insurance corporations and pension funds (ICPFs).

4) Including non-profit institutions serving households.

5.4 MFI loans to euro area non-financial corporations and households 1)

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	Non-financial corporations 2)					Households 3)				
	Total		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total		Loans for consumption	Loans for house purchase	Other loans
		Adjusted loans 4)					Adjusted loans 4)			
	1	2	3	4	5	6	7	8	9	10
					Outstanding amounts					
2015	4,287.1	4,266.9	1,051.8	760.7	2,474.6	5,309.7	5,643.5	595.3	3,949.1	765.3
2016	4,311.4	4,308.9	1,012.5	796.5	2,502.4	5,449.4	5,728.6	615.9	4,082.8	750.6
2017	4,326.4	4,364.4	987.7	820.3	2,518.5	5,599.1	5,865.6	654.4	4,216.5	728.1
2017 Q4	4,326.4	4,364.4	987.7	820.3	2,518.5	5,599.1	5,865.6	654.4	4,216.5	728.1
2018 Q1	4,343.7	4,381.1	997.8	820.6	2,525.4	5,633.0	5,904.6	663.6	4,243.6	725.8
Q2	4,358.0	4,424.9	986.0	828.0	2,544.0	5,659.7	5,940.5	670.1	4,272.9	716.7
Q3	4,396.9	4,464.4	1,000.2	836.9	2,559.9	5,701.3	5,978.6	678.3	4,310.4	712.7
2018 May	4,380.9	4,413.0	1,007.1	824.6	2,549.3	5,649.9	5,927.8	668.9	4,259.6	721.5
June	4,358.0	4,424.9	986.0	828.0	2,544.0	5,659.7	5,940.5	670.1	4,272.9	716.7
July	4,381.8	4,441.9	997.6	833.2	2,551.0	5,674.6	5,954.4	673.9	4,285.4	715.3
Aug.	4,394.3	4,453.8	1,001.0	835.0	2,558.4	5,693.2	5,972.2	677.6	4,300.2	715.4
Sep.	4,396.9	4,464.4	1,000.2	836.9	2,559.9	5,701.3	5,978.6	678.3	4,310.4	712.7
Oct. (p)	4,403.4	4,468.8	985.0	844.0	2,574.5	5,715.9	5,996.1	681.5	4,323.5	710.8
					Transactions					
2015	-11.4	24.0	-50.5	32.0	7.0	97.2	75.3	21.2	80.1	-4.1
2016	82.5	100.2	-15.4	44.0	54.0	121.1	113.7	24.1	105.3	-8.3
2017	83.0	132.9	0.8	37.2	45.0	173.5	165.8	45.1	134.2	-5.8
2017 Q4	31.8	51.8	10.8	10.8	10.2	48.1	44.5	12.3	36.8	-1.0
2018 Q1	38.2	38.7	16.7	5.6	15.8	39.4	45.6	11.2	27.5	0.7
Q2	17.0	48.0	-12.2	10.2	19.0	35.2	44.8	10.5	29.1	-4.5
Q3	48.9	48.1	16.5	10.3	22.1	49.9	48.5	10.5	40.5	-1.1
2018 May	23.7	21.0	4.4	4.9	14.5	9.9	14.8	3.8	6.3	-0.2
June	-20.8	13.3	-19.7	3.5	-4.5	13.7	16.2	2.6	13.9	-2.9
July	26.0	18.4	12.7	6.0	7.3	17.0	16.5	4.3	13.3	-0.7
Aug.	13.6	12.4	3.5	1.9	8.2	18.0	17.3	4.1	13.9	0.0
Sep.	9.4	17.2	0.3	2.4	6.7	14.9	14.8	2.1	13.3	-0.5
Oct. (p)	4.8	3.0	-17.1	7.1	14.8	15.3	18.6	3.6	11.9	-0.1
					Growth rates					
2015	-0.3	0.6	-4.5	4.4	0.3	1.9	1.4	3.7	2.1	-0.5
2016	1.9	2.4	-1.5	5.8	2.2	2.3	2.0	4.1	2.7	-1.1
2017	1.9	3.1	0.1	4.7	1.8	3.2	2.9	7.3	3.3	-0.8
2017 Q4	1.9	3.1	0.1	4.7	1.8	3.2	2.9	7.3	3.3	-0.8
2018 Q1	2.3	3.3	2.7	4.4	1.4	3.0	2.9	7.2	3.0	-0.4
Q2	2.5	4.1	1.3	5.4	2.1	3.0	3.0	7.2	3.1	-1.1
Q3	3.2	4.3	3.3	4.6	2.7	3.1	3.2	6.9	3.2	-0.8
2018 May	2.8	3.7	3.5	4.7	1.9	3.1	2.9	7.2	3.1	-0.5
June	2.5	4.1	1.3	5.4	2.1	3.0	3.0	7.2	3.1	-1.1
July	3.0	4.1	2.7	5.5	2.3	3.3	3.0	7.2	3.4	-0.8
Aug.	3.1	4.2	3.0	5.3	2.4	3.2	3.1	7.2	3.2	-0.8
Sep.	3.2	4.3	3.3	4.6	2.7	3.1	3.2	6.9	3.2	-0.8
Oct. (p)	2.8	3.9	0.6	4.9	2.9	3.2	3.2	7.1	3.3	-0.7

Source: ECB.

1) Data refer to the changing composition of the euro area.

2) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector. These entities are included in MFI balance sheet statistics with financial corporations other than MFIs and insurance corporations and pension funds (ICPFs).

3) Including non-profit institutions serving households.

4) Adjusted for loan sales and securitisation (resulting in derecognition from the MFI statistical balance sheet) as well as for positions arising from notional cash pooling services provided by MFIs.

5.5 Counterparts to M3 other than credit to euro area residents 1)

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	MFI liabilities						MFI assets			
	Central government holdings 2)	Longer-term financial liabilities vis-à-vis other euro area residents					Net external assets	Other		
		Total	Deposits with an agreed maturity of over 2 years	Deposits redeemable at notice of over 3 months	Debt securities with a maturity of over 2 years	Capital and reserves		Total	Repos with central counter-parties 3)	Reverse repos to central counter-parties 3)
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2015	282.8	6,999.2	2,119.1	80.0	2,255.2	2,544.9	1,352.2	281.9	205.9	135.6
2016	307.7	6,956.9	2,090.5	70.9	2,145.9	2,649.7	1,135.0	253.6	205.9	121.6
2017	343.4	6,767.3	1,968.3	59.7	2,013.0	2,726.2	935.9	299.9	143.5	92.5
2017 Q4	343.4	6,767.3	1,968.3	59.7	2,013.0	2,726.2	935.9	299.9	143.5	92.5
2018 Q1	340.8	6,745.7	1,952.7	59.4	2,015.0	2,718.5	906.6	315.9	135.9	86.2
Q2	330.4	6,705.8	1,950.6	58.4	2,022.9	2,674.0	862.1	422.1	174.1	183.8
Q3	403.4	6,693.5	1,934.7	56.9	2,048.5	2,653.4	885.5	425.1	177.3	183.0
2018 May	336.1	6,750.6	1,950.8	58.8	2,029.4	2,711.6	860.4	395.6	177.3	186.6
June	330.4	6,705.8	1,950.6	58.4	2,022.9	2,674.0	862.1	422.1	174.1	183.8
July	354.8	6,695.1	1,951.4	57.7	2,018.6	2,667.3	847.8	384.0	184.1	192.4
Aug.	391.6	6,676.5	1,942.9	57.3	2,016.2	2,660.2	851.0	411.3	181.4	189.0
Sep.	403.4	6,693.5	1,934.7	56.9	2,048.5	2,653.4	885.5	425.1	177.3	183.0
Oct. (p)	398.2	6,794.6	1,936.6	56.6	2,109.9	2,691.5	996.2	465.7	167.1	174.4
	Transactions									
2015	6.2	-216.1	-106.4	-13.4	-210.8	114.6	-87.2	-13.7	21.4	-4.0
2016	22.0	-122.7	-69.6	-9.1	-118.5	74.5	-274.8	-91.4	12.8	-12.0
2017	39.4	-82.2	-84.8	-8.6	-73.0	84.2	-98.2	-68.3	-60.9	-27.6
2017 Q4	-11.8	-31.9	-17.5	-1.8	-14.0	1.5	-62.8	-60.9	3.2	7.9
2018 Q1	-2.7	7.7	-15.2	-1.4	10.6	13.8	55.6	-54.4	-7.6	-6.3
Q2	-10.4	-16.8	-5.3	-1.1	-18.0	7.6	-62.5	85.4	16.4	19.4
Q3	76.4	32.6	-16.0	-1.5	21.9	28.3	39.6	-10.2	3.2	-0.8
2018 May	-13.4	-12.1	-6.5	-0.4	-5.4	0.2	-41.7	-2.3	30.3	34.7
June	-5.7	-10.3	-0.4	-0.4	-6.6	-3.0	20.5	41.2	-3.2	-2.8
July	24.3	11.6	1.4	-0.7	-0.4	11.2	0.1	-39.9	10.0	8.6
Aug.	36.7	-6.6	-9.0	-0.4	-5.8	8.6	-5.7	18.9	-2.6	-3.5
Sep.	15.4	27.7	-8.4	-0.5	28.1	8.5	45.2	10.8	-4.1	-6.0
Oct. (p)	-5.5	13.6	0.5	-0.3	9.9	3.5	18.0	31.3	-10.2	-8.6
	Growth rates									
2015	2.5	-3.0	-4.8	-14.4	-8.6	4.6	-	-	11.6	-2.9
2016	7.8	-1.7	-3.3	-11.4	-5.3	2.9	-	-	6.3	-9.0
2017	12.7	-1.2	-4.1	-12.4	-3.5	3.2	-	-	-29.7	-22.7
2017 Q4	12.7	-1.2	-4.1	-12.4	-3.5	3.2	-	-	-29.7	-22.7
2018 Q1	12.0	-0.9	-4.1	-12.5	-1.5	2.5	-	-	-25.6	-22.2
Q2	6.7	-1.1	-3.2	-10.8	-2.6	2.0	-	-	-3.6	-18.0
Q3	14.5	-0.1	-2.7	-9.3	0.0	1.9	-	-	7.7	4.9
2018 May	6.2	-1.0	-3.6	-10.3	-2.4	2.4	-	-	-6.8	-12.4
June	6.7	-1.1	-3.2	-10.8	-2.6	2.0	-	-	-3.6	-18.0
July	10.3	-0.8	-2.5	-10.4	-2.7	2.3	-	-	22.7	23.3
Aug.	16.4	-0.8	-2.7	-9.9	-2.6	2.1	-	-	24.6	34.2
Sep.	14.5	-0.1	-2.7	-9.3	0.0	1.9	-	-	7.7	4.9
Oct. (p)	18.3	0.4	-1.7	-8.8	0.8	1.9	-	-	-9.9	-22.0

Source: ECB.
1) Data refer to the changing composition of the euro area.
2) Comprises central government holdings of deposits with the MFI sector and of securities issued by the MFI sector.
3) Not adjusted for seasonal effects.

6 Fiscal developments

6.1 Deficit/surplus
(as a percentage of GDP; flows during one-year period)

	Deficit (-)/surplus (+)					Memo item: Primary deficit (-)/ surplus (+)
	Total	Central government	State government	Local government	Social security funds	
	1	2	3	4	5	6
2014	-2.5	-2.1	-0.2	0.0	-0.1	0.1
2015	-2.0	-1.9	-0.2	0.1	-0.1	0.3
2016	-1.6	-1.7	-0.1	0.2	0.0	0.6
2017	-1.0	-1.3	0.0	0.2	0.1	1.0
2017 Q3	-1.1	.	.	.	.	1.0
Q4	-1.0	.	.	.	.	1.0
2018 Q1	-0.8	.	.	.	.	1.2
Q2	-0.5	.	.	.	.	1.4

Sources: ECB for annual data; Eurostat for quarterly data.

6.2 Revenue and expenditure
(as a percentage of GDP; flows during one-year period)

	Revenue						Expenditure						
	Total	Current revenue				Capital revenue	Total	Current expenditure					Capital expenditure
			Direct taxes	Indirect taxes	Net social contributions				Compen-sation of employees	Intermediate consumption	Interest	Social benefits	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2014	46.7	46.2	12.5	13.1	15.4	0.5	49.1	45.2	10.2	5.3	2.6	23.0	3.9
2015	46.2	45.7	12.5	13.0	15.2	0.5	48.3	44.4	10.0	5.2	2.3	22.7	3.9
2016	46.0	45.5	12.6	12.9	15.2	0.5	47.5	44.0	9.9	5.2	2.1	22.7	3.6
2017	46.1	45.7	12.8	12.9	15.2	0.4	47.0	43.3	9.8	5.1	2.0	22.5	3.8
2017 Q3	46.1	45.7	12.7	12.9	15.3	0.4	47.1	43.4	9.9	5.1	2.0	22.5	3.7
Q4	46.1	45.7	12.8	12.9	15.2	0.4	47.0	43.3	9.8	5.1	2.0	22.5	3.8
2018 Q1	46.1	45.7	12.9	12.9	15.2	0.4	46.9	43.1	9.8	5.1	1.9	22.4	3.8
Q2	46.1	45.7	12.9	12.9	15.2	0.4	46.6	42.9	9.8	5.1	1.9	22.3	3.7

Sources: ECB for annual data; Eurostat for quarterly data.

6.3 Government debt-to-GDP ratio
(as a percentage of GDP; outstanding amounts at end of period)

	Total	Financial instrument			Holder			Original maturity		Residual maturity			Currency	
		Currency and deposits	Loans	Debt securities	Resident creditors		Non-resident creditors	Up to 1 year	Over 1 year	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currencies	Other curren-cies
						MFIs								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2014	91.8	2.7	17.1	71.9	43.9	25.8	47.9	9.8	82.0	18.8	31.8	41.1	89.7	2.1
2015	89.9	2.8	16.2	70.9	44.1	27.3	45.7	9.1	80.8	17.5	31.2	41.2	87.8	2.1
2016	89.1	2.7	15.4	71.0	46.6	30.5	42.5	8.8	80.3	17.1	29.9	42.1	87.0	2.1
2017	86.8	2.6	14.2	70.0	47.3	31.9	39.5	8.0	78.8	15.9	28.8	42.2	85.0	1.8
2017 Q3	88.2	2.8	14.6	70.9	.	.	.	.	.	.	.	.	.	.
Q4	86.8	2.6	14.2	70.0	.	.	.	.	.	.	.	.	.	.
2018 Q1	86.9	2.6	14.0	70.3	.	.	.	.	.	.	.	.	.	.
Q2	86.3	2.6	13.7	70.0	.	.	.	.	.	.	.	.	.	.

Sources: ECB for annual data; Eurostat for quarterly data.

6 Fiscal developments

6.4 Annual change in the government debt-to-GDP ratio and underlying factors [1]
(as a percentage of GDP; flows during one-year period)

	Change in debt-to-GDP ratio [2]	Primary deficit (+)/ surplus (-)	Deficit-debt adjustment								Interest-growth differential	Memo item: Borrowing requirement
			Total	Transactions in main financial assets					Revaluation effects and other changes in volume	Other		
				Total	Currency and deposits	Loans	Debt securities	Equity and investment fund shares				
	1	2	3	4	5	6	7	8	9	10	11	12
2014	0.2	-0.1	-0.2	-0.4	0.2	-0.4	-0.3	0.0	0.1	0.2	0.5	2.3
2015	-1.9	-0.3	-0.8	-0.5	0.2	-0.3	-0.3	-0.1	0.0	-0.4	-0.8	1.2
2016	-0.8	-0.6	0.1	0.2	0.3	-0.1	0.0	0.1	0.0	-0.1	-0.3	1.6
2017	-2.2	-1.0	-0.2	0.3	0.5	0.0	-0.2	0.1	-0.1	-0.3	-1.0	0.9
2017 Q3	-1.6	-1.0	0.0	0.6	0.8	-0.1	-0.1	0.0	-0.1	-0.4	-0.7	1.2
Q4	-2.2	-1.0	-0.2	0.4	0.5	0.0	-0.2	0.1	-0.1	-0.4	-1.0	0.9
2018 Q1	-2.4	-1.2	-0.1	0.5	0.5	0.0	-0.1	0.1	-0.1	-0.4	-1.1	0.8
Q2	-2.9	-1.4	-0.2	0.3	0.2	-0.1	-0.1	0.2	-0.1	-0.4	-1.3	0.5

Sources: ECB for annual data; Eurostat for quarterly data.
1) Intergovernmental lending in the context of the financial crisis is consolidated except in quarterly data on the deficit-debt adjustment.
2) Calculated as the difference between the government debt-to-GDP ratios at the end of the reference period and a year earlier.

6.5 Government debt securities [1]
(debt service as a percentage of GDP; flows during debt service period; average nominal yields in percentages per annum)

	Debt service due within 1 year [2]					Average residual maturity in years [3]	Average nominal yields [4]						
	Total	Principal		Interest			Outstanding amounts					Transactions	
			Maturities of up to 3 months		Maturities of up to 3 months		Total	Floating rate	Zero coupon	Fixed rate		Issuance	Redemption
											Maturities of up to 1 year		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2015	14.6	12.8	4.3	1.9	0.5	6.6	2.9	1.4	0.1	3.3	3.0	0.4	1.2
2016	14.1	12.4	4.6	1.7	0.4	6.9	2.6	1.2	-0.1	3.0	2.9	0.2	1.2
2017	12.9	11.2	4.2	1.7	0.4	7.1	2.4	1.1	-0.2	2.8	2.3	0.3	1.1
2017 Q3	13.0	11.3	3.7	1.7	0.4	7.1	2.5	1.1	-0.2	2.9	2.5	0.2	1.1
Q4	12.9	11.2	4.2	1.7	0.4	7.1	2.4	1.1	-0.2	2.8	2.3	0.3	1.1
2018 Q1	12.9	11.3	4.2	1.6	0.4	7.2	2.4	1.1	-0.2	2.8	2.5	0.4	1.1
Q2	12.8	11.2	3.6	1.6	0.4	7.3	2.4	1.1	-0.2	2.8	2.5	0.4	0.9
2018 May	12.8	11.2	3.7	1.6	0.4	7.3	2.4	1.1	-0.2	2.8	2.5	0.4	1.0
June	12.8	11.2	3.6	1.6	0.4	7.3	2.4	1.1	-0.2	2.8	2.5	0.4	0.9
July	12.8	11.3	3.7	1.6	0.4	7.3	2.3	1.1	-0.2	2.7	2.4	0.4	1.0
Aug.	12.8	11.2	3.8	1.6	0.4	7.2	2.3	1.1	-0.2	2.7	2.5	0.4	1.0
Sep.	13.1	11.5	3.8	1.6	0.4	7.3	2.3	1.1	-0.1	2.7	2.6	0.4	0.9
Oct.	13.2	11.7	3.5	1.6	0.4	7.3	2.3	1.1	-0.1	2.7	2.5	0.5	1.0

Source: ECB.
1) At face value and not consolidated within the general government sector.
2) Excludes future payments on debt securities not yet outstanding and early redemptions.
3) Residual maturity at the end of the period.
4) Outstanding amounts at the end of the period; transactions as 12-month average.

6.6 Fiscal developments in euro area countries
(as a percentage of GDP; flows during one-year period and outstanding amounts at end of period)

	Belgium	Germany	Estonia	Ireland	Greece	Spain	France	Italy	Cyprus
	1	2	3	4	5	6	7	8	9
Government deficit (-)/surplus (+)									
2014	-3.1	0.6	0.7	-3.6	-3.6	-6.0	-3.9	-3.0	-9.0
2015	-2.5	0.8	0.1	-1.9	-5.6	-5.3	-3.6	-2.6	-1.3
2016	-2.4	0.9	-0.3	-0.5	0.5	-4.5	-3.5	-2.5	0.3
2017	-0.9	1.0	-0.4	-0.2	0.8	-3.1	-2.7	-2.4	1.8
2017 Q3	-1.1	1.1	-0.7	-0.6	1.0	-3.1	-3.0	-2.5	1.5
Q4	-0.9	1.0	-0.4	-0.2	0.8	-3.1	-2.7	-2.4	1.8
2018 Q1	-0.9	1.3	-0.6	-0.4	1.1	-3.0	-2.7	-2.2	2.5
Q2	-0.3	1.9	-0.2	-0.5	0.9	-2.7	-2.7	-1.8	3.0
Government debt									
2014	107.6	74.5	10.5	104.1	178.9	100.4	94.9	131.8	108.0
2015	106.5	70.8	9.9	76.8	175.9	99.3	95.6	131.6	108.0
2016	106.1	67.9	9.2	73.4	178.5	99.0	98.2	131.4	105.5
2017	103.4	63.9	8.7	68.4	176.1	98.1	98.5	131.2	96.1
2017 Q3	107.6	64.8	8.6	72.9	177.4	98.4	99.9	133.6	101.3
Q4	103.8	63.9	8.7	68.4	178.6	98.1	98.5	131.2	96.1
2018 Q1	106.8	62.7	8.5	69.3	180.3	98.7	99.4	132.9	93.4
Q2	106.3	61.5	8.3	69.1	179.7	98.1	99.1	133.1	104.0

	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Austria	Portugal	Slovenia	Slovakia	Finland
	10	11	12	13	14	15	16	17	18	19
Government deficit (-)/surplus (+)										
2014	-1.5	-0.6	1.3	-1.7	-2.2	-2.7	-7.2	-5.5	-2.7	-3.2
2015	-1.4	-0.3	1.3	-1.0	-2.0	-1.0	-4.4	-2.8	-2.6	-2.8
2016	0.1	0.3	1.6	0.9	0.0	-1.6	-2.0	-1.9	-2.2	-1.7
2017	-0.6	0.5	1.4	3.5	1.2	-0.8	-3.0	0.1	-0.8	-0.7
2017 Q3	0.1	0.9	1.9	2.9	1.0	-1.2	-2.4	-0.5	-1.5	-1.4
Q4	-0.6	0.5	1.4	3.5	1.2	-0.8	-3.0	0.1	-0.8	-0.7
2018 Q1	0.0	0.4	1.5	3.1	1.6	-0.7	-0.7	0.5	-0.7	-0.7
Q2	0.2	0.7	1.6	3.9	1.9	0.1	-0.9	0.6	-0.6	-1.1
Government debt										
2014	40.9	40.5	22.7	63.7	67.9	84.0	130.6	80.4	53.5	60.2
2015	36.8	42.6	22.2	58.6	64.6	84.8	128.8	82.6	52.2	63.6
2016	40.3	39.9	20.7	56.3	61.9	83.0	129.2	78.7	51.8	63.0
2017	40.0	39.4	23.0	50.9	57.0	78.3	124.8	74.1	50.9	61.3
2017 Q3	38.0	39.2	23.5	53.5	57.0	79.8	129.5	79.0	51.3	60.7
Q4	40.0	39.4	23.0	50.9	57.0	78.3	124.8	74.1	50.9	61.3
2018 Q1	35.5	36.0	22.2	50.5	55.1	77.2	125.4	75.5	50.8	60.0
Q2	36.9	35.0	22.0	49.6	54.0	76.5	124.9	72.8	51.8	59.5

Source: Eurostat.

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This Bulletin was produced under the responsibility of the Executive Board of the ECB. Translations are prepared and published by the national central banks.

The cut-off date for the statistics included in this issue was 12 December 2018.

For specific terminology please refer to the ECB glossary.

PDF ISSN 2363-3417, QB-BP-18-008-EN-N
HTML ISSN 2363-3417, doi:10.2866/043608, QB-BP-18-008-EN-Q