PART I

EA and EU outlook
GROWTH CONTINUES AT A MORE MODERATE PACE

Global crosscurrents combine with domestic growth impediments

The forces that had strengthened economic growth in Europe in recent years, such as world trade, private consumption and investment have all lost momentum last year. This has lowered the pace of growth markedly and diminished expectations about the strength of future growth.

Output growth and trade outside the EU have turned out weaker than expected in the autumn, partly reflecting last year’s tightening of global financial conditions, trade tensions, and elevated uncertainty, but also the weakness of the manufacturing industry in several countries. While a gradual slowing of growth in major advanced economies is set to continue, emerging and developing countries should benefit from easing global financial conditions and, in some cases, from policy measures that brighten their outlook. Due to the sizeable negative impact of the external environment on export-oriented sectors and EU Member States, the main impetus to growth is expected to continue to come from domestic demand, driven by further growth in employment and incomes, despite some moderation in employment growth. Additional jobs, coupled with rising wages for employees, are expected to support consumption and economic activity while uncertainty about economic prospects keeps weighing on sentiment. Investment is set to continue expanding, but far less energetically due to the impact on equipment investment of the less favourable external environment and the high prevailing levels of uncertainty.

Looking ahead, the economic expansion in the euro area is forecast to continue at an annual rate of 1.2% this year (1.4% in the EU), slightly less than expected in the winter. The fading of certain adverse domestic factors, the prolongation of favourable financing conditions, and a rebound in activity outside the EU are expected to support growth in the second half of 2019 and in 2020. GDP is forecast to grow by 1.5% in 2020 in the euro area (1.7% in EU27), helped in part by calendar effects. Despite the expected fall in unemployment and stronger wage growth, inflation is expected to remain subdued with the near-term profile shaped mainly by oil price developments. HICP inflation in the euro area is forecast at 1.4% in both 2019 and in 2020, which is lower than expected in the winter and reflects in part lower oil-price assumptions.

As initial deadlines for US-China trade negotiations and Brexit have passed without resolution, various uncertainties continue to loom large. Substantial downside risks to the growth outlook remain in place. An escalation of trade tensions could prove to be a major shock and create roadblocks for Europe’s growth trajectory. A ‘no deal’ Brexit would be particularly harmful for the UK but it would also negatively affect the EU27 though to a minor extent. Domestically, transitory growth impediments could turn out to be more persistent than currently envisaged, especially in manufacturing.

Figures next to horizontal bars are annual growth rates.
1. PUTTING THE FORECAST INTO PERSPECTIVE: THE WEAKNESS IN MANUFACTURING IN THE EURO AREA

The sharp slowing in euro area growth in 2018 has come as a surprise. While various factors have to be considered to explain the relatively broad-based character, as well as the persistent nature of the weakness, the slump in manufacturing and trade appears to have been the most severe drag on euro area growth throughout 2018. This section aims to situate this slowdown in the global context and shed more light on its origins. It investigates developments in export and manufacturing sectors in the euro area, with a particular focus on the automotive sector in Germany and related spillovers.

Momentum in the world economy weakened visibly...

Industrial activity and exports in the euro area weakened sharply in the beginning of 2018 and have been slowing since then (see Graph I.3). Over the course of the year, economic momentum weakened visibly in other parts of the world, in both advanced and emerging economies, which culminated in a sharp contraction in global manufacturing and trade towards the end of 2018 and in early 2019.

Given the decoupling of growth momentum, countries with large manufacturing sectors have been affected the most by the ongoing slowdown, which also produced a significant negative carryover for activity in 2019. Indeed, Graph I.5 indicates a negative relationship between the share of various possible explanations for this weakness have been identified. Recent analyses by the IMF and the ECB confirm a negative impact of rising protectionism on the global economy, with the ECB providing evidence of sharper slowing in sectors affected by extensive discriminatory measures. The tightening of global financing conditions over the course of 2018 and the ensuing turbulence in several emerging markets, weighed on investment, activity and trade. Moreover, the slow-down in the Chinese economy towards the end of the year, interacted with trade disputes with the US, leading to weaker confidence, investment, and demand for capital goods. Additionally, the turn of the ‘tech cycle’ depressed trade in Asia. Finally, disruptions related to new car emission standards and rising uncertainty in a number of countries weighted on momentum in Europe.

...with a soft patch in manufacturing output...

At the same time, a clear dichotomy can be found between developments in industrial production and activity in service sectors. While manufacturing has been at the centre of the recent soft patch, services have held up relatively well overall, with surveys (i.e. PMIs) remaining firmly in the expansionary area. This has been the case both at a global level as well as in the euro area, where manufacturing entered contractionary territory in early 2019, whereas growth in the services sector has remained robust (see Graph I.4).

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of manufacturing in total gross value added and the magnitude of revisions to the 2019 growth outlook since the Autumn forecast. This relationship is particularly strong in the euro area (blue dots), where the sharpest downward revisions concern countries with above-average manufacturing sectors (namely DE, IT and IE). On the other hand, it seems to be much weaker for CEE countries (violet dots) \(^{(4)}\), in particular those outside the euro area, where there is tentative evidence that the hit to growth related to their large exposure to manufacturing has so far been offset by the positive effect of the inflow of structural funds (see Box I.3).

While the slump in the automotive sector in the second half of 2018 caught most of the attention, the weakness in manufacturing started already at the beginning of last year and was more broad-based in nature. The sharp drop in manufacturing output in the first quarter of 2018 can be largely traced back to a fall in the manufacturing of computer, electronic and optical products, and to a smaller extent to the contraction in the output of chemicals and motor vehicles (see Graph I.6). In the second half of the year, however, the decline in the production of motor vehicles played a key role (particularly in the third quarter), together with the renewed weakness in computers and chemicals and a slump in the production of pharmaceuticals (in the last months of the year).

\(^{(4)}\) Removing non-euro-area CEE countries raises \(R^2\) of the regression to 0.19 (from 0.09 in case of the sample comprising all EU countries)

The drop in industrial output coincided with declines in capacity utilisation across most industrial groupings, and which extended into early 2019, confirming the broad-based character of the slowdown in manufacturing. (see Graph I.7).

...and euro area exports weakened across the board...

The euro area exports to countries outside the area took a severe hit in the first half of 2018, and have remained broadly flat since, rising by a mere 1.7% for the year as a whole (compared to 4.3% in 2017). The early-2018 weakness reflected a sharp contraction in demand from all major trading partners except the US, but was particularly severe in the case of China, the UK and Turkey. Demand in China contracted again towards the end of the year, reflecting a sharper slowing of the Chinese economy.
The product breakdown also confirms the broad-based nature of the export slump in early-2018, as all major manufacturing groupings posted sharp declines. While most of them recovered during the remainder of the year and in early 2019, machinery and transport equipment recorded another sharp contraction in the third quarter, reflecting supply-side bottlenecks (discussed below), and have remained very weak since then.

As the biggest producer and exporter of manufactured goods in the EU, with high cross-border integration of production chains, Germany has a key role in driving both European production and exports. A look at the decomposition of German exports by means of an error-correction model (see Graph I.10) indicates that the sharp deceleration in growth over the course of 2018 (for y-o-y growth) reflected the weakening in both domestic and foreign demand. First, demand for German goods from the EU came to a halt in the third quarter. This might reflect not only demand weakness but also the introduction of new emission test procedures in the automotive sector (discussed later on in more detail). Following the EU demand weakness in the third quarter, demand for German goods from outside of the EU fell sharply in the last quarter of 2018. Finally, it is worth highlighting that a significant part of the contraction in the second half of 2018 cannot be explained by either demand or real effective exchange rate changes. This suggests that supply constraints or product specialisation might also have played a role. This calls for a closer look at the automotive sector, one of the main drivers of the German manufacturing industry, and a sector which went through well-documented supply problems during the second half of the year.

...amid a slump in the automotive sector.

The slump in the automotive sector deserves special attention not only because of its direct role in depressing euro area manufacturing output in 2018, but also due to its potential for spillovers given the highly complex, cross-border and cross-industry supply chains of the car industry.

Following carmakers’ difficulties with the introduction of a new emission testing procedure, the production of motor vehicles in the euro area fell sharply (-6.5% q-o-q) in the third quarter. The rebound in the fourth quarter was milder than previously expected, with output increasing only slightly by 0.7% q-o-q. Preliminary data for the first two months of 2019 are not encouraging either, suggesting that production and exports remained weak. This soft patch was particularly pronounced in Germany and Italy, but output also contracted in Spain and France.

In Germany both output and exports of passenger cars contracted by around 17% q-o-q, in volume...
The slump in the automotive sector had a severe impact on the German economy, reflecting the size of the sector and its complex network of supply chain linkages. The direct share of the manufacturing of motor vehicles, trailers and semi-trailers (NACE division 29) in Germany’s gross value added (GVA) was about 4.7% in 2017, more than twice the euro area average (of 1.9%); to which intense cross-sector and cross-country linkages have to be added. Furthermore, motor vehicles and vehicle parts are Germany’s most important export product, accounting for close to one-fifth of the country’s exports.

Several factors have coincided to cause this weakness. First, as mentioned above, supply-side factors seem to have played a key role in the third quarter, as the new emission test procedures caused delivery delays and supply disruptions. However, demand for German cars, both domestic and from within and outside the EU has been weakening as well, further depressing sales and exports. In order to interpret recent developments in the sector and make near-term predictions, one first has to disentangle the (supposedly short-lived) supply factors and the (possibly more persistent) drivers of lower demand.

**Supply-side problems have dominated since mid-2018...**

The most easily identifiable factor that depressed car production in 2018 was the introduction of the new Worldwide Harmonised Light Vehicles Test Procedure (WLTP) on 1 September. Delays in obtaining certificates of compliance with these new standards led firms to suspend the production of a number of car models causing heavy disruption to both delivery and sales. Moreover, some producers decided not to request WLTP approval for selected models that were at the end of their life cycle, thus effectively ceasing production until the introduction of new models.

While the effect of the WLTP-related disruption seems to be wearing off, more than half a year later, the level of car production and exports remains depressed. (see Graph I.11). Other new factors are likely to have played a role, among them the strike at the Hungarian Audi factory that disrupted production in the home plant in Germany. Moreover, a number of market experts have signalled companies’ concerns about the next stages of the WLTP regime, which include changes to the mandatory evaporation test. (5)

Reflecting this, the German car sector reported a noticeable increase in the percentage of firms indicating supply factors as limiting production, particularly equipment (European Commission Business and Consumer Survey). This, however, peaked in the third quarter of 2018 and has edged somewhat lower since. Simultaneously, demand factors have also been growing in importance as a headwind to further increases in production. (see Graph I.12)

(5) Nevertheless, firms are expected to show a higher level of preparedness compared to the disruptions seen in 2018, which should moderate the negative effects of the re-certification process to some extent. See IHS Markit (2019). ‘West European Sales Preview’. March.
… amid subdued global demand…

Global demand for cars has been subdued in recent years with a host of idiosyncratic, country-specific and often temporary developments interacting with medium-to-long term secular trends likely to shape the car market for years to come.

After several years of buoyant demand growth, the German automotive industry faced broadly stagnant demand between late 2016 until mid-2018, followed by a collapse in the second half of 2018 (see Graph I.13). These developments mask important divergences in intra- and extra-EU car registrations. While the former had been steadily rising since 2013, driven by increasing incomes, sentiment and pent up demand from the euro area’s sovereign debt crisis; the latter have been declining gradually from an all-time peak in 2015. The mid-2018 collapse in euro-area registrations (preceded by the intense “frontloading” ahead of the WLTP tests) exacerbated the long-standing downward trend in non-EU registrations, resulting in the sharpest contraction in total demand since 2008.

Since then, the continued weakness in automotive industry orders can, to some extent, still be linked to the impact of WLTP, with customers waiting for certifications before acquiring a specific vehicle of choice. (7) Cyclical forces could also be at play, with car registrations increasing for five years in a row, including in 2018 and hovering close to pre-crisis levels.

On the external side, the decline in non-EU demand for German cars observed in 2018 appears to reflect several idiosyncratic and largely country-specific factors. Outside the euro area, car exports to the UK have been weak throughout 2018, partly reflecting the Brexit-related uncertainty (see Graph I.14). Exports to China held up relatively well in the first three quarters of 2018 (8) but fell sharply towards the end of 2018 as the Chinese economy slowed more than expected. Likewise, following relatively stable growth in the first three quarters of the year, car exports to the US contracted towards the end of the year. Finally, a near-collapse in exports to crisis-stricken Turkey and other highly distressed economies further exacerbated the contraction in extra-euro-area demand for German cars.

… with powerful structural forces at play…

The long-standing downward trend in demand for auto vehicles from non-EU countries (Graph I.13) highlights the role of structural and global forces shaping the outlook for the industry. While these were certainly present in the EU data as well, up until recently they appear to have been outweighed by the robust economic momentum in the EU.

These structural forces reflect changes in regulation, technology and consumer preferences. One of the strongest among them appears to be the ongoing shift in consumer preferences away from cars reliant on certain types of fuel technologies (e.g. diesel); (9) but also away from technologies using all fossil fuels - and towards e.g. electric propulsion. Diesel cars, the speciality of the

(6) Demand has been proxied by the composite indicator of passenger car registrations from 22 EU Member States and 12 non-EU countries, covering about 80% of German export markets of motor cars and other motor vehicles.


(8) Reflecting the unilateral decision by China to reduce tariffs on car and car parts from 1 July 2018.

European and German car industry have seen demand go down significantly since the ‘Dieselgate’ in 2015 and in view of existing and potential driving bans in an ever increasing number of European city centres (Graph I.15). Furthermore, increasing ecological awareness and rising costs associated with owning a car (largely policy-induced) have contributed to the popularity of alternative transport modes. This includes traditional public transport, car-sharing platforms, but also rapidly new and expanding modes of city mobility, such as city bicycles and electric scooters. All these factors jointly have grown in importance over the course of recent years and now act as systemic drags on car demand.

From suppliers of intermediate inputs across the supply chain.

As an example, the production of cars involves a number of players, handling the sale, maintenance and repair of motor vehicles, parts and accessories, sale of fuel, renting and leasing. The more a production process makes use of intermediate inputs, and the use is both rich in value added and poor in imports, the higher the expected multiplier will be. Any shock impacting the industry can thus result in sizeable indirect effects that amplify the initial shock.

In particular, the decline in German car production has direct and indirect impact on many manufacturing sectors, not only in Germany. Under the assumption that the structure of value chains remained similar to what they were in 2015, the inter-country input-output tables (ICIO, released by the OECD) allow us to estimate the direct and indirect GDP impact of the 8% (q-o-q) contraction in output of the German automotive sector (see Graph I.16).

... and spill-overs to the broader economy.

Changes in production in the automotive industry have an economic impact that extends far beyond this sector’s share in value added. Looking at the main economic sectors, the sector of industry including the car industry generated the biggest output multiplier on the EU economy in 2017. Given the extensive value chain integration of the sector, the mechanical impact of falling production on industrial output needs to be complemented with the spill-over effects on other sectors of the economy.

Accordingly, one should distinguish between the (i) direct effect, as an increase (or decrease) in final demand for cars leads to an increase (or decrease) in output in this sector, as producers react to meet additional (or reduced) demand; and the (ii) indirect effect, as an increase (or decrease) in output creates additional (or lower) demand from suppliers of intermediate inputs across the supply chain.

Due to the high share of the automotive sector in total value added in Germany, the decline in automotive output observed in 2018-Q3 leads mechanically to a (direct) loss of more than 0.4pps. of GDP in Germany. Taking into account the first round effect, i.e. the decrease in output faced by the direct suppliers of the German automotive sector, the impact amounts to 0.5pps. of GDP in Germany, and between 0.05pps. and 0.1pps. of GDP in other Member States.

Note: The impact refers to the GDP loss in each Member State as a result of the shock to the automotive sector output.

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(12) The contraction in the entire automotive sector (NACE grouping C29) was milder than for the sub-grouping passenger cars (-16.6% q-o-q)
GDP in Hungary, Czechia and Slovakia. Including the spill-overs to the whole value chain, the impact on GDP is significant in several countries. In Germany, GDP would have been 0.6% higher without such a fall in the automotive sector; 0.2% higher in Czechia, Hungary and Slovakia; 0.1% higher in Slovenia; and between 0.05% and 0.1% higher in Austria, Poland and Romania. For all other countries, the impact is estimated to be below 0.05 pps. of GDP.

Focussing on output sector by sector, the spillovers to the other countries affected primarily the automotive sector, and not only in the EU (see Graph I.17). Among the countries where the output of the automotive sector lost more than 0.5% due to the fall in Germany in 2018-Q3, Switzerland was most affected (~1.3%), followed by Austria (~1.2%), Czechia and Hungary (~1.1%) and Slovenia (~1.0%). The automotive sector was also impacted, to a lesser extent, in Finland, Poland, Denmark and Romania.

What is the outlook for the car industry?

The automotive industry is in the midst of a major transformation, led by alternative power sources, autonomous vehicles, car sharing and connected cars. On the supply side, tighter post-2020 CO2 emission standards may put constraints on the production shares of different fuel technologies, which may or may not match well the trends in demand.

In the near term trade tensions as well as a no-deal Brexit pose significant downside risks to the outlook for the industry. Recent research adds further to the body of evidence on the impact of trade restrictions on exports and overall economic activity, which are not expected to be mitigated by indirect trade diversion effects. On the upside, with the average vehicle age increasing since 2000, particularly for passenger cars and light commercial vehicles, some pent up demand for new cars in Europe can still be expected.

Naturally, suppliers to the automotive sector were also affected, although to a lesser extent (see Graph I.18). In Germany, three sectors were significantly affected: fabricated metal products, rubber and plastic products, and basic metals. Abroad, the only significantly affected sector (excluding the automotive sector, presented above) is the rubber and plastic products sector in Czechia, which is one of the main suppliers of the German automotive industry.


See European Automobile Manufacturers Association (ACEA) and European Environment Agency (EEA) statistics on average vehicle age. According to the later, the share of cars aged 10 years or over is increasing across Europe’s fleet, as consumers show a higher tendency to hold on to their vehicles for longer, despite marked differences in age across Member States. Diesel passenger
All these developments suggest significant adjustments ahead, with potential costs in terms of jobs and skill-upgrades as well as the need to overhaul infrastructure. In this context, European manufacturers are facing considerable adaptation challenges over the near-to-medium term. Nevertheless they will continue to benefit from a large and deeply integrated internal market, significant R&D spending and an extensive network of suppliers from which to leverage know-how and experience.

**Fading external drivers of euro area growth**

All in all, the extent to which external headwinds and the fall in manufacturing output weighed on euro area output has been a recurring question. Disentangling the role of supply and demand factors remains a challenge (17). A model-based decomposition (18) of euro area growth offers some relevant insights about the relative importance of various factors.

The results underscore the exceptional conjuncture in 2017, when euro area growth benefited from a particularly supportive external environment, including robust world demand and trade. This external exuberance is estimated to have fuelled above-trend growth by as much as half a percentage point, which more than outweighed the negative impact of the euro’s exchange rate appreciation. The turn of the manufacturing and trade cycle in 2018, and the ensuing waning of external support implied a sharp downgrade in growth performance. As a result, global demand and trade shocks had a negative impact on euro area quarterly growth.

![Graph I.19: Growth drivers in the euro area](image)

**Implications for the forecast.**

Given the nature of drags on activity in 2018 and early 2019, developments in trade and in the manufacturing sector are key for assessing the euro area economic outlook. First, the global economy is expected to bottom out over the course of this year and global trade growth outside the EU is expected to strengthen in 2020 (see section I.2). Even if the rebound in trade is expected to be much more modest compared to conditions in 2017, the impulse from external demand could provide a much needed boost to euro area manufacturing in the remainder of the forecast horizon.

In addition, given that much of the disruption in the automotive sector in 2018 appears to have been caused by the introduction of the new emission standards, the situation is expected to normalise gradually over the course of 2019. Moreover, there are reasons to expect demand to recover somewhat from depressed 2018 levels among the biggest importers of European cars, e.g. China (thanks to specific stimulus measures aimed at boosting car sales) and Turkey. That said, the more medium term drags on car demand – both policy-induced and related to shifts in consumer preferences – are set to become increasingly more binding. This is bound to limit the scale of the recovery in the auto sector, and – given extended spill-overs to other parts of the economy – will be an important factor moderating the outlook for the euro area economy over the medium term.

All in all, factors weighing on manufacturing last year are expected to reverse (global momentum) or ease somewhat (automotive sector), giving way to a moderate firming of growth in the euro area over the forecast horizon.

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19. Graph 19 displays the model-based decomposition of the average quarterly real GDP growth in 2017 and 2018. The red diamond shows actual GDP growth, the coloured bars show the contribution of the different groupings to deviations of quarterly GDP growth from its long-run trend (0.34%), i.e. the horizontal axis. The sum of positive and negative contributions matches the data (red diamond).
2. EXTERNAL ENVIRONMENT

Global economic activity slowed sharply towards the end of 2018 and the beginning of 2019, amidst a downturn in global manufacturing and trade (concentrated in particular in the euro area, China and the EU’s neighbouring countries). This was compounded by temporary headwinds in the US linked to the partial government shutdown and a sharp tightening of financing conditions both of which weighted on domestic demand in the beginning of the year. As a result, the slowdown in global economic activity around the turn of the year was deeper than previously forecast, weighing considerably on annual growth rates for 2019.

The global economy is currently characterised by increasing divergence and there are idiosyncrasies across countries and regions. Activity in major advanced economies, including the US in particular, is expected to moderate toward potential over the forecast horizon amid waning policy support and following a period of above-potential growth. China’s secular trend of gradually slowing growth is set to continue, as the economy transitions towards a more sustainable growth model and the drag from deleveraging in the corporate sector as well as the impact of trade tensions are partially offset by the latest round of new policy stimulus. Growth prospects in other emerging markets vary considerably, depending on their particular domestic vulnerabilities and susceptibility to external shocks (including capital flows and commodity prices). Overall, emerging markets should benefit from more favourable global financing conditions than previously expected. A rebound, especially in recently distressed economies, is expected to contribute to a moderate pick-up in growth across in emerging markets over 2019-2020.

However, the global economy is expected to bottom out over the course of this year as temporary headwinds wane in some countries and new policy support in China contributes to a stabilisation of economic activity.

Global growth is projected to recover from the weakness at the turn of the year...

Global growth eased to 0.8% q-o-q in both the third and fourth quarter of 2018 (from 0.9% in the first and second) mainly due to weaker-than-expected activity in some advanced economies (euro area, Japan and the US) and China. In the rest of the world, activity held up well, but with notable differences. Growth momentum in emerging Asia (excluding China) continued to be stronger than in any other region despite a less favourable export environment. At the same time, real GDP growth remained weak in Latin America and South Africa, reflecting domestic economic and political headwinds. Economic growth in the oil exporting countries of the Middle East was weaker than expected in the last quarter of 2018, mainly due to the sharp drop in oil prices that quarter.

A key factor behind the global economic slowdown was the particularly sharp decline in manufacturing and foreign trade in the fourth quarter of 2018 that continued in early 2019. Between November 2018 and March 2019 (latest available data), the Global Manufacturing Purchasing Managers’ Index (PMI) has been falling to levels last seen in 2016, dragged down by declining output growth and a slump in new orders. The decline in trade and manufacturing affected many countries, but was particularly concentrated in the euro area and China. Outside the euro area, it can be associated with weaker demand for capital goods, slower growth in China, due to a sharper-than-expected impact of deleveraging efforts, and a turn of the tech cycle in Asia. The more limited weakening in underlying economic activity in the US appears linked to internal factors, such as the partial government shutdown, sell-off in equity markets and weather effects. So far, the slump in manufacturing activity has had little impact on

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services, as the captured by the Global Services PMI (Graph I.20).

Overall, global GDP growth (excluding the EU) is expected to slow from 3.9% in 2018 to 3.6% in 2019, which is partly due to the lower carry-over from 2018 that resulted from slowing growth in the fourth quarter of last year. Over the course of 2019, a number of factors should help the global economy bottom out. Following the sharp tightening of financing conditions in the second half of 2018, the reappraisal of monetary policy by major central banks and the move towards a more accommodative monetary policy stance is expected to support a rebound in growth rates, especially across emerging market economies. In addition, significant policy stimulus has been deployed in China, which should help to stabilise activity in the country, while also supporting activity in Asia. Furthermore, it is assumed that prospects for at least a temporary solution of US-China trade tensions have improved.

In 2020, the global economy (excluding the EU) is forecast to return to a slightly higher growth path, with annual GDP growth of 3.8%, which is in line with previous forecasts (Graph I.21). The uptick in global growth is projected to come from a slight rebound in activity in emerging markets, whereas economic growth in other parts of the global economy (US, Japan and China) is set to slow gradually.

...despite an expected moderation of growth in advanced economies...

In 2018, economic activity in advanced economies (excluding the EU) was marginally weaker than expected in the autumn. While economic growth in the US remained solid on the back of strong labour market conditions and a large pro-cyclical fiscal stimulus, the pace of economic growth varied a lot from one quarter to the other, including two quarters of contraction (triggered in part by a series of natural disasters). In the short run, the economic outlook for advanced economies has somewhat weakened in view of the temporary headwinds to US demand in the beginning of the year and the slower than expected growth momentum in Japan carrying over into 2019.
In the US, real GDP growth is expected to moderate toward potential in 2019 and 2020. In 2019, economic activity is set to weaken but to grow above potential at 2.4%, underpinned by a number of factors including a strong labour market; some continuing boost from fiscal stimulus; favourable financing conditions reflecting a more accommodative monetary policy stance by the Fed; and receding trade tensions, assuming progress in trade negotiations. Negotiations between the US and China have been extended, as no resolution had been reached by the initial deadline in March and the truce on initially planned additional US measures has been extended without a new deadline. Accordingly, the spring forecast no longer assumes that the US will increase tariff rates from 10% to 25% on USD 200bn worth of imports from China. Nevertheless, the forecast for the US implies a marginal downward revision to GDP growth in 2019 (-0.2 pps.) compared to the autumn forecast, mainly due to the temporary factors weighing on domestic demand at the turn of 2018-2019. In 2020, the pace of US growth is expected to continue moderating to around potential (just below 2%) as macroeconomic policies become broadly neutral.

In Japan, the pace of economic growth should remain stable at around 0.8% in 2019 reflecting a gradual recovery in global economic activity over the year and accommodative monetary policy. Fiscal offsetting measures should smoothen the growth impact of consumption tax hike planned for October 2019. In 2020, the pace of expansion is expected to slow to 0.6% as domestic demand weakens in the wake of fiscal consolidation.

...due to the continued expansion in emerging market economies.

In 2018, emerging markets registered solid real GDP growth of 4.6%, unchanged from 2017. However, the headline figure masks considerable divergence. In the second half of the year many emerging markets came under market pressure as rising interest rates in the US, a strengthening US dollar and increasing trade tensions, combined with country-specific domestic vulnerabilities triggered capital outflows. The highest pressures were observed in Argentina and Turkey, which both faced financial market turmoil and were pushed into recession. China’s economic slowdown also intensified in the second half of 2018, as two years of financial deleveraging, a tight fiscal policy stance in the first half of the year, and, importantly, trade tensions with the US and softening global demand, all took their toll.

Real GDP growth in emerging markets is expected to edge down to 4.5% in 2019, as weaker growth momentum in some of the recently stressed emerging market economies carries over into the first half of 2019. However, economic activity is expected to find support from expansionary fiscal policies in several major economies (China, Russia, and India) and more favourable financial conditions, thanks to the slower pace of monetary tightening in the US now expected. Furthermore, on the basis of the revised assumptions on trade policy measures (see above), activity in China should benefit from lower trade tensions with the US. In 2020, growth in emerging market economies is projected to pick up slightly to 4.7% against the backdrop of a rebound in a number of particularly distressed countries. Countries like Argentina are expected to benefit from financial stabilisation and policy reforms after experiencing financial turmoil in 2018. In other countries, like Brazil and South Africa, a cyclical rebound together with reduced political uncertainty is set to lift growth.

In recent months, more favourable global financial conditions relieved pressures on most emerging market currencies, while sovereign yields fell. Portfolio capital flows into emerging market economies (Emerging Asia in particular) recovered, driven by the reappraisal of the monetary policy-tightening path in the US (Graph I.22). Financing conditions are expected to remain on average supportive for growth, though differences between regions will rise, as global investors continue to differentiate between markets.

In the US, real GDP growth is expected to moderate toward potential in 2019 and 2020. In 2019, economic activity is set to weaken but to grow above potential at 2.4%, underpinned by a number of factors including a strong labour market; some continuing boost from fiscal stimulus; favourable financing conditions reflecting a more accommodative monetary policy stance by the Fed; and receding trade tensions, assuming progress in trade negotiations. Negotiations between the US and China have been extended, as no resolution had been reached by the initial deadline in March and the truce on initially planned additional US measures has been extended without a new deadline. Accordingly, the spring forecast no longer assumes that the US will increase tariff rates from 10% to 25% on USD 200bn worth of imports from China. Nevertheless, the forecast for the US implies a marginal downward revision to GDP growth in 2019 (-0.2 pps.) compared to the autumn forecast, mainly due to the temporary factors weighing on domestic demand at the turn of 2018-2019. In 2020, the pace of US growth is expected to continue moderating to around potential (just below 2%) as macroeconomic policies become broadly neutral.

In Japan, the pace of economic growth should remain stable at around 0.8% in 2019 reflecting a gradual recovery in global economic activity over the year and accommodative monetary policy. Fiscal offsetting measures should smoothen the growth impact of consumption tax hike planned for October 2019. In 2020, the pace of expansion is expected to slow to 0.6% as domestic demand weakens in the wake of fiscal consolidation.

...due to the continued expansion in emerging market economies.

In 2018, emerging markets registered solid real GDP growth of 4.6%, unchanged from 2017. However, the headline figure masks considerable divergence. In the second half of the year many emerging markets came under market pressure as rising interest rates in the US, a strengthening US dollar and increasing trade tensions, combined with country-specific domestic vulnerabilities triggered capital outflows. The highest pressures were observed in Argentina and Turkey, which both faced financial market turmoil and were pushed into recession. China’s economic slowdown also intensified in the second half of 2018, as two years of financial deleveraging, a tight fiscal policy stance in the first half of the year, and, importantly, trade tensions with the US and softening global demand, all took their toll.

Real GDP growth in emerging markets is expected to edge down to 4.5% in 2019, as weaker growth momentum in some of the recently stressed emerging market economies carries over into the first half of 2019. However, economic activity is expected to find support from expansionary fiscal policies in several major economies (China, Russia, and India) and more favourable financial conditions, thanks to the slower pace of monetary tightening in the US now expected. Furthermore, on the basis of the revised assumptions on trade policy measures (see above), activity in China should benefit from lower trade tensions with the US. In 2020, growth in emerging market economies is projected to pick up slightly to 4.7% against the backdrop of a rebound in a number of particularly distressed countries. Countries like Argentina are expected to benefit from financial stabilisation and policy reforms after experiencing financial turmoil in 2018. In other countries, like Brazil and South Africa, a cyclical rebound together with reduced political uncertainty is set to lift growth.

In recent months, more favourable global financial conditions relieved pressures on most emerging market currencies, while sovereign yields fell. Portfolio capital flows into emerging market economies (Emerging Asia in particular) recovered, driven by the reappraisal of the monetary policy-tightening path in the US (Graph I.22). Financing conditions are expected to remain on average supportive for growth, though differences between regions will rise, as global investors continue to differentiate between markets.
Global trade is set to slow further in the near term…

Global trade growth (excluding EU) slowed from 5.4% in 2017 to 4.6% in 2018, but was still faster than the average rate between 2012 and 2016 and slightly faster than expected in the autumn. However, trade flows fell abruptly in the last quarter of 2018, after emerging markets recorded a slump in imports (Graph I.23). Imports plunged during the last two months of the year in China at a speed not seen since the Great Recession. This weighed on the region’s economic activity, leading to a trade contraction in the rest of emerging Asia. Trade in advanced economies, by contrast, expanded in the fourth quarter, albeit at a subdued pace, mainly due to robust import demand in the US and Japan.

…before rebounding later in 2019 and expanding in 2020.

In 2019, world import growth outside the EU (Graph I.24) is expected to slow down sharply to 3.0% (-0.9 pps. compared to the autumn forecast). The revision reflects a large negative carry-over from the weak fourth quarter in 2018 as well as signals from a number of leading indicators suggesting that the weakness in global trade continued in the first quarter of 2019. However, global growth momentum is set to bottom out over the course of this year, amid reduced US-China trade tensions and sizeable policy stimulus in China, global trade growth should stabilise. In 2020, import growth outside the EU is expected to strengthen modestly to 3.6% (roughly on par with the autumn forecast), largely driven by strengthening economic activity in emerging markets.

The elasticity of non-EU imports with respect to GDP rose sharply to 1.4 in 2017 from the exceptional compression in 2015-2016, and decreased only slightly in 2018 (see graph I.25). The higher import elasticities observed in the period 2017-2018 are a reflection of the strong rebound in investment, the most trade-intensive component of GDP, after years of weak global capital spending. However, the carryover effect from the weak end of 2018, sluggish global manufacturing and investment as well as lingering trade tensions are set to bring down the trade elasticity to 0.8 in the current year. In 2020, import elasticity is expected to slightly rebound but is unlikely to return to 2017-2018 levels, due to the ongoing rebalancing from investment to consumption in China, the waning effects of policy stimulus in the US (and China) on investment, and due to the structural shift towards services in the global economy.
Supply-side developments becoming more important for oil prices

Oil prices had fallen to just over 50 USD/bbl at the end of 2018 from a peak of around 85 USD/bbl in October 2018 amid surging crude output from the US, Saudi Arabia and Russia, the implementation of US waivers for importers of Iranian crude, and diminishing expectations about the strength of global economic growth. This downward pressure on oil prices eased in early 2019 as OPEC cut production again, the US introduced sanctions on Venezuela, and Canada partially suspended production to drain high stockpiles of oil. Still, less optimistic expectations about the strength of the global economy dampened the impact of supply cuts. In April 2019, the US announced that it would stop granting waivers to importers of Iranian oil, creating additional supply side pressures and pushing Brent prices to about 75 USD/bbl.

Over the forecast horizon, upward price pressures from increasing constraints on the supply of heavy crude (from Venezuela and Iran) are expected to be held down by the recovery of oil production in Canada and, towards the end of 2019, the expansion of US shale exports. Substantial uncertainties around this scenario relate to the medium-term effectiveness of the OPEC cuts, the volatility of Iranian, Libyan and Venezuelan production, as well as the evolution of oil demand from China. Brent prices are assumed to average 69.2 USD/bbl in 2019 and 67.8 USD/bbl in 2020, which implies a downward revision from the autumn forecast of about 14% for 2019 and 12% for 2020 in US dollar terms and by about 12% and 10% in euro terms, respectively (Graph I.26). As these assumptions are based on developments in futures prices during a base period, the impact of the recent US measures against Iran’s oil exports is only partially captured, which increases upside risks to the oil price assumption.

The prices of other commodities are set to stabilise over the forecast horizon. After a strong start to 2018, prices of metals have declined, reaching their lowest levels in sixteen months at the end of 2018 because of rising trade concerns and a softer outlook for growth in China. They have since rebounded, driven by expectations of fiscal stimulus in China and some supply disruptions (e.g. Brazilian iron ore, Chinese zinc). Overall, metal prices increased by 6% in 2018 and are assumed to remain roughly stable in 2019 and 2020.

Downside risks to the global outlook remain elevated

Some of the risks that had in autumn be associated with policy decisions that could endanger growth projections have eased. In the US, the risk of an abrupt tightening of fiscal policy in 2020 (in the absence of a Congressional agreement on spending levels) is likely to have diminished following the negative impact of the recent government shutdown. Furthermore, the near-term risk that the US economy might overheat and trigger a sharp tightening of monetary policy, appears to have diminished. Following this year’s reappraisal of US monetary policy by the Federal Reserve and the ensuing easing of financing conditions, risks related to high debt exposures in emerging markets have also eased somewhat, but concerns about financial vulnerabilities related to high debt and leverage in many of these countries remain meaningful.

US-China trade tensions are assumed to be receding, at least temporarily and in the near term, but uncertainty around US trade policy remains prominent and a major source of uncertainty. It continues to weigh on market sentiment and further moves toward trade protectionism remain a relevant risk that threatens to disrupt global value chains, slow global growth and undermine the multilateral trading system.

Downside risks to the global outlook remain interconnected and the potential materialisation of any risk factor could lead to deterioration of financial market sentiment at a time when valuations appear stretched in many asset classes and leverage in the financial and non-financial
system remains elevated. This could result in a rapid tightening of global financial conditions, with knock-on effects for some emerging markets.

Downside risks beyond the near term also remain prominent in China and the US. The current stimulus measures in China could exacerbate financial risks and increase leverage more than currently projected, thereby amplifying the risk of a sharper economic adjustment in the future. In addition, the apparent policy shift towards more reinforced state and party capitalism could ultimately weigh on China’s path of economic catching-up. Furthermore, in the medium-term, reduced fiscal policy space and elevated leverage in the corporate sector in the US, could lead to a deeper or more prolonged downturn once the cycle eventually turns.

3. FINANCIAL MARKETS

Deteriorated macroeconomic conditions and mounting risks led to a sharp reassessment of risk premia towards the end of 2018. This translated mainly into a flight to safety with falling equity prices, widening corporate bond spreads and declining sovereign bond yields. A reappraisal of monetary policy by major central banks helped to reverse this trend early this year. Sovereign yields have since continued to fall as investors no longer expected a near-term hike in US interest rates and accommodative monetary policy in the euro area is now expected to continue for longer. These expectations have led to a moderate depreciation of the euro and given a boost to global risk appetite, helping to spur a rally in equity markets.

As major central banks have reassessed their monetary policy ...

The US Federal Reserve has reassessed its monetary policy stance since the beginning of this year. After hiking its target range for the federal funds rate four times in 2018, the Federal Open Market Committee (FOMC) has this year repeatedly signalled its intention to be more patient in considering further adjustments. At its monetary policy meeting in March 2019, the FOMC indicated that no further rate hikes would be required in 2019. In addition, it announced that the unwinding of the Federal Reserve’s balance sheet would stop at the end of September 2019 and that the pace of its balance sheet reduction would be slowed in the interim.

...the euro has weakened since the beginning of this year...

The euro has weakened by about 2% in nominal effective terms since the beginning of this year. This has happened against a background of weaker-than-expected growth in the euro area and the subsequent downward adjustment of market expectations about the ECB’s monetary policy. The euro’s depreciation has been rather broad-based: emerging economies’ currencies generally appreciated against the euro, supported by vanishing expectations of further US monetary policy tightening, while rising concerns about the growth outlook in the euro area weighed on the euro against other major currencies.
... and financial markets turned from gloom to optimism.

There has been considerable market volatility globally and in the EU over the last couple of months. Share prices, which fell significantly in December 2018, bounced back in the first months of 2019. Sovereign bond yields have been declining across the board since autumn 2018, reflecting deteriorated macroeconomic conditions and the more accommodative monetary policy stance adopted by the main central banks early this year. The decline in yields is evident in the German 10-year sovereign bond yield, which turned negative at the end of March 2019, adding to the total notional amount of global negative yielding debt, which exceed USD 10tn for the first time since September 2017.

10-year sovereign interest rates in the US stood at 2.4% in April this year, i.e. close to the levels observed in January 2018, after having reached just over 3% in the second half of 2018 (Graph I.27). The development of 10-year sovereign yields in the UK has been similar, and now hover around 1.0%, down from around 1.7% in October.

In March 2019, the spread between Italian and German 10-year sovereign bonds fell below 250 basis points and remained close to that level in April, significantly below the 320 basis points seen on several occasions in autumn 2018 (Graph I.28). This suggests that market participants have become more sanguine about Italy’s budget issues. Investor demand for Italian bonds has been strong lately, as suggested by a series of significantly oversubscribed auctions. Contagion to other Member States has been consistently limited and temporary. The spread between Spain’s 10-year sovereign bonds and German bunds has remained around 110 basis points since the start of 2018.

Risk premia for euro area corporate bonds rose slightly in 2018 from very low levels in 2017. 5-year BBB-rated corporate bonds displayed a 130 basis point spread in December 2018, a rise of about 50 basis points over 12 months (Graph I.29). Since January 2019, credit spreads have narrowed in line with the receding risk aversion observed in all market segments with 5-year BBB corporate bond spreads falling to just under 100 basis points in mid-April. Euro area high-yield corporate bond spreads have behaved similarly, falling from 500 basis points in December to around 390 basis points in April.

Similarly, Ireland and Portugal’s sovereign spreads and, to some extent Greece’s, have reacted little to conditions specific to the Italian market.

Global stock markets fell significantly and experienced high volatility in December 2018 but have since recovered all their losses (Graph I.30). Over the past months the performance of European stock indices such as the EuropeStoxx 600 (excluding dividends) has been relatively subdued compared US indices such as the S&P 500. The performance of Asian equity indices has been more mixed. While the Nikkei 225 has been roughly flat, the Stoxx Asia Pacific 600 has risen and Hong Kong’s Hang Seng has declined. Within the EuropeStoxx 600 index, banks were the worst performing sector. This was mainly due to investor concerns about the banking sector’s ability to raise profitability to sustainable levels (see Box I.2).

Bank funding to the real economy remained almost steady in the euro area...

Net lending flows to households and corporates in the euro area have remained positive. The annual growth rate of loans to the private sector (adjusted for loan sales and securitisation) increased to 3.2% in February 2019 from 3.0% the previous month. Among the borrowing sectors, the annual growth rate of loans to households stood at 3.3% in February, compared with 3.2% the month before; while the annual growth rate of loans to corporates rose to 3.7%, from 3.4% in January.

The annual growth rates of loans to corporates have diverged across countries since autumn last year (Graph I.31), staying above 6% in France and Germany, while decreasing in Italy and Portugal and turning negative in Spain, where loan repayments outweighed new loans. This sheds light not only on the demand for loans but also on the situation of banks and their lending activity in these countries.

Interest rates on loans to non-financial corporates in the euro area also have been rather stable, with a slight downward trend in 2018 and early 2019. Interest rates are around 1.5% or lower in Italy, France and Germany, while interest rates in Portugal are close to 2.5%. The low and stable level of interest rates in Italy and Spain combined with falling lending volumes since last autumn suggests declining demand and/or tightening non-price credit standards in these two countries.

Signals from the April 2019 ECB Bank Lending Survey reflected the accommodative monetary policy stance. Credit standards remained broadly unchanged for loans to non-financial corporates, while they tightened for household loans for house purchases, consumer credit and other lending to households. Banks’ cost of funds and balance sheet constraints and the perception of higher risks attached to the economic situation and outlook contributed to a tightening of credit standards on loans to enterprises, mainly competitive pressures in the banking sector contributed to an easing of credit standards. Among the largest Member States, credit standards for households tightened mainly in Italy and Spain.

According to the Bank Lending Survey, in the euro area the demand for loans to non-financial corporates remained unchanged in the first quarter in 2019, but banks reported falling loan demand in Spain and Italy. This survey result was in line with the observation of declining loan volumes in these two countries in early 2019 despite low interest rates. Overall though, the low general level of interest rates and continued growth of fixed investment supported the demand for loans by corporates.
Table I.2:
Financing side - euro area and EU
(Annual percentage change)

<table>
<thead>
<tr>
<th></th>
<th>Spring 2019 forecast</th>
<th>Autumn 2018 forecast</th>
<th>Spring 2019 forecast</th>
<th>Autumn 2018 forecast</th>
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<tr>
<td></td>
<td>2017</td>
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<td>2020</td>
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<tr>
<td>Domestic non-financial private sector</td>
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<tr>
<td>- Loans to non-financial corporations</td>
<td>2.7</td>
<td>2.7</td>
<td>3.0</td>
<td>3.4</td>
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<tr>
<td></td>
<td>3.4</td>
<td>3.7</td>
<td>4.0</td>
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<tr>
<td>- Credit to households</td>
<td>85.2</td>
<td>84.1</td>
<td>84.4</td>
<td>85.2</td>
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<tr>
<td></td>
<td>85.3</td>
<td>85.2</td>
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<td>(GDP)</td>
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<td></td>
<td>50.0</td>
<td>49.6</td>
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<td>49.8</td>
<td>50.0</td>
<td>51.0</td>
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<tr>
<td>- Loans to non-financial corporations</td>
<td>2.1</td>
<td>2.3</td>
<td>2.3</td>
<td>2.5</td>
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<td></td>
<td>3.8</td>
<td>4.0</td>
<td>4.0</td>
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<tr>
<td>- Credit to households</td>
<td>85.3</td>
<td>84.4</td>
<td>84.3</td>
<td>83.8</td>
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<tr>
<td>Note: Figures unadjusted for sales and securitisation. Counterpart area is domestic (home or reference area).</td>
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Meanwhile, banks reported that the demand for housing loans increased in the first quarter in the euro area and in all large Member States. The percentage of rejected loan applications rose across all loan categories, and in particular for housing loans. For the second quarter of this year, banks expected a further tightening of standards for housing loans but some easing for loans to corporates and consumer credit. Demand for loans was expected to increase further.

Overall, euro area banks appear to have played their part in the effective transmission of the ECB’s monetary policy. The key reasons for this were the ECB’s use of non-standard policy measures, improved capital ratios, more stable funding structures, and a highly competitive environment among banks. However, banks continued to struggle with low profitability levels, which largely explained investors’ negative perception of the banking sector (see Box I.2).

Looking forward, bank lending to the private sector is expected to remain positive thanks to an overall healthy banking system and further ECB support in the form of TLTRs. Credit to both households and NFCs is projected to grow this year and next (see Table I.2). (22)

...in tandem with still rising market funding.

Market funding continued growing in the euro area. Net issuance of private euro-denominated long-term bonds expanded in early 2019 for all categories of issuers: corporates, banks and other financial intermediaries. However, the annual growth rate of the net issuance by corporates fell to 4.6% in February 2019, while banks and other financial intermediaries have increased their use of bond market funding. Net issuance by banks had turned positive in mid-2018 and has been increasing since, growing at an annual rate of 2.9% in February.

Over the last few months, the contribution of bank lending to the overall debt funding of corporates has grown at an annual rate of around 3%, while the volume of market funding has grown at a more modest 1%. This is partly attributable to a more favourable evolution of funding conditions offered by banks as compared with markets where corporate bond spreads widened in 2018. As a result, the share of market funding in the total outstanding debt of corporates remained below 20%.

There has been growing concern about leveraged loans and higher indebtedness of low-credit-quality or highly leveraged corporates. (23) Although outstanding debt is significantly smaller for euro area corporates than for those of other geographic jurisdictions, this remains a significant concern, in particular as interest rates and the credit risk premia could increase over time, and as euro area banks and other financial institutions could be exposed to leveraged debt issued in other jurisdictions.

Equity net issuance by euro area enterprises grew at an annual rate of less than 0.5% in 2018. This moderate growth reflects the higher cost of equity compared to debt (the equity premium), and the effect of share buy-back programmes of certain large corporates, but it still represents an increase over the year before.

(22) The figures in the table are unadjusted for sales and securitisation and therefore differ somewhat from those previously quoted in this section. The revisions from the latest Autumn Forecast are mainly driven by high levels of securitisation in Italy at the end of 2018.

4. GDP AND ITS COMPONENTS

The economic expansion in the euro area and in the EU continued in 2018 at a pace of 1.9% and 2.0% respectively. This was markedly lower than in 2017, when economic growth got a push from external factors with net trade contributing massively. Without the sizeable carry-over from strong growth in 2017, the annual GDP growth rate in 2018 would have been lower.

Economic growth slowed in the context of diminished expectations...

Economic activity in Europe missed expectations in 2018, taking forecasters largely by surprise. Accordingly, forecasters in international institutions (e.g. OECD, IMF), central banks (e.g. ECB) and the private sector (as covered by Consensus Economics) have revised downward their projections for euro area GDP growth successively. Since spring last year, first expectations for 2018 deteriorated markedly (Graph I.32) and, in the second half of the year expectations for 2019 were also revised lower (Graph I.33).

In the recent economic history, such sharp downward revisions in euro area growth forecasts within 12 months are rare. Since 2007, forecasters have introduced similar sharp or even sharper downward revisions of their current year forecasts in spring only in the four years that were related to recessions. However, both in the 2008-2009 period and in the years 2012-2013 the size of revisions were mostly more substantial (see Graph I.34).

Against the background of such diminished expectations the discussion about the strength of the downturn of GDP growth has intensified in recent months. One key question is whether the moderation of economic growth marked a temporary weakness that will be followed by a rebound this year, or hints on an impending recession. To answer this question, it is necessary to identify the position of the EU economy with respect to the main determinants of economic growth such as the business cycle, the external...
environment, and a number of exceptional factors which exert a more transitory or more persistent impact on economic activity.\(^{(24)}\)

...with the cyclical explanation failing to explain the downshift...

One explanation of slowing growth could relate to a maturing business cycle in Europe. In principle, economies with a positive output gap could be expected to converge gradually towards their potential levels of output, which would imply growth rates temporally falling below potential rates. However, in contrast to the US economy (see Section I.2), the aggregate output gap in the euro area and in the EU only turned positive in 2017, and only a number of (mostly smaller) Member States has reached sizeable positive output gaps in 2018.

In the autumn, the estimated potential growth rate in the euro area implied a positive increasing output gap until 2020, but diminishing expectations about GDP growth have lowered the estimates of potential GDP growth for 2019 and 2020. The output gap estimates for the euro area have not remained unaffected and stand in the spring forecast in 2019 at 0.3% of potential GDP and in 2020 at 0.4%. This implies a rather modest change between the years and less than what a maturing business cycle would be expected to cause.

Other standard indicators that could hint at a maturing cycle, can at best only partly explain the slowdown in growth. A strong expansion that raises inflationary pressures and thereby triggers a monetary policy response that slows the expansion is definitely not in the cards. The over-accumulation of capital after strong investment growth that causes a cyclical weakness is also hard to expect against the background of Europe’s long-standing investment weakness. Supply constraints have only started to become binding in a very small number of countries and sectors in the EU and recent business surveys suggested that supply constraints have actually been easing since early 2018.

\(^{(24)}\) Moreover, the financial cycle could have been a trigger for slowing output growth, as suggested by the analysis of the economic and financial crisis. For example, the build-up of high private debt and stretched asset price valuations could have raised default concerns and led to a widening of corporate bond spreads and ultimately slower economic growth. At the current juncture, the analysis of financial market developments does not provide sufficient evidence in favour of such reasons for the slowing observed so far. See for further analysis, e.g. Borsó, C., Drehmann, M. and D. Xia (2018). ‘The financial cycle and recession risk’. BIS Quarterly Review, December, pp. 59-71; and Rünstler et al (2018). ‘Real and financial cycles in EU Countries: stylised facts and modelling implications’. ECB Occasional Paper 205.
Towards the end of 2018, economic growth in the global economy fell short of what forecasters had expected. Accordingly, international institutions and central banks lowered their projections for both global growth and growth outside the EU throughout the second half of last year. These revisions were more limited for the year 2018 as the first half had built a strong basis (Graph I.35), but more pronounced for economic activity in 2019, partly reflecting that the weaker last quarter in 2018, which lowered the carryover to 2019 (see Graph I.36). Given the important influence that the external environment has on the projections for the EU and the euro area, developments in the external environment deserve a closer inspection.

Disruptive effects originating in the external environment of the EU economy have, at least partly, caused the slowdown (see Section I.2). This could include a more general trend towards slower globalisation or even a partial reversal thereof. For a long time, globalisation, mainly through trade, had a sizeable positive impact on economic activity, but the distributional implications of such growth have only in recent year attracted more attention. (26) Moreover, the occurrence of external imbalances has raised questions about the sustainability of existing trade patterns. These two issue have in some countries contributed to the increasing popularity of inward-looking policies (e.g. tariffs or withdrawal from economic partnerships), which could hamper further globalisation or even lead to some reversals, for example by distorting cross-border value chains and a move towards more regional value chains. (27) Together, these factors could lead to less synchronised business cycles, a higher share of domestically produced input and thus a decline in trade volumes.

Many of the processes related to globalisation and its reversal need some time to unfold and have therefore limited explanatory power for an abrupt slowing of economic growth. This does not apply to tariffs on international trade, which not only have direct effects on the goods concerned but also signalling effects. In that regard, the introduction of tariffs by the US and retaliatory measures in the EU and China in the first half of last year certainly affected the world economy. Evidence can be seen in the coincidence of the announcement and implementation of new tariffs in the first half of 2018, mainly affecting goods trade, and the weakening of manufacturing at that time. However, the global weakness of manufacturing also coincides with a period in which financial conditions were tightening due to monetary policy measures in the largest economies outside the euro area (see also Section I.1).

...and a confluence of sector and country-specific factors were strongly affecting economic activity.

While the impact of cyclical developments and the external environment may help to explain why growth has been slowing, the euro area has also been hit by a number of sector and country-specific factors that have weighed on economic activity throughout last year:

- Weak growth in the first half of the year was partly explained by temporary domestic factors such as strikes, extraordinary weather conditions not captured by seasonal adjustment, higher tax burdens for consumers, and unusually high levels of sick leave.

- In the second half of the year, European carmakers, particularly in Germany had problems with the introduction of a new Worldwide Harmonised Light Vehicles Test Procedure (WLTP) in September, which caused production disruptions (see Section I.1). These problems added to regulatory discussions on limitations to the use of Diesel cars in cities, the ongoing ‘Dieselgate’ affair, (28) some concerns about falling Chinese and global demand for European cars, (29) and trade distortions (e.g. tariffs on steel, new requirements due to the USMCA affecting overseas activities), but also structural challenges (e.g. transition to the production of hybrid and electric cars, automated driving) (30) amid the ongoing structural transformation of


(27) Based on detailed trade, a recent empirical study did not find evidence of a downturn in global value chains since 2010, but the study did not include data after 2016; see Gaulier, G., Sztulman, A. and D. Ünal (2019). ‘Are global value chains receding? The jury is still out. Key findings from the analysis of deflated world trade in parts and components’. Banque de France Working Paper 715.

(28) The notice of violation of the Clean Air Act to Volkswagen Group in September 2015 issued by the US Environmental Protection Agency resulted in what is called ‘Dieselgate’ and which also involved other manufacturers that manipulates the emissions of diesel engines. For an overview of implications see e.g. G. A. Cordano (2019), ‘How do crises influence sales: the impact of the Diesel scandal on Volkswagen’s and the automotive industry’s sales.’ Louvain School of Management and University of Cologne.


(30) In an investigation of the position of the European car industry, Frederiksson et al (2018) concluded that Europe could still lead the global electric vehicle race, but it that it would have to step up to remain at the frontier of automotive technology; Frederiksson, G., Roth, A., Tagliapietra, S. and R. Veugelers (2018). ‘Is the European automotive industry ready for the global electric vehicle revolution?’. Bruegel Policy Contribution 26, December.
the economy with a secular decline of manufacturing. (31)

- **Transport problems** caused by the water levels in rivers such as the Rhine. Roughly 80% of cargo transported by ship in Germany each year travels the Rhine, which links important industry locations in the North to Belgium, the Netherlands, the North Sea, and in the South to Switzerland. For most of the second half of 2018, water depths at Kaub, near the river’s midway point hit 12-year lows, which impaired production in some sectors in countries where inland water transport is important. (32)

- **Country-specific developments** weighed on economic activity in the second half of 2018, such as social unrest in France, political and policy uncertainty in Italy (with temporary increases in financial fragmentation), and political uncertainty in several countries with specific issues.

Overall, much of the euro area’s decline in growth can be traced to two determinants. First, a less supportive external environment reflecting slowing growth outside the EU and fading global trade momentum (see Section I.2). Second, a number of domestic factors that have lasted longer than expected, including car-related distortions in the manufacturing sector, social tensions and both domestic and external policy uncertainty.

The variety of factors behind the slowing of economic growth in Europe marks a substantial difference from other periods with rapidly diminishing growth expectations. This is visible in an analysis of the revisions in the contributions of GDP components in the years with the largest revisions in GDP growth forecasts (Graph I.37).

The revisions in other years can be traced to investment (2009, 2012, and 2013) and net exports (2009). Revisions underlying the diminishing expectations for euro area growth in 2019 were much broader-based, without any single GDP components taking special responsibility. As a result, the current economic outlook depends more on details in the development of GDP and all its components than at previous episodes of substantial downward revisions, which had more isolated causes.

**The slowing of economic growth has been apparent for more than a year...**

The slowing of economic growth was first observed at the beginning of last year and continued over the following quarters. In the fourth quarter, euro area GDP expanded by 0.2% quarter-on-quarter. This was slightly higher than in the previous quarter when GDP grew by 0.1% (quarter on quarter), which followed a moderation to 0.4% in each of the first two quarters of 2018, down from 0.7% in all quarters in 2017. Half year-on-half year, GDP growth slowed in the first half of 2018 (from 1.4% to 0.9%) and further in the second half (to 0.5%).

A broad-based drop was registered in new export orders across emerging and developed economies alike, which was generally larger than and strongly correlated with the drop in headline manufacturing; and which echoed the significant slowdown in world trade growth in the second half of 2018. (33) (see Graph I.38). This is in line with

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(31) Foreign trade has been shown to have slowed the secular decline of manufacturing in Germany, see e.g. W. Dauth, S. Findeisen and J. Suedekum (2017). ‘Trade and manufacturing jobs in Germany’, *American Economic Review: Papers & Proceedings* 107:5, pp. 337-42.

(32) The Kiel Institute estimated that the low water levels in rivers dampened German GDP growth by 0.1 pps. each in the third and fourth quarter in 2018 (p. 2); see Kiel Institute (2018), *Economic Outlook – German Economy*. Winter, December 11.

(33) The slowdown in exports growth took place against the background of less buoyant world trade, linked to lower global activity momentum and heightened trade tensions. The degree of trade openness plays a significant role in explaining the impact on euro area activity. See Banco de...
data from the Centraal Planbureau (CPB) on world (excluding EU) import volumes (goods), which in the fourth quarter of 2018 posted its biggest quarterly contraction since early 2009.

Foreign demand had an important role in the decline of export volumes in the first quarter of last year, and remained muted throughout 2018. These demand-side pressures on economic growth are confirmed by the coincident decline in supply constraints (i.e. capacity utilisation) and output growth, as well as a worsening in business and consumer sentiment throughout 2018.

...and surveys suggest subdued growth momentum has continued in early 2019...

Recent survey indicators show economic growth remaining subdued in early 2019, with some stabilisation at the beginning of the year although at lower levels than one year ago (see Graph I.39).

- In March, the Commission’s Economic Sentiment Indicator (ESI) decreased in both the euro area (by 1.6 points to 112.6) and the EU (by 1.9 points to 112.5), after remaining almost unchanged in February at 106.1 (-0.2 pts.). Following a decline in each of the seven preceding months, the ESI stood in March at a 29-month low, but remained at a historically elevated level with all its components exceeding long-term averages. Over the quarter, the ESI also declined, consistent with growth stuttering again in the beginning of the year. Economic sentiment in the euro area has been weighed down the most by a decline in confidence in industry, and to a lesser degree by lower confidence among services, consumers and retail, whereas construction remained broadly stable.

- In April, the PMI Composite (flash) fell again in the euro area, mainly driven by service sector weakness outside Germany and France. It continued to see an increased rate of decline of new orders relative to output and signs of excess capacity started to emerge, adding to worries about further weakness in the coming months. At 51.3 the index is lower than on average in the first quarter (51.3) and in the last quarter of 2018 (52.3).

The diverging performance between the manufacturing and the services sector continued in recent months (see Graph I.40), with the gap between both sectors’ readings reaching its largest since 2009. Were the downturn in manufacturing to persist, the resilience of the service sector would be further tested, and would not be expected to remain unaffected.


It is estimated that extra-euro area demand for euro area goods declined from an average quarterly growth rate of 1.6% in each quarter of 2017 to 0.5% in the first quarter of 2018.

...with ‘hard’ data look more favourable for the first quarter.

Despite its limited availability, ‘hard’ data came in slightly stronger in recent months:

- In January, new industrial orders remained close to their lowest level since July 2017, on the back of a sharp drop in non-domestic orders.
- In February, industrial production in the euro area was marginally lower than in the months before, but at the same time the January reading was revised higher. In the first two months of 2019 it expanded compared to the previous quarter (0.8%). These figures were strongly affected by developments in car manufacturing (see Section I.1).

All in all, the euro area economy looks to have started 2019 with its growth momentum broadly unchanged, which suggests that it is still too early to call a turning point and that the temporary factors weighing on growth are still unwinding.

Growth to stay close to potential in 2019 and in 2020...

With a relatively less favourable external environment, the European economy is increasingly dependent on the fundamentals behind domestic demand. Over the forecast horizon, consumer spending and firms’ investment decisions should continue to be supported by several factors: (i) a supportive macroeconomic policy mix, with an accommodative monetary policy stance and fiscal policy loosening in a number of Member States; (ii) improving labour market conditions, as reflected in further job creation and strengthening wage growth, and (iii) continued improvements in corporate and household balance sheets, resulting in lower deleveraging needs, on average. Overall, GDP is now expected to grow by 1.2% this year in the euro area and 1.4% in the EU (-0.2 pps. compared to the winter forecast).

The expected slight pick-up in the quarterly profile forecast for 2019 is based on the assumption that trade and policy uncertainty will not escalate further, that activity outside the EU will bottom out and that the temporary factors that held back growth in the latter half of 2018 will gradually unwind. It also reflects the growth impulse of fiscal measures in some Member States, with domestic demand benefitting from a mildly expansionary fiscal policy stance (see Section I.9). (36)

In 2020, with the fundamentals behind the euro area economy remaining relatively firm, euro area GDP growth is forecast to rise to 1.5% (1.6% in the EU). This includes an estimated working day effect of 0.2 pps., which reflects the relatively large number of working days in several Member States in 2020. It hides a slight loss of momentum in 2020, which is visible in the working-day adjusted quarterly growth rates that are forecast to remain at 0.3% (quarter-on-quarter) in all four quarters.

...resulting in a roughly stable output gap.

With economic growth in the euro area and EU expected to dip below potential for the first time in five years, the increase in the output gap foreseen in autumn is now expected to be delayed. By 2020, only a limited number of countries are expected to see sizeably larger output gaps compared to 2018. According to the Commission’s estimates, the growth rate of potential GDP in the euro area is expected to remain slightly below 1½%, compared to an average real GDP growth forecast of about 1¼% between 2019 and 2020, on average. Despite improving since 2012, potential output growth is still projected to remain below its pre-crisis

(36) In an environment where interest rate are assumed to stay at low levels, the magnitude of fiscal spillovers is expected to be larger and should be taken into account when assessing the aggregate euro area fiscal stance. The transmission channels include trade, domestic prices and the real effective exchange rate. See Alloza, M., Cozmanca, B., Ferdinandusse, M. and Jacquinot, P. (2019). ‘Fiscal spillovers in a monetary union’. ECB Economic Bulletin 1, pp. 59-69.
level, (37) which is to a larger degree explained by a lower contribution from capital accumulation (Graph I.41).

The labour market shortfall is expected to be offset by a slight improvement in the trend growth of total factor productivity, as well as by increasing contributions from capital, leading to a strengthening of potential growth over the forecast horizon. All in all, the euro area output gap is estimated to have become slightly more positive in 2018, and is expected to gradually narrow until 2020, when it is projected to be only marginally positive.

Differences in per-capita GDP growth are set to remain sizeable in 2019 and 2020, despite narrower ranges than observed for GDP growth. Among the larger Member States, only Spain and Poland to see faster than average per-capita growth in both years. Annual growth rates of more than 3% in both 2019 and 2020 are expected in eight new Member States, which should support economic convergence in the EU as aimed for by the use of EU funds (see also Box I.3).

The slowdown in economic growth is expected to be widespread…

While the slowdown in 2018 was mainly driven by Germany and Italy, over the forecast horizon, the difference between the fastest and slowest growing economies is projected to diminish. Among the largest EU economies, Poland and Spain are projected to be economic outperformers, with real GDP growth rates above the EU average in both 2019 and 2020, while the Netherlands is expected to grow somewhat above average in 2019. In contrast, Italy, Germany, the UK and France are set to grow below average in both years (see Graph I.42). GDP growth in both years is set to be slower than in 2018 in all but five Member States. In the euro area, only Greece is forecast to see growth gaining traction, whereas Luxembourg is projected to see almost stable economic growth.


…with growth to be almost entirely driven by domestic demand going forward.

In 2018, the moderation in economic growth in the euro area was driven by a lower contribution from net exports compared to the previous year (from 0.8 pps. to 0.2 pps.), whereas domestic demand’s contribution to growth remained robust at around 1.7 pps.. Given its share in GDP of about 55%, private consumption made the largest contribution to growth (0.7 pps.) although this was slightly down from 0.9 pps. in 2017. The fall was entirely compensated by a higher contribution from investment spending (0.7 pps. from 0.5 pps.), whereas the contribution from government consumption remained stable (at 0.2 pps.). All in all, this suggests that the spillover from lower export growth has so far been limited (see Graph I.43).

It should be noted, however, that these figures are highly sensitive to the inclusion of data from Ireland, where special features of the economy sometimes result in relatively large changes from one period to the other that have a substantial impact on aggregates in the euro area and the
EU. (38) Computing the euro area aggregate excluding Ireland, the decline in the growth contribution of domestic demand between 2017 and 2018 looks more pronounced (-0.4 pps. without Ireland, instead of -0.1 pps.), whereas the decline in the growth contribution of net exports looks less severe (-0.3 pps. without Ireland, instead of -0.6 pps.).

In 2019, the contribution to growth from domestic demand is expected to fall (from 1.7 pps. to 1.3 pps.), driven by lower investment growth and a negative contribution from the change in inventories (-0.2 pps.), while the contribution from net exports is forecast to turn negative for the first time since 2016 (-0.2 pps. from +0.2 pps. in 2018). The increase in euro area annual growth in 2020 is explained by a stronger contribution from private consumption together with a neutral contribution from net exports.

Private consumption lost momentum…

Private consumption has been the main driver of the economic recovery since its beginning in 2013, contributing in 2018 almost half of the GDP growth in the euro area, but less than the share of private consumption in GDP (about 55%) would have suggested. This mainly reflected its loss of growth momentum in the second half of the year when private consumption in the euro area expanded only by 0.3% as compared to the first half of the year, down from 0.7% in the first half of the year, with half of the decline attributable to shrinking private consumption in Germany. In the fourth quarter of 2018, in the euro area the growth rate of private consumption rebounded slightly from the multi-year trough in the third quarter. The softening in 2018 lowered the annual growth rate in the euro area to 1.3% from 1.6% in 2017 (1.6% in the EU, 2.0% in 2017). The main support for private consumption came from increased employment and labour incomes. Favourable financing conditions provided mainly support in countries where households have predominantly a negative interest rate expenditure, i.e. where they would gain from a decline in interest rates. (39)

The breakdown of private consumption expenditure shows that the slowdown in the euro area in 2018 was sharper for durable goods (-1.7 pps. to 2.7%) than for non-durable goods and services (-0.6 pps. to 1.1%). Following some growth moderation already in the first half of the year, households’ expenditure on durable goods even declined in the second half, which can be associated with the decline in car sales and passenger car registrations in the same period. This can be interpreted as the demand-side counterpart to the supply-side effects of the fall in car production. More generally, the decline in expenditures on durable goods confirmed how sensitive this expenditure type is to the business cycle and suggested that the pent-up demand for durables might have been exhausted after several years of economic expansion that allowed households to increase spending on durables and offset earlier declines in their stock of durables. (40)

…and signals about the short-term outlook are mixed…

Short-term indicators of private consumption are overall consistent with a continued rebound of consumer spending growth to the levels seen before the exceptionally weak second half of last year. While the survey-based indicators limit the scope for expectations of a quick rebound, available hard data could be interpreted as hinting on a slightly faster rebound. Discrepancies between indicators could also point to at large

(38) These features are for example related to activities of multinational firms and include the relocation of intellectual property and contract manufacturing; see e.g. J. FitzGerald (2018). ‘National accounts for a global economy: the case of Ireland’. Trinity Economic Paper 0418, Trinity College Dublin.

(39) This group includes Cyprus, the Netherlands, Portugal and Spain, whereas households have predominantly positive interest rate exposure in Austria, Belgium, Germany, Italy and Malta; see Tzamourani, P. (2019). ‘The interest rate exposure of euro area households’. Deutsche Bundesbank Discussion Paper 01/2019.

uncertainties weighing on consumers’ spending decisions.

- In April 2019, the Commission’s consumer confidence indicator (flash estimate) declined in the euro area, after it had rebounded in the first three months of the year (see Graph I.44). Consumers’ intentions for major purchases, one of its components, have deteriorated in the three months in 2019, but had reached in November 2018 the highest reading since 2000 and remained in March well above its long-term average.

- In the first three months in 2018, the expectations about the economic situation have improved more than the assessment of the current situation. After reaching a trough in mid-2018, the ‘optimism bias’, i.e. the difference between the assessment of the future and the past economic situation, has since increased to levels last seen in mid-2017 (see Graph I.45).

- Consistent with the expected moderation in labour market improvements, consumers’ unemployment fears over the next 12 months have increased, particularly in the second half of 2018. This is also in line with surveys on firm’s employment expectations (see Section I.6), which suggest that employment growth will slow further in the quarters ahead, particularly in manufacturing. Their level nevertheless remains above average, which suggests a continuation of employment growth in the euro area, supporting a positive outlook for private consumption in 2019.

- The Commission’s Retail Trade Confidence Indicator increased somewhat in the euro area and the EU in the first quarter compared to the previous quarter and remained at historically high levels (Graph I.46).

In early 2019, ‘hard’ data indicated a continued rebound in private consumption growth:

- Retail trade volumes in the euro area (and the EU) increased in the first two months in 2019 and thereby almost fully offset their decline in December. The average of the first two months exceeded in both areas the average of the fourth quarter in 2018 and the reading in February was the second highest in the history of the series.

- New passenger car registrations growth in the euro area increased in the first quarter (7.4% q-o-q, up from -11.4% in the preceding quarter). Less binding supply constraints in the automobile industry should continue to support car sales growth going forward, while ongoing discussions about restrictions for the use of Diesel cars may continue to be detrimental (see
also Section I.1), compounded by its probable impact on sales of other types of cars via spillovers on prices of second-hand vehicles.

- **Loans to euro area households** for consumption continued to grow more quickly than loans for any other purpose, but have slowed compared to February 2018, when they recorded the highest growth rate since early 2007 (see also Section I.3). In this context, households intending to finance private consumption via consumer credit are set to benefit from favourable lending conditions, as reported in the ECB’s April 2019 Bank Lending Survey.

Recent data releases overall bode well for the rebound of private consumption growth, but expectations about the strength of the rebound in 2019 and 2020 are contingent on a broad set of household fundamentals.

**...but growth in 2019 and 2020 should remain robust.**

Private consumption is closely aligned with developments in households’ income and wealth. Last year, households’ disposable income were supported by wages increases (negotiated wages and actual wages) and employment growth. The compensation of employees grew at its fastest pace in ten years, leading to a pick-up in both nominal gross disposable income and real disposable income. The push from higher labour income has only been partly offset by higher negative contributions from direct taxes, social contributions and transfers, consistent with the cyclicality of automatic stabilisers.

In 2019 and 2020, gross wages and salaries in the euro area are expected to remain the main contributor to strong growth in nominal disposable incomes. Some country-specific factors are set to impact growth in employee compensations. In France, the CICE (Tax Credit for Competitiveness and Employment) is due to be replaced by a permanent contribution in nine years. This reflects fiscal policy measures in a number of Member States, particularly in Germany, Italy and France. All in all, household nominal gross disposable income growth is forecast to peak in 2019 before slowing somewhat in 2020. With consumer price inflation expected to moderate in 2019 (see Section I.7), households’ real disposable income growth should increase to 1.9% in 2019 (from 1.5%) before returning to 1.5% in 2020 (Graph I.47).

Favourable financing conditions and increases in households’ net wealth are expected to exert positive effects in 2019 and 2020. The aggregate household balance sheet has continued to improve in 2018 and appears to be in a solid shape, on average, amid a rise in households’ net worth due in part to rising house prices and stock market gains. At the same time, the household debt service burden continues to diminish, in an environment of low interest rates and declining indebtedness. The debt to income ratio reached 94.5% in the fourth quarter of 2018, down from a peak of 99.3% in the fourth quarter of 2010. Also, the financing of private consumption via consumer credit should be less costly in an environment where the

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(41) Growth in negotiated wages is more persistent than the wage drift, as it reflects established changes in pay for a certain period ahead. As such, negative changes in the wage drift driven by adverse macroeconomic conditions would have to be unusually large to offset recent dynamics, giving support to the outlook for wages. See Koester, G. and Guillonchon, J. (2018). ‘Recent developments in wage drift in the euro area’. ECB Economic Bulletin 8, Box 5, pp. 60-3.

(42) Pockets of vulnerability remain, however, particularly at the country level. While not high by international standards, household indebtedness remains above the benchmark level derived from the macroeconomic imbalance procedure (MIP). See ECB (2018). ‘Macroeconomic imbalance procedure’. Financial Stability Review. November.
normalisation of monetary policy has been postponed.

The number of households with precautionary savings is expected to increase this year, slightly raising the average household saving rate and dampening the expansion of private consumption on aggregate. While consistent with consumption-smoothing behaviour, it is likely to be partly counteracted by the impact of persistently low interest rates on saving intentions.

Overall, private consumption should remain the main driver of the economic expansion, supported by continued, albeit slower, labour market improvements and higher wage growth. The weakness in the second half of last years implies that the continued rebound is set to start from a lower level with a smaller carryover than expected in the autumn. As a result, the annual growth rate in 2019 should remain roughly unchanged from 2018 at 1.3% in the euro area (unchanged at 1.6% in the EU) and then pick up to 1.5% in 2020 (1.7% in the EU).

**Government consumption growth remained almost unchanged in 2018...**

In 2018, government consumption remained almost unchanged in the euro area (1.1%, down 0.1 pps.) and in the EU (1.1%, up 0.1 pps.). Accordingly, its contribution to GDP growth varied only marginally. According to the sectoral breakdown, available up to the third quarter of 2018, this appears to be driven by relatively weak growth in the acquisition of goods and services, which was not compensated by a stronger pick-up in compensation of employees (see Graph I.48).

...but it is projected to gain pace compared to other GDP components.

In 2019, in most Member States’ government consumption is expected to grow more strongly than in 2018 in the euro area (1.4%, up from 1.1%) and in the EU (1.6%, up from 1.1%). This reflects mainly an increase in intermediate consumption expenditure and continued strong growth of the compensation of employees on the back of wage increases in the public sector. (43) The forecast of slower growth of government consumption in the euro area and the EU in 2020 (to 1.3% in both areas) rests on a no-policy-change assumption, according to which measures are only factored into the forecast if they have been adopted and presented to national parliaments, or if they have been sufficiently specified.

The expansion of public consumption is projected to differ across Member States. It is forecast to accelerate strongly in Germany and the Netherlands, while remaining almost unchanged in France and slowing in Spain. In Italy, government consumption is forecast to contract this year before expanding somewhat in 2020.

**Investment dynamics remain strong...**

Investment in the euro area was the only demand component growing last year at a faster pace compared to the previous year (3.3% in 2018 following 2.6% in 2017). Excluding Irish data, euro area investment growth slowed somewhat from 4.2% to 3.1%, dampened by elevated uncertainty (44) and a downgraded global demand outlook, despite the persistence of favourable factors. Overall, investment made up 21.0% of GDP in the euro area (20.6% in the EU), the highest since 2009 (2008 in the EU), while persistent differences in the ratios of equipment and construction investment remain. Only the former surpassed its pre-crisis peak.

Differences between investment in the public and private sectors have also endured (Graph I.49). Public investment has increased only slightly after remaining at an all-time low reached in 2016 (2.6% of GDP). By contrast, private investment


has been on an upward trend since 2013 reaching a post-crisis high (18.2% of GDP). Further ahead, public investment in the euro area is projected to grow by about 3.0% in both 2019 and 2020, lifting its share of GDP to 2.8%.

The profile of investment growth seems to suggest that it has already peaked. In the second half of 2018, investment was 1.9% higher than in the first half of the year, although the higher pace can be explained by a sharp pick up in investment in Ireland after a strong contraction over 2017. Investment growth excluding Ireland fell to 1.1% from 1.4% in the first half of 2018, when it had already moderated from the second half of 2017 (at 2.5%).

Overall, investment is projected to continue growing, although its pace will slow on the back of lower external demand growth. It should continue to be shored up by solid fundamentals, such as high capacity utilisation rates and low financing costs for investment spending.

The European Fund for Strategic Investments (EFSI) is expected to continue supporting investment in the EU in 2019 and 2020. As of April 2019, operations approved under the Investment Plan for Europe were expected to trigger €393bn in investments. Around 945,000 small and medium-sized businesses are expected to benefit from improved access to finance.

The impact of these supportive factors is, however, set to be partly offset by declining profit margins, rising supply hindrances (particularly in the construction sector), and the end of targeted fiscal incentives in some Member States. Still-high uncertainty regarding the global outlook and demand growth are likely to weaken the impetus for investment, particularly in countries and sectors more exposed to external demand developments. In this context, firms may follow a wait-and-see attitude, postponing investment decisions, due to the reduced attractiveness of some investments, notably in capital-intensive sectors. While the forecast is based on the assumption that trade disputes will not escalate further, persistent trade policy uncertainty is nevertheless expected to weigh on global trade.

In 2019, investment growth is forecast to slow to 2.3% in the euro area (2.1% in the EU) and to remain steady in 2020 in both areas (Graph I.50). The marked slowdown in 2019 is particularly driven by an expected contraction in Italy, its first since 2014, compounded by the expected moderation in France, Spain and the Netherlands throughout the forecast horizon.

[46] Recent research suggests that the broad-based trend increase in gross saving and net lending of non-financial corporates across major industrialised countries over the previous two decades have not spurred higher fixed capital investment but led to the build-up of liquid financial assets. See Dao. M. C., and M. C. (2018). ‘The rise in corporate saving and cash holding in advanced economies: aggregate and firm level trends’. IMF Working Paper 262.


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[45] Between 2021 an 2007, the InvestEU Programme will continue the work of the EFSI. It will bring together the multitude of EU financial instruments designed to support the funding of investment projects in the EU.
...but further increases in equipment investment are limited...

Equipment investment rose by 4.4% in 2018, down from 50.0% in 2017 (see Graph I.51). In the second half of 2018, equipment investment growth accelerated slightly compared to the first half of the year (to 1.8%, from 1.6%), driven by investment in transport equipment. On a quarterly basis, equipment investment increased at an unchanged pace in the last quarter of the year.

![Graph I.51: Profit margins and equipment investment](image)

Note: Euro area excluding Ireland. Profit margins from NFCs.

Available high-frequency indicators for the first quarter show mixed signals for investment growth. On the one hand, industrial production of capital goods fell in February after rebounding in January. The rate of capacity utilisation in manufacturing in the euro area remained unchanged in the first quarter (survey conducted in January) at 83.6%, above its average level since 1990 (81%) for the seventh consecutive quarter. The rate of capacity utilisation in services increased by 0.8 pts. to 91.1%, also above the average since the start of the series in the third quarter of 2011 (89%).

At the same time, profitability measures are consistent with a less favourable outlook. After peaking at 22.4% in the third quarter of 2017, its highest since 2008, business margins (measured as the ratio of net operating surplus to value added) declined for four consecutive quarters, which is in line with the weakening export performance and points to a further moderation in equipment investment.

The Commission’s surveys signal moderating confidence in the manufacturing, services and retail sectors in the first quarter of 2019. Despite remaining above long-term averages, this does not bode well for the investment outlook.

All in all, equipment investment is still set to be supported by above-average capacity utilisation rates in manufacturing and a high share of firms reporting equipment as a factor limiting production, despite falling somewhat more recently. Financing conditions are expected to remain favourable by historical standards, with corporate investment further benefiting from the ECB’s decision to launch a third round of TLTROs, which has a built-in incentive mechanism to encourage banks to boost lending, as well as from its interest rate guidance. With labour market conditions tightening further in some Member States, and absent a renewed deterioration in sentiment, firms are also expected to be encouraged to invest, smoothing the impact of more binding supply constraints.

Overall, equipment investment in the euro area is expected to grow by 1.8% in 2019 and by 2.4% in 2020 (1.5% and 2.4% in the EU). This is particularly driven by Italy, where equipment investment is forecast to contract in 2019 and to grow only modestly in 2020. The expected slowing in equipment investment growth is broadbased among the largest euro area economies.

...whereas construction investment benefits from buoyant housing markets.

In 2018, construction investment registered its fourth consecutive year of recovery, growing by 3.2% in the euro area (3.3% in the EU), which was slightly lower than in 2017 (3.9%, 4.6% in the EU). After losing momentum in the first half of last year, however, construction investment growth remained steady in the second half (see Graph I.52). Its share of GDP stood in 2018 at 10% thus remaining clearly below its peak of about 12.8% in 2006.

Most signals for the near-term outlook remain positive for residential investment:

- In March, in the euro area the increase in the Commission’s Construction Confidence Indicator partly offset the decline in February, fuelled by more optimistic views on the level of order books. In the first quarter it stood well

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In the euro area, evidence has been presented on the close link between profitability measures and export performance; see Amici, M., Bobbio, E. and R. Torrini (2018). ‘Patterns of convergence (divergence) in the euro area: profitability versus cost and price indicators’. Italian Economic Journal 4:3, pp. 367-84.
above the long-term average, but also higher than on average in 2018.

- In February, construction production increased strongly and data for January were revised up. As compared to February 2018, the output was about 5% higher in both the euro area and the EU.

- In February, the annual rate of growth in loans for house purchases remained at 3.5%, the highest rate since September 2011. The ECB’s composite cost-of-borrowing indicator for such loans remained close to 1.8%.

- The number of building permits fell in the last quarter of the year (-1.5% after +0.7% in the third quarter of 2018) while growing by about 30% since 2015. In September, it stood close to its highest level since early 2011.

- House prices, as measured by the House Price Index, remained buoyant. In the fourth quarter, it rose by 4.2% in the euro area (the same in the EU) as compared to the same quarter in 2017, close to the 11-year high recorded in the first quarter of 2018 (4.5%). As household disposable incomes are on average growing quickly, such increases are consistent with a deterioration in the average affordability of housing.\(^\text{49}\)

Financing conditions for households are expected to remain favourable, supporting the current momentum, although this should be partly offset by the expected slowing in household income growth in 2020. Also, adverse demographic trends and more stringent labour shortages, with increased evidence of difficulties in recruiting skilled labour, may pose some challenges. Over the forecast horizon, construction investment growth in the euro area is projected to remain strong, at about 2.4% in both 2019 and 2.1% in 2020 (2.2% and 1.9% in the EU). There are, however, differing trends among the largest countries. While growth is expected to slow substantially in the Netherlands and Spain, and to a lesser extent in France, it is forecast to remain broadly steady in both Germany and Italy.

With weaker export performance...

In 2018, the growth of exports of goods and services almost halved in the euro area (from 5.2% to 3.2%) and the EU (from 5.4% to 3.0%) and was more pronounced that the decline in the growth of world imports (excluding the euro area). This partly offset the relatively strong growth of the euro area’s export markets in previous years (Graph I.53).

After growing by about a third as strongly as in the second half of 2017, euro area exports of goods and services remained broadly stable in the second half of last year (at 1.3%, from 1.0% in the first half of 2018 and 2.9% in the second half of 2017). This stabilisation at the aggregate level was, however, not widespread among the largest euro area economies. While Italy, France and the Netherlands saw a strong pick-up in the second half of the year, exports in Germany fell and remained almost unchanged in Spain. On a quarterly basis, export growth gained traction in

\(^\text{49}\) House prices are only one of the factors determining housing affordability; others are for instance household debt, rental prices and the level of interest rates; see J. Le Roux and M. Roma (2018), ‘Recent house price increases and housing affordability’. ECB Economic Bulletin 1, pp. 29-34.
the fourth quarter of 2018 in the euro area while remaining below the rates seen over the previous year (1.2% q-o-q, after 0.2% in the third quarter).

While exports of both goods and services registered a deterioration over 2018, their dynamics differed. Goods exports slowed in both halves of the year (from 3.2% in the second half of 2017 to 1.1% and 0.7% respectively) whereas service exports rebounded strongly in the second half of 2018 (from 0.7% to 3.1%). In both cases, developments in the German economy were preponderant.

Against this background, according to external trade statistics, both extra and intra-euro area trade flows slowed sharply in 2018. Last year, extraeuro- area exports of goods grew by 1.7% (4.3% in 2017), which compares with an overall growth of 1.5% in intra-euro-area export volumes (3.3% in 2017). This also contrasts with the slowdown seen in 2016, where intra-euro area trade remained robust despite faltering demand outside the area. A concurrent contraction in the annual growth of trade flows has not occurred since the global financial crisis. Broken down geographically, extra-euro area goods exports over the year were dragged down mainly by lower demand from China, as well as lower exports to the UK and Turkey (see Graph I.54).

Faltering global demand for euro area goods exports is also confirmed by a significant slowdown in new industrial orders from non-euro area countries, as well as a significantly lower demand growth in export markets compared to 2017. This is mostly reflected in the significant fall of euro area export growth in the first half of 2018, which was compounded by disruptions in the manufacturing sector over the second half of the year.

\footnote{The larger contributor to softer external demand during 2018 was Turkey, with its contribution falling from +0.4 pps. in 2017 to -0.4 pps. in 2018. The country saw major financial market tensions in the summer of 2018 amid an increase in inflation and deteriorating financing conditions.}

While the geographical orientation of euro area external trade, particularly its relatively large exposure to Turkey, as well as its product specialisation appear to have driven a wedge between the growth in euro area export markets and overall world import demand (excluding euro area) over most of 2018, this had closed by January 2019 (see Graph I.55).

In line with weakening final demand growth in 2018 (from 2.8% to 2.2% in the euro area, its lowest since 2013), import growth slowed to 3.2% over last year (from 3.9% in 2017). According to international trade data, extra-euro area imports rose by 2.2% in 2018 (3.8% in 2017), with intra-euro area imports slowing similarly (from 3.1 to 1.4%).

Still, net exports made a positive contribution to growth, although considerably less than in 2017 (0.2 pps. vs. 0.8 pps.). \footnote{Euro area imports of goods and services, however, picked up in the second half of 2018, leading net exports to detract from growth for the first time since the second half of 2016.} The magnitude of the downward adjustment is considerably smaller when looking at the euro area aggregate excluding Ireland. Accordingly, net exports contribution declined from 0.3 pps. in 2017 to 0.0 pps., still higher than the negative contribution to growth seen in 2016.
...net exports contribution to growth is expected to turn neutral.

The latest indicators signal that euro area export growth is likely to remain slow in the near term, and do not favour the expectation of a rebound.

- The assessment of export order books in the Commission’s manufacturing survey deteriorated further in the first quarter of 2019, following its post-crisis peak in January 2018 and fell to levels last seen in early 2017.

- Export expectations in manufacturing as measured by the Commission’s quarterly survey (survey conducted in January) fell in early 2019 for the fifth consecutive quarter to its lowest since the second quarter of 2013. The cooling in export prospects continued to be widespread across the largest Member States. This is further consistent with IHS Markit’s Manufacturing PMI new export orders index which remained in contractionary territory in April (below the no-expansion threshold of 50), where it has been for seven months now.

Looking ahead, after expanding by 3.4% in 2018, demand for euro area exports of goods and services, is forecast to remain subdued, growing by 3.0% in 2019 and to pick up to 3.5% in 2020. The slowdown in 2019 is due to weakening momentum in trade growth, particularly in the last quarter of 2018, which carries over to 2019, thus weighing on the annual average (see Section I.2).The forecasts for growth in the euro area’s export markets have also been revised down since the autumn for both this year and next. This reflects to a larger extent declines in the projections for export market developments in the EU than outside (Graph I.56).

All in all, euro area export growth is set to remain sluggish in 2019 at 2.3%, compared to 3.2% in 2018, and considerably slower than the 5.2% growth recorded in 2017. It is forecast to remain weaker than in 2018 both this year and next but should pick up somewhat in 2020 to 3.0% (Graph I.57). In the EU, export growth is forecast to slow to 2.5% in 2019 (from 3.0% in 2018) and to expand by 3.1% in 2020. This is in line with the expected profile of growth in the euro area export markets, but also reflects more binding supply constraints in some Member States. Exports are expected to continue to grow below external demand directed at euro area goods and services, leading to continued market share losses.

Euro area imports of goods and services are projected to weaken to 2.8% (3.1% in the EU) in 2019 before rising again to 3.3% in 2020, which partly reflects the expected slowing of investment growth. As a result, net trade is projected to act

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Note: Revisions between the Commission's spring 2018 forecast and the spring 2019 forecast.

Investment typically has the highest import content of all GDP demand components, see for example M. Bussière, G. Callegari, F. Ghironi, G. Sestieri, and N. Yamano (2013).
as a drag on growth in 2019 (-0.2 pps.) but should turn neutral in 2020.

As in previous forecasts, projections for 2019 and 2020 are based on a purely technical assumption of status quo in terms of trading relations between the EU27 and the UK.

5. THE CURRENT ACCOUNT

The current account surplus of the euro area narrowed to 3.6% of nominal GDP in 2018, down from the historically high level of 3.9% of GDP in 2017 reflecting primarily the decrease in the goods trade surplus. The adjusted current account surplus also eased to 2.9% of GDP in 2018, down from 3.2% in 2017. (53) The current account surplus as a percentage of GDP is expected to decline further over the forecast horizon, largely mirroring the fall in the merchandise trade surplus, to 3.3% in 2020, a quarter of a percentage point below levels projected in the autumn forecast.

The current account surplus moderated in 2018 form a high in 2017...

The year 2018 marks the reversal of the long-standing trend of a steady increase in euro area current account surpluses. This trend had been in place since the global financial crisis and reflected the confluence of several factors at various periods. These included the sharp decline in commodity prices in 2014 and 2015, gains in price competitiveness due to a weak euro, and sluggish investment spending coupled with high private sector savings. The gradual narrowing of the current account balance from 2018 can be viewed as reflecting the reversal of some of the above-mentioned factors. This includes the partial rebound in commodity prices since 2017, with crude oil prices raising import prices and deteriorating the terms of trade, an appreciation of the nominal effective exchange rate of the euro, and a strengthening of domestic demand, and investment in particular.

...and is expected to decline gradually this year and next...

The euro area current account surplus is set to decline gradually this year, which mirrors mainly the expected decline in the trade balance, coupled with the relative stability in the balance of primary incomes and current transfers.

The declining surplus in trade in goods and services appears to be primarily a reflection of the weakness in merchandise exports in 2018. While the nature and durability of this soft patch remain to some extent a puzzle (see Section I.1), the collapse in euro area exports seems to reflect domestic factors (e.g. sectoral supply-side constraints), as well as external demand weakness (e.g. in Turkey, UK, China). Moreover, a strongly negative carryover from the downturn in 2018, and continued weak export performance in early 2019, coupled with broadly stable terms of trade, underpin the outlook for another weak year in exports (2019), followed only by a partial rebound in 2020. While import growth slowed as well in 2018, reflecting the broad-based weakness in domestic demand and is set to weaken further in 2019, it failed to offset the fall in exports, producing a continuous decline in the merchandise trade surplus.


(53) The adjusted current account and merchandise trade balance of the euro area and the EU take into account discrepancies between the sum of the trade balances of the Member States and the aggregate, which theoretically should not exist, but are usually observed due to reporting errors.
The gradual decline in the current account surplus reflects different developments in the saving/investment relationships in the private sector and in the public sector. Private sector net lending is expected to continue its downward trend as investment remains relatively robust and increases in gross saving are set to be insufficient to keep pace. Net borrowing by the public sector is set to be broadly balanced in 2019 and 2020, with both investment and gross saving expected to remain relatively stable in terms of GDP in the near term.

...with Germany and the Netherlands remaining the largest contributors.

In the past few years, a steadily rising number of Member States have contributed to the euro area’s current account surplus. In 2018, 11 euro area Member States posted surpluses (down from 14 in 2017). However, the main contributors to the surplus remain Germany and the Netherlands, which jointly account for about 80% of the euro area’s overall current account surplus (Graph I.59). Over the forecast horizon, their combined share is expected to remain broadly unchanged, despite a reduction in current account surplus in both countries.

Other countries contributing to the decline in the surplus in the forecast horizon are Belgium and Portugal.

Offsetting this trend are several euro area countries where current account surpluses grow slightly higher between 2018 and 2020 (Italy and Austria) or deficits shrink (Finland, Greece, Latvia, and Slovakia).

6. THE LABOUR MARKET

The slowing of economic growth in Europe has not yet stopped its labour market situation from improving but labour market indicators are usually lagging. Given the strong role employment creation has on labour incomes, household disposable incomes and private consumption labour-market dynamics have an important impact on the economic outlook.

So far, labour markets continue to improve...

Throughout the economic recovery, the EU economy has recorded strong job growth. This can be clearly seen by comparing the euro area's current recovery with previous ones (see Graph I.61). Against the background of a rather subdued recovery in terms of output growth the ‘job-richness’ is the counterpart to rather weak labour productivity growth.
The latest data releases suggest that labour market conditions have improved further.\(^{(54)}\)

- The *unemployment rate* in the euro area has been on a downward trend since the start of the recovery in 2013, and in early 2019 fell to its lowest level since autumn 2008. Unemployment in the EU has declined in parallel, and in early 2019 was at its lowest level since the monthly data series was launched in January 2000. This has benefitted various population groups including young people and the long-term unemployed. The rates of youth unemployment (under 25 years of age) and long-term unemployment have fallen further last year in both the euro area and the EU.

- The latest data releases show that employment (number of persons) grew throughout last year (see Graph I.62). In 2018, the euro area economy created about 1½ million jobs (2¾ million in the EU28), slightly less than in each of the two years before. In the fourth quarter of 2018, the total number of people employed in the euro area was 3.0% higher than in the pre-crisis peak in the first quarter of 2008 (3.7% higher in the EU).

\(^{(54)}\) For detailed analyses of labour market developments in the euro area and in the EU, see European Commission (DG Employment, Social Affairs and Inclusion) (2019), ‘Employment and Social Developments in Europe’. *Quarterly Review*, March.
With the unemployment rate already very low, further employment growth requires a readily available supply of labour. Over the past few years there has already been a rapid expansion of the labour supply, which can be attributed to increasing participation rates, (55) migration within the EU towards Member States with low unemployment, and net migration into the EU. In 2018, the labour force expanded by 0.5% in the euro area (0.4% in the EU). The observed rise in labour market participation rates now evident for over a decade, mainly reflects increased activity among older people (55-64) and a parallel decline in the share of younger employees (15-24).

...with indicators of labour market slack receding...

The continued decline in the unemployment rate provides evidence of a tightening labour market. The ongoing improvement in labour market conditions is also visible in broader underemployment measures. Economic slack in the labour market, captured by measures of unemployment such as involuntary part-time work, people who do not search actively, or who are not available to take a job within two weeks, has diminished further in 2018 (see Graph I.64). This suggests that the potential additional labour supply coming from those outside of the labour force has fallen. Labour market slack coexists with structural skill mismatches, as skills shortages have been emerging, especially in some sectors.

The euro area aggregate masks some significant differences among Member States. For example, by mid-2018, in some countries (e.g. in Germany, Belgium and the Netherlands) and sectors (e.g. construction in Germany), the availability of labour had already become a concern for companies and shortages have risen up in the list of factors that constrain further employment growth. At the euro area level, these shortages had always been less pronounced and they even lost relevance in the second half of 2018 as an increasing number of respondents in the Commission surveys attached more weight to demand aspects as constraining their economic activity. Accordingly, measures of labour market slack differed from one country to another (see Graph I.65) with the largest discrepancies among the large euro area countries visible between Germany and Italy.

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Another lens through which one can gauge labour market slack is the non-accelerating wage rate of unemployment (NAWRU). Its estimated recent decline has narrowed the gap with the actual unemployment rate, which implies a labour market closer to equilibrium.

…but slowing economic growth has started impacting on the pace of improvements.

The close link between the progress of the economic recovery and the improvement in labour market conditions could suggest that markedly slower economic growth may have a negative impact on the employment situation. In 2018, the decline in the pace of economic growth in the euro area by 0.5 pps. was accompanied by a decline in the rate of annual employment growth of only 0.1 pps. while labour market indicators continued improving. But labour market indicators usually lag developments in economic activity because employers try to limit adjustment costs related to lay-offs and new recruitment. With moderate economic growth lasting longer, the question arises as to how long and to what extent employment growth can continue.

The near-term outlook is only mildly affected by slowing growth….

Short-term indicators at the end of the first quarter of 2019 point to some remaining strength in the labour market. Regarding the near-term outlook, the Commission’s survey data on employment expectations suggest that net job creation will continue but at a more moderate pace. Overall, in both the euro area and the EU, the hiring intentions of firms remain above their long-term averages in all sectors.

- Employment expectations in the euro area’s manufacturing and services sectors declined fairly steadily in 2018 and early 2019 and stood in March 2019 close to levels last seen in autumn 2016 (Graph I.66). The decline was especially pronounced in manufacturing. By contrast, in the construction sector, employment expectations were rather stable and close to the highest levels seen in the last decade. Consumers’ unemployment expectations remain low.

- Fewer companies are seeing labour constraints but employment expectations remain compatible with continued employment momentum. Since mid-2018 surveys indicate that fewer firms are facing challenges from a tightening labour market (see Graph I.67). The percentage of euro area and EU firms mentioning labour as a factor limiting production in the manufacturing sector and in services has fallen from 17.0% and 20.3% respectively in the second quarter of 2018, to 15.5% and 17.5% respectively in the first quarter of 2019 (January 2019 survey).
The job vacancy rate has been broadly rising since late 2014 in the euro area and in the EU. In the fourth quarter of 2018, the seasonally adjusted vacancy rate reached a new all-time high in both areas (2.3%), mainly pushed by a rising share of unfilled job positions in Germany, which lifted its vacancy rate from 3.1% to 3.2%. The high vacancy rate in Europe could be interpreted as both a signal of a tightening labour market (also reflected in the further inward shift of the Beveridge curve (Graph I.68)), and as an indicator of skill mismatches from lower employability. For example, it could be that fewer workers were able to accumulate skills while working (‘learning on-the-job’) during the period of high unemployment following the economic and financial crisis. This would hint at hysteresis effects that reduce future (potential and actual) employment and output growth.

…but the room for employment to increase further is more limited…

The pace of job creation over the next two years is projected to moderate, due to the lagged effect of slowing GDP growth on the labour market. And in some countries, bottlenecks and labour shortages suggest that slowing employment growth can be expected. In some Member States the fading of temporary fiscal stimuli is expected to exert a dampening impact on employment growth. Looking at factors that could support labour supply growth, participation rates have already moved to high levels and the integration of refugees is progressing particularly in certain countries. Over time, the weakness of the manufacturing sector should raise the relative importance of the more labour-intensive services sector.

Evidence of an expected rebound in labour productivity, which could dampen employment demand, has yet to emerge. In fact, in the last quarter of 2018, labour productivity even declined in the euro because the slowdown of economic growth was more pronounced than the slowdown of employment growth. In countries with relatively tight labour markets, labour hoarding played a role, as companies tried to avoid future recruitment difficulties, which could have lowered aggregate productivity. But at the same time, a tighter labour market should have encouraged job-to-job transitions that could also have led to more efficient and thus more productive job matches.

Overall, the outlook for employment growth looks slightly weaker than in the autumn. In the euro area, the number of employed persons is expected to increase by 0.9% in 2019 and 0.8% in 2020 (0.9% and 0.7% in the EU), lower than the 2018 expansion of 1.3%.

…and the unemployment rate is projected to decline more slowly…

Although employment growth is projected to slow, it should still be sufficient to lower unemployment rates further, because it is set to exceed the growth of the labour force, which is expected to grow in the euro area by 0.4% in 2019 and by 0.3% in 2020 (0.5% and 0.3% in the EU). Despite adverse effects from population ageing, the expansion of the labour force is driven by ongoing increases in labour market participation rates despite faster population ageing, the net immigration of workers and the integration of refugees.
Unemployment in the euro area is forecast to fall from 8.2% of the labour force in 2018 to 7.7% in 2019 and 7.3% in 2020; while in the EU it is set to fall from 6.8% in 2018 to 6.5% in 2019 and 6.2% in 2020. At these levels, unemployment is expected to fall below its pre 2008-2009 crisis levels in both the euro area and in the EU. According to updated estimates, in 2019 in the euro area the actual unemployment rate is expected to fall below the non-accelerating wage rate of unemployment (NAWRU), a proxy of structural unemployment and thus a measure of spare capacity in the labour market. In the EU the actual rate has fallen below the NAWRU in 2018.

...across most Member States with disparities gradually diminishing further.

While the continued improvement in labour market conditions has been broadly shared across Member States, the levels of labour market indicators such as the unemployment rate still varies significantly. Looking forward, the overall picture in the labour market is projected to improve further as the result of the recent economic expansion, with unemployment rates falling in most Member States and employment growing almost everywhere. Despite moving in the same direction, large differences between unemployment levels are still apparent (see Graph I.69).

Although all Member States have recorded falling rates of unemployment in the past four years, the group of countries with above-average rates has been rather stable in the euro area. In 2018, three large Member States (Spain, Italy, and France) along with Greece and Cyprus formed that group, with only the latter expected to leave the group in 2019. In 2019, unemployment is forecast to stop declining in a few Member States in the euro area (Italy and Malta) and outside the euro area (Czechia and Sweden). While sharing this outlook, the countries concerned exhibit rather different labour market situations. In all except Italy, the end of the decline in the unemployment rate coincides with levels well below long-term averages.

There are several explanations at hand for persisting differences in the labour market situation of Member States. Apart from differences in the speed and size of the recovery after the economic and financial crisis in 2008-2009 and the euro area recession in 2011-2013, differences in labour market institutions, structural features and the progress with implementing reforms contribute to explanations. A feature more generally observed is the lack of labour mobility across countries.

Looking ahead, labour market differences are expected to continue narrowing as the expansion continues. However, expectations concerning the narrowing of the range of unemployment rates in the euro area in 2019 (between 3.1% and 18.2%, and thus only 0.1 pps. wider than expected in the autumn) and in 2020 (between 2.8% and 16.8%, also 0.1 pps. wider than in the autumn) have remained almost unchanged.

7. **INFLATION**

Inflation in the euro area and the EU rose in 2018, with the increase mainly driven by high contributions from energy prices. This means that the improvement in the labour market, including employment growth and rising compensation per employee levels, has yet to exert a noticeable impact on inflationary pressures. Moreover, as economic growth slows, any pick-up in inflation is expected to be delayed.

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56 The estimation of natural rates of unemployment is subject to uncertainty, for instance related to the possibility that economic expansion has removed more from the crisis legacy than envisaged in the central scenario and entailed a reversal of crisis-related hysteresis. For example, monetary policy could have had persistent effects on the natural unemployment rate and potential output; see also European Commission (DG ECFIN) (2017), ‘How persistent are crisis effects in the euro area’?, *European Economic Forecast – Winter 2017*, Institutional Paper 48, pp. 10–14; or for a discussion O. J. Blanchard (2018). ‘Should we reject the Natural Rate Hypothesis?’ *Journal of Economic Perspectives* 32:1, Winter, pp. 97–120.
Headline inflation fails to pick-up …

Headline inflation in the euro area, as measured by the Harmonised Index of Consumer prices (HICP), averaged 1.4% in the first quarter of 2019, lower than projected in the winter (see Graph I.70). This rate is also lower than the average of 1.8% registered in 2018, but just above the 1.3% in the same quarter of 2018. Headline inflation in the first three months was supported by still elevated energy price inflation – which increased to 5.3% in March, up from 2.7% in January - reflecting a lower euro exchange rate against the USD, higher administered energy prices and some base effects stemming from last year’s energy price levels. Nonetheless, energy inflation is well below the 8.4% average registered in the fourth quarter of 2018 and is expected to moderate further as some negative base effects kick-in in the second and third quarter of this year at the assumed future energy prices.

…and core inflation remains subdued…

Core inflation, which captures all items except energy and unprocessed food, remained at its 2018 average pace of 1.2% in January and February but declined to 1.0% in March against the background of declines in non-energy industrial goods inflation and services inflation.

The decline of non-energy goods inflation to 0.2% in March stood broadly within the narrow range the series has moved in over the past two years. The weakness in the manufacturing sector since the second half of 2018 and the moderation in oil prices may limit upward pressures in non-energy industrial goods. Moreover, capacity utilisation and pricing intentions across the euro area, as reported by corporate survey respondents, declined somewhat early this year and may reduce pipeline price pressures in the future. In fact, industrial producer price inflation in the manufacturing sector fell further in the first quarter of 2019 from the highs registered in the first half of 2018. The decline of the euro against the US dollar seems to have had only a limited pass-through effect on domestic pipeline price pressures.

Food price inflation (57) moderated somewhat in the first three months of 2019, especially because of developments in the volatile sub-component of unprocessed food prices. The latter have been dampened by some supply factors, such as weather and harvesting conditions.

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(57) As outlined in Eurostat’s News Release of 22 February 2019, there has been a methodological update which affected the composition and weight of both processed food and unprocessed food inflation and resulted in a statistical break in the series between December 2016 and January 2017. For more details, see Box I.4.
Specifically, February and March saw steep declines in the categories of transport services, communications and package holidays and accommodation, whereas the other categories were stable. Amid continuing house price increases – which registered a robust annual increase of 4.2% in the fourth quarter of 2018 in both the EU and the euro area - the component of services inflation related to housing (with a weight of around 10% in the consumption basket), has been stable since 2016 with only a marginal uptick in October last year. Increases in house prices tend to shift demand towards renting due to declining affordability and thereby puts upward pressure on rents. So far, the reported growth in house prices is not having the expected impact on this component of inflation, because rising incomes may have mitigated the impact of house prices on affordability.

However, the recent pick-up in wage growth has been somewhat faster than the pace of expansion of economic activity. In fact, unit labour cost (ULC) growth has picked up steadily in the euro area throughout 2018 - with growth rates surpassing 2% (year-on-year) in the third and fourth quarter of 2018, the highest rates since 2009. An incomplete pass-through of labour costs into final prices is reflected in subdued profit margins - as proxied by the growth in profits per unit of output - which has been very weak, and for some quarters even negative, since 2017 (Graph I.72). This limited pass-through from higher wages into selling prices suggests that, on aggregate, businesses are holding on, preferring instead to have a temporary squeeze on their profit margins rather than increasing prices in an uncertain and competitive environment.

These developments raise two issues. First, whether the link between labour costs and prices still holds. Second, how long businesses would be willing to contain their profit margins despite higher wage costs and whether they face the right cyclical environment to increase their selling prices and recover their profit margins.

On the first issue, one deterministic explanation is by statistical construction. Wage growth explains a big part of services inflation - itself half of the weight of core inflation - since the part of wages in overall service costs is large. For many service sectors, the share of employee compensation in value added accounts for more than half. In measuring the dynamic relationship, empirical
investigations of the link between labour costs and prices show that the nature of the relationship has changed since the 1980s and that there has been almost no pass-through since then. The fact that domestic demand has remained relatively solid in the euro area in recent quarters, especially in certain services sectors, should also support a slight pick-up in profit margins over the forecast horizon.

For the euro area, there has been evidence of a link between compensation per employee levels and inflation, but with a pass-through of less than unity. The analysis of the situation in the largest euro area countries shows a link between nominal compensation per employee adjusted for productivity and price inflation with a lag of six months. In contrast to the US, however, there is no evidence of a weakening in the relationship between labour costs and prices. Two features appear to determine this link in the euro area: (i) the state of the economy with the strength of the pass-through depending on the actual level of inflation, with lower inflation implying a weaker response; and (ii) the type of shock, with demand shocks implying stronger price responses to wages than supply-side shocks.

These observations have implications for the expected strength of the pass-through of labour costs to inflation over the next few quarters. On the one hand, the relatively low level of inflation still prevailing in the euro area should hinder somewhat the pass-through. On the other hand, the observed pick-up of growth in unit labour costs in countries like Germany and France and in the services sector, where the pass-through tends to be rather high, should contribute to eventually re-assert the link between the two, even if with a delay. The fact that domestic demand has remained relatively solid in the euro area in recent quarters, especially in certain services sectors, should also support a slight pick-up in profit margins over the forecast horizon.

The forecast for inflation has been revised lower ...

The near-term outlook for inflation is rather flat, with some negative base effects in energy in the second and third quarters in 2019, in line with oil price assumptions. In fact, the impact of oil prices on headline inflation is expected to gradually taper off next year as base effects fade and oil prices are assumed to remain relatively stable. On average, headline inflation in the euro area is forecast at 1.4% in both 2019 and 2020, a downward revision of 0.1 pps. for 2020 compared to the winter interim forecast.

Growth in compensation per employee in the euro area is expected to moderate and is projected at 2.0% in 2019, a decline from the robust 2.2% increase in 2018. The forecast for 2019, however, is strongly affected by the replacement of the CICE (Tax Credit for Competitiveness and Employment) in France - which is recorded as a subsidy to firms until the end of 2018 - by a permanent reduction in social security contributions in 2019. Accordingly, the change reduces the contribution of employers in total compensation but not the wages and salaries component; thus it should not have an impact on the take-home pay of households per se. In 2020, the growth of compensation per employee is projected at 2.2% in the euro area as a whole. The growth of real compensation of employees, after deducting for inflation, should remain positive in 2019 and 2020. As a result of the robust increase in compensation per employee, unit labour cost growth in the euro area is expected to increase to 1.7% in 2019 and to moderate to 1.4% in 2020.

The increase in unit labour costs in the euro area has recently been the main factor in explaining the pick-up in the GDP deflator (Graph I.73). Given the subdued growth of labour productivity, this observation implies that it was mainly the increase in compensation per employee that put upward pressure on domestic prices.

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(60) For the US economy, empirical analyses showed the slope and curvature of the Phillips curve to depend not only on the level of inflation but also on the extent of downward nominal wage rigidities; see Daly, M. C. and B. Hobijn (2014). ‘Downward nominal wage rigidities bend the Phillips Curve’. Journal of Money, Credit and Banking, 46:2, pp. 51-93.


With solid increases in the compensation of employee in 2019 and 2020, and productivity growth remaining rather subdued on average, wage pressures should remain the key determinant of domestic cost pressures. Overall, the annual growth rate of the GDP deflator in the euro area is projected to rise from 1.4% in 2018 to 1.6% in 2019 and 2020. This suggests that the pass-through from wages to prices is becoming more relevant over the forecast horizon.

... consistent with lower inflation expectations.

Market-based measures of inflation expectations along the maturity spectrum have moved lower since the beginning of the year. At the cut-off date of this forecast, inflation-linked swap rates at the one-year forward one-year-ahead horizon stood at 1.0% (see Graph I.74). Swap rates at the three-year forward three-years-ahead horizon imply an average inflation of 1.2%. On a longer horizon, the widely watched five-year forward five-years-ahead indicator suggests inflation of 1.4%, below the ECB’s definition of medium-term price stability.

Survey-based measures of inflation expectations, which had been on an upward trend, have declined slightly since winter. According to the Commission’s surveys, selling price expectations in manufacturing edged lower in the first quarter of 2019, while that for services remained unchanged, with both indicators standing above their long-term averages. Consumers reported higher price trends over the past twelve months. Price expectations in the construction sector started to ease somewhat in the first quarter. Euro area Flash PMI indices for April showed price pressures falling to their lowest readings in 2½ years, but still with positive inflation along manufacturing supply chains. The assessment of average selling prices in services sectors suggested inflation at a more solid clip.

The monthly mean of market forecasts calculated by Consensus Economics stood in April at 1.3% for 2019 and 1.4% for 2020. The results of the ECB Survey of Professional Forecasters for the second quarter of 2019 showed average inflation expectations at 1.4% in 2019 and 1.5% in 2020 (0.1 pps. lower than in the first quarter). Longer-term inflation expectations (for 2023) remained at 1.8%.

Inflation differentials to narrow

Aggregate HICP inflation rates continue to mask substantial differences across euro area Member States (Graph I.75).

While temporary inflation differentials are usually not seen as a matter of concern, persistent inflation differentials have in the past been among the factors behind the build-up of imbalances (e.g.
price and cost imbalances) in the euro area. By contrast, the narrowing of inflation differentials helps to make financial conditions, as measured by real interest rates, more similar across euro area countries.

By the fourth quarter of 2020, HICP inflation rates at or above the euro area annual average of 1.4% are projected in all euro area economies, except Italy, Ireland, Greece and Cyprus. In 2020, five euro area Member States are expected to experience inflation at or above 2%; mostly those small euro area countries, which are growing strongly and still converging towards average price levels. With most countries projected to record inflation rates within a narrower range, the dispersion of inflation rates, as measured in terms of the unweighted standard deviation, is expected to decline further. The spread between the highest and lowest inflation rate across the euro area is set to fall to a post-crisis low.

Outside the euro area, inflation differentials are more pronounced; by the fourth quarter of 2020, headline inflation rates are projected to range from 1.2% in Croatia to 3.2% in Hungary.

8. PUBLIC FINANCES

Economic growth above potential and low interest rates continued to support public finances in 2018. The euro area aggregate general government deficit (Graph I.76) declined for the eighth year in a row and reached its lowest level since 2000. The deficit is, however, forecast to rise in 2019 due to slower economic growth and some expansionary fiscal measures, and then to remain roughly unchanged in 2020. The structural deficit (65) of the euro area shrank in 2018, but it is set to increase slightly in both 2019 and 2020. Debt-to-GDP ratios are expected to keep falling in most Member States in 2019 and 2020 due to the projected primary surpluses as well as debt-decreasing snowball effects, the latter reflecting nominal GDP growth rates outpacing average interest rates paid on public debt.

(65) The structural balance corrects the headline balance for the cyclical component, and one-off and temporary budgetary factors.

The euro area deficit is set to increase from the historical low of 0.5% of GDP...

In 2018, the budget balance improved by around half a percentage point of GDP in both the euro area and the EU, and the deficit reached 0.5% and 0.6% of GDP respectively. The deficit is, however, set to increase in 2019 to 0.9% of GDP in the euro area and 1.0% in the EU, and to remain roughly unchanged in 2020, based on a no-policy-change assumption. In 2019, budget deficits are expected to be significantly higher in the US and Japan (6.5% and 2.8% of GDP respectively).

As for the annual change in the aggregate budget balance of the euro area (Graph I.77), the cyclical component is set to contribute negatively in 2019, as real GDP growth is forecast to be below potential growth, and to provide a fairly neutral contribution in 2020. (64) Interest expenditure is expected to decline marginally in 2019 and 2020 while the change in the structural primary balance is projected to contribute negatively to the change in the aggregate budget balance in 2019 and 2020 due to expansionary discretionary fiscal policies in some Member States. (65) Changes in one-off measures are set to have a negative impact on the euro area budget balance in 2019 but to revert to a positive impact in 2020. (66)

(64) After a positive contribution of 0.3 pps. of GDP in 2018, the change in the cyclical component is set to give a negative contribution of around 0.1 pps. of GDP in 2019 and to contribute positively of around the same magnitude in 2020.

(65) The aggregate structural primary balance is projected to deteriorate by about 0.3 pps. in 2019 and in 2020, after having improved by about 0.1 pps. in 2018.

(66) Examples of typical one-offs include revenues from tax amnesty and from sales of non-financial assets, and expenditure related to short-term emergency costs or to the financial crisis (for more information on one-off measures...
Around half of the Member States of the EU are forecast to record a government budget surplus in the years 2019 and 2020. However, large deficits are projected in some Member States. A deficit slightly above 3% of GDP is projected in France in 2019 partly because of the impact of one-off measures and in Italy in 2020, based on a no-policy-change assumption. After recording a deficit of 3% in 2018, Romania is set to run a deficit of more than 3% in 2019 and more than 4% in 2020. On the other hand, Cyprus recorded a deficit of 4.8% of GDP in 2018 due to the sizeable support for the banking sector, but the country is expected to return to a large surplus position in 2019.

The decline in the deficit in 2018 was due to a higher revenue ratio and a lower expenditure ratio (see Graph I.78). A further decline in the revenue ratio is expected in 2020, based on a no policy change assumption, but this should be matched by a reduction in the expenditure ratio keeping the budget balance broadly stable.

Looking at some public spending components of the euro area aggregate, the public investment-to-GDP ratio stood at 2.7% of GDP in 2018 and is projected to increase slightly to 2.8% in 2019 and 2020 (still below its pre-crisis average of 3.2% of GDP between 2000 and 2007). Public investment is expected to benefit from higher absorption of EU funds and from the Investment Plan for Europe (see also Box I.3). Social transfers are set to increase as a share of total general government expenditure in the euro area aggregate in 2019 and 2020 in particular due to additional discretionary spending in some Member States. The weight of the wage bill in public expenditure is set to decline slightly (Graph I.79).

### Table I.7: General Government budgetary position - euro area and EU (% of GDP)

<table>
<thead>
<tr>
<th></th>
<th>Euro area</th>
<th></th>
<th></th>
<th></th>
<th>EU</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2018</td>
<td>2019</td>
<td>2020</td>
<td>2017</td>
<td>2018</td>
</tr>
<tr>
<td>Total receipts [1]</td>
<td>45.1</td>
<td>46.3</td>
<td>46.1</td>
<td>45.6</td>
<td>45.1</td>
<td>46.3</td>
</tr>
<tr>
<td>Total expenditure [2]</td>
<td>47.0</td>
<td>46.8</td>
<td>47.0</td>
<td>46.6</td>
<td>45.8</td>
<td>45.6</td>
</tr>
<tr>
<td>Actual balance [3]</td>
<td>-1.0</td>
<td>-0.5</td>
<td>-0.9</td>
<td>-0.9</td>
<td>-1.0</td>
<td>-1.0</td>
</tr>
<tr>
<td>Interest expenditure [4]</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Cyclically-adjusted budget balance</td>
<td>-1.0</td>
<td>-0.8</td>
<td>-1.1</td>
<td>-1.2</td>
<td>-1.1</td>
<td>-1.2</td>
</tr>
<tr>
<td>Change in structural budget balance</td>
<td>0.1</td>
<td>0.2</td>
<td>-0.2</td>
<td>-0.5</td>
<td>0.1</td>
<td>-0.3</td>
</tr>
<tr>
<td>Gross debt</td>
<td>87.7</td>
<td>86.3</td>
<td>84.5</td>
<td>82.7</td>
<td>83.3</td>
<td>80.2</td>
</tr>
</tbody>
</table>

The structural budget balance is the cyclically-adjusted budget balance net of one-off and other temporary measures estimated by the European Commission.

### Graph I.77: Breakdown of the change in the aggregate general government balance, euro area

### Graph I.78: General government balance: expenditure and revenue's contribution to the change, euro area

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(57) By 2020, the fall in public investment relative to the pre-crisis period would remain sizeable in Spain (about -2 pps. of GDP), Ireland and Portugal (about -1.5 pps.), Greece, Italy and Malta (about -1 pps.).
The revenue ratio of the euro area is projected to decline by 0.5 pps. of GDP from 46.3% in 2018 to 45.8% in 2020, mainly reflecting the projected fall in income taxes and social contributions. The reduction in the revenue-to-GDP ratio is largely due to the impact of discretionary measures taken by governments, while underlying revenue developments appears to be in line with the projected increase in nominal GDP. (68)

...but the debt ratio continues to decline.

The general government debt-to-GDP ratio of the euro area has been on a declining path since it peaked in 2014 (Table I.8). (69) In 2018, the debt ratio fell to 87.1% (81.5% in the EU) and it is projected to fall further over the forecast period, reaching 84.3% in 2020 (78.8% in the EU), under a no-policy-change assumption. The deleveraging of the government sector continues to benefit from historically low interest rates paid on debt, which implies a debt-decreasing snowball effect. (70) Moreover, in the 2019-2020 forecast period, a debt-decreasing primary surplus of close to 1.0% of GDP on average is expected for the euro area aggregate (Graph I.80).

As for developments in individual Member States, in 2018, the debt-to-GDP ratio increased in Cyprus (to 102.5%) and Italy (to 132.2%). In 2019-2020, the debt-to-GDP ratio is projected to increase in Romania, due to a large primary deficit, and in Italy. The latter is the only euro area Member State where the snowball effect is projected to provide a debt-increasing contribution over the forecast period, as the average interest rate paid on Italy’s debt exceeds its nominal GDP growth. The debt-to-GDP ratio in 2020 is expected to remain above 100% in four Member States (Belgium, Greece, Italy, and Portugal), and above 90% in three others (Spain, France and Cyprus).


(69) Non-consolidated for intergovernmental loans.

(70) The snowball effect is the impact on the debt-to-GDP ratio provided by the difference between nominal growth and the implicit interest rates paid on debt. Specifically, in the euro area aggregate, nominal GDP growth is projected to average 3.0% over 2019-2020 and thus outpace the average interest rate paid on debt, which is set at 2.1%. As a result, the snowball effect is expected to help reduce the debt ratio in the euro area aggregate by around 0.8 pps. of GDP per year on average over the forecast period.

Table I.8: Euro area debt dynamics

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Change in the ratio</td>
<td>3.7</td>
<td>3.5</td>
<td>3.3</td>
<td>3.6</td>
<td>3.5</td>
<td>3.4</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Stock-flow adjustment</td>
<td>-0.3</td>
<td>-0.4</td>
<td>-0.7</td>
<td>-0.6</td>
<td>-0.6</td>
<td>-0.7</td>
<td>-0.8</td>
<td>-0.7</td>
</tr>
<tr>
<td>Snow-ball effect</td>
<td>0.7</td>
<td>-0.1</td>
<td>-0.3</td>
<td>-0.6</td>
<td>-1.0</td>
<td>-1.3</td>
<td>-0.9</td>
<td>-0.8</td>
</tr>
<tr>
<td>Of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expenditure</td>
<td>2.9</td>
<td>2.6</td>
<td>2.3</td>
<td>2.1</td>
<td>2.0</td>
<td>1.8</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Growth effect</td>
<td>-0.5</td>
<td>-1.3</td>
<td>-2.0</td>
<td>-1.8</td>
<td>-2.2</td>
<td>-1.7</td>
<td>-1.0</td>
<td>-1.3</td>
</tr>
<tr>
<td>Inflation effect</td>
<td>-1.0</td>
<td>-0.9</td>
<td>-1.3</td>
<td>-0.5</td>
<td>-1.0</td>
<td>-1.3</td>
<td>-1.4</td>
<td>-1.4</td>
</tr>
<tr>
<td>End of period.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Notes: A positive sign (+) implies an increase in the general government gross debt ratio, a negative sign (-) a reduction.

The “snow-ball effect” captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting; accumulation of financial assets and valuation and other residual effects.

The revenue ratio of the euro area is expected for the euro area aggregate for 2019-2020.

Graph I.79: Change in expenditure composition in 2019-20, euro area

Graph I.80: Gross debt development: change drivers, euro area
9. MACROECONOMIC POLICIES IN THE EURO AREA

Monetary conditions in the euro area remain very accommodative, overall. Based on the customary technical assumptions, short-term money market rates are set to move sideways over the forecast horizon and should remain very growth-supportive, overall. In addition, nominal long-term yields are expected to increase only very gradually, and despite somewhat lower long-term inflation expectations, real long-term financing costs should remain in negative territory. As regards the euro area fiscal policy stance, measured by the change in the structural budget balance, it turned slightly contractionary in 2018 after being broadly neutral in 2015-2017. A mildly expansionary fiscal stance is projected over the forecast horizon under a no-policy-change assumption.

Monetary conditions are expected to remain accommodative

In light of the expected continuation of only moderate economic growth and subdued inflation in the euro area, upward pressures on nominal rates are expected to be very limited over the forecast horizon. Thus, given the present low level of interest rates, financing conditions in the euro area are expected to remain very loose by historical standards. Nominal long-term rates, which since autumn have steadily decreased in tandem with disappointing economic data to their lowest levels since late 2016, are expected to pick up only modestly and remain below levels reached at the end of 2018. The high stock of assets purchased under the Expanded Asset Purchase Programme (EAPP) in the Eurosystem’s balance sheet, in combination with the continued reinvestment of maturing securities, should help keep nominal long-term rates low, overall. On the short end of the yield curve, high excess liquidity, in combination with the ECB’s forward guidance, should keep short-term money market rates at very low levels and support favourable lending conditions further on. Indeed, in the money market, the overnight rate (EONIA) has continued to remain only slightly above the ECB’s deposit facility rate in recent months, reflecting high excess reserves in the banking system. Similarly, the three-month Euribor rate remained near record low levels since the autumn.

In real terms, short-term rates have increased from their all-time lows in October 2018 on account of weakening headline inflation (see Graph I.81), but still remain below the levels of early 2018. Real long-term interest rates, which have been negative since mid-2014, have decreased somewhat since the beginning of the year. While lower long-term inflation expectations largely offset the decline in nominal long-term rates at the end of last year, they only decreased slightly in the first three months of 2019, which in combination with the further decrease in nominal rates resulted in lower real long-term rates.

Looking ahead, overnight rates are assumed to remain close to current levels over the whole forecast horizon, as suggested by EONIA forward rates. At the time of writing, markets had fully priced in a 10 bps. rate hike only for the first quarter of 2021. This represents a considerable time premium to the calendar-based leg of the ECB Governing Council’s forward guidance, according to which interest rates are expected to remain at present levels until at least the end of 2019, indicating that markets put increasing weight on the state-based leg of forward guidance.

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inflation is expected to further decrease slightly over the remainder of the year before picking up again in 2020, this should altogether lead to slightly higher real short-term interest rates in 2019, followed by a reversal in 2020, with real short-term rates remaining clearly in negative territory. At the same time, forward rates suggest a slight but gradual rise in nominal long-term rates over the forecast horizon, which should eventually also translate into slightly higher, but still negative, real long-term rates, as long-term inflation expectations increase at a slower pace, as currently anticipated by markets.

The transmission of these developments to nominal financing conditions in the non-financial private sector is captured by the composite credit cost indicators (CCCI) for non-financial corporations and households (see Graph I.82). Although developments on the long end of the term structure typically dominate in the CCCI, the decrease in nominal long-term money market rates since last autumn did not go hand in hand with a similar decrease in borrowing costs for non-financial corporations and households as captured by the CCCI. While credit costs for households fell only marginally on account of largely unchanged rates on housing loans, which have moved sideways amid small fluctuations since mid-2017, non-financial corporations’ credit costs actually increased slightly until January. This reflected offsetting movements by medium- and long-term loans, which decreased in line with long-term money market rates, and increasing corporate bond yields, likely reflecting higher risk premia. This upward trend was reversed in February, when corporate bond yields declined considerably, resulting in a somewhat lower CCCI for non-financial corporations overall, compared to the autumn.

The geographical make-up of the euro area’s fiscal stance does not reflect the adjustment needs in the high-debt Member States. In particular, in 2019, an increased deficit in the structural balance is forecast in Italy and Spain, while a broadly neutral fiscal stance is projected in Belgium and France. As for large Member States that run structural surpluses, Germany and the Netherlands are

---

The euro area fiscal stance is set to be expansionary in 2019 and 2020 when measured by the discretionary fiscal effort that Member States are expected to implement. In particular, primary expenditure (net of one-offs and cyclical unemployment benefits) is set to increase at a rate above medium-term potential growth, while on the revenue side some discretionary tax cuts are envisaged. For further details on the methodology to compile the discretionary fiscal effort, see Carnot, N. and F. de Castro (2015), ‘The Discretionary Fiscal Effort: an Assessment of Fiscal Policy and its Output Effect’. European Commission, Economic Papers 543 (February 2015).
expected to use part of their fiscal space to support growth prospects (Graph I.84).

Belgium, Spain, France and Italy are set to run sizeable structural deficits in 2019 combined with debt levels close to or above 100% of GDP, suggesting that further fiscal adjustment is needed (Graph I.85).

The policy mix in the euro area mainly reflects the interplay between financing conditions and fiscal policy (see Graph I.86). On the monetary side, the policy measures taken by the ECB since the end of 2014 have in recent years exerted significant downward pressure on nominal long-term rates. However, monetary easing has only been partially transmitted to real rates, as long-term inflation expectations declined over the same period and only started to pick up towards the end of 2016, before declining again since mid-2018. Meanwhile, developments in the euro’s exchange rate also impact broader monetary conditions in the euro area and the steady depreciation of the euro throughout last year has had an additional easing effect.

Despite the expected gradual increase in real long-term rates over the remainder of the year, average real long-term rates for 2019 (derived from the 10-year swap rate deflated by inflation expectations) are expected to be markedly lower than in the previous year due to their considerable decrease over in first three months. They are expected to increase in 2020, albeit at a gradual pace and remain below their 2018 average. Thus, overall financing conditions should remain very supportive of growth. At the same time, the fiscal policy stance is expected to support economic growth in the 2019-2020 forecast period as it is projected to be mildly expansionary.

10. RISKS

In the first quarter of 2019, initial deadlines for US-China trade negotiations and Brexit have passed with neither of these issues having been resolved, implying that these uncertainties will continue to loom large. In addition, the central scenario of the forecast is surrounded by other important risks. While some previously identified risks have diminished, substantial risks to economic growth in the euro area still exist and many of them are interrelated with each other. Many of these risks are stemming from the external environment (see Section I.2).

Some previously identified risks have materialised or diminished...

In the autumn, the risks included a continued (and to some extent) stronger-than-projected slowing of global economic growth and foreign trade as well
as a more significant slowing of output and trade growth in China. These risks have partially materialised and entered into the central scenario of the spring forecast. The formerly emphasised risks in the US such as a fiscal cliff and an overheating that could trigger a faster-than-expected tightening of monetary policy with spillovers mainly to emerging markets has also diminished in recent months, particularly since this year’s FOMC decisions and statements. As regards trade tensions, the ongoing negotiations between the US and China about their trade relations have brought a truce of indefinite duration for the previously announced additional increase of tariff rates and thewidening of trade volumes that are subject to tariffs. Accordingly, these measures are no longer in the central scenario (as they were in the autumn forecast) but have moved into the risks surrounding the central scenario.

• An escalation of trade tensions or higher trade uncertainty. Given the EU’s position as a highly open economy with large export-dependent economies, the evolution of trade disputes will have an important bearing on the growth projection. The tariffs and trade disruptions imposed so far seem to have had relatively modest direct effects on the global economy. But trade uncertainty remains elevated, for example in the US economy (Graph I.87) but also in the EU. The outcome of the ongoing US-China negotiations could provide some relief, but even an agreement would unlikely mark the end of disruption.

• Also geo-strategic concerns could exert a stronger impact on cross-border investment and trade than currently envisaged (e.g. related to Iran sanctions). Because of extended or new sanctions, higher import prices could raise inflation to an extent that forces central banks to adopt a less accommodative policy stance. Beyond the short term, the persistence of trade tensions and trade uncertainty could result in the transformation of global value chains into more regional value chains, which would involve a loss of efficiency and growth potential.

• Increased tariff rates on US imports of cars from the EU. Empirical analysis suggests that a substantial increase in tariff rates would have a significant and very disruptive impact on economic activity. (77) As already highlighted in the autumn forecast, the US government has investigated the implementation of increased tariff rates on US imports of cars and parts from the EU. (78) As US authorities have in the meantime prepared and submitted a report on
the subject to the US government, there is a timeline up to the second half of May for responding to the report. Higher import tariffs would have a direct impact by raising car prices in the US (or squeezing margins) and lowering sales to the US but also knock-on effects on other sectors and indirect effects on financial market sentiment and business confidence.

- A sharper-than-projected or more persistent slowdown in the external environment could negatively affect activity in the EU’s trading partners (see also Section I.2). This could result in the slowing of economic growth in several advanced economies that is not offset by a more positive outcome in emerging market countries like China and the countries that had been in deep recessions last year, e.g. Argentina and Turkey (see Section I.2). Weaker-than-expected economic growth in China could impact negatively on commodity exporting developing and emerging economies (via global commodity prices), deteriorate investor sentiment and lead to tighter financial conditions.

- A ‘no deal’ Brexit. The central scenario is based on the technical assumption of unchanged trade relationships between the UK and the EU over the forecast horizon. A ‘no deal’ Brexit would disrupt the almost frictionless functioning of goods, labour, and financial markets and would dampen economic growth, particularly in the UK, but also in the EU27, though to a minor extent. In addition, large swings in oil prices, for instance caused by an intensification of geopolitical tensions in the Middle East, could have negative effects on global growth, even if positive terms of trade effects of lower (higher) oil prices in oil-importing countries would push (lower) the purchasing power of households due to offsetting effects in oil-exporting countries.

...but also related to vulnerabilities originating in Europe...

Key sources of risk originating mainly in Europe include renewed financial market turmoil, a rekindling of worries about the sovereign-financial sector nexus in a set-up with high debt, and adverse effects of populism and political uncertainty.

- Renewed financial market turmoil. The long period of unconventional monetary policy since the crisis has globally been accompanied by increased indebtedness of corporates with the aggregate corporate debt-to-GDP ratio currently at historically high levels. Amid high debt and high asset prices, there is a risk of complacency in financial markets. By accommodating downside risks to economic growth in the short term, vulnerabilities could build up that amplify downside risks in the medium term. Sharp changes in market sentiment cannot be excluded. This could create potential for additional periods of financial turmoil, which would be detrimental to economic activity and put financial stability in peril.

- Debt-related economic and financial vulnerabilities. Concerns over fiscal sustainability could push up borrowing costs in some vulnerable euro area Member States. This would not only weigh on the economic and financial situation of the country directly affected, but could also spill over to other countries, cause financial fragmentation and rekindle worries about the sovereign-financial sector nexus with stress in the banking sector and in the bond-holding insurance sector possibly passed on to non-financial companies and households.

- Populism and political uncertainty could rise and lead to less growth-supportive policies. As a result, there could be a pullback in private investment. Moreover, market participants could start reconsidering the safety of sovereign debt, which could raise risk premia and interest rates.

Apart from these substantial risks, in the short term, some of the temporary impediments that slowed economic growth in 2018 could prove to be more persistent than currently envisaged, which would result in weaker growth.

...which appear in combination to outweigh the upside risks...

Upside risks feature less prominently than downside risks in the external environment.

Several of the aforementioned downside features could also turn into the opposite direction and result in a stronger-than-expected continuation of the economic expansion in Europe.

- **Successful policy measures could strengthen economic growth** more than expected. Macroeconomic stimulus in China could exert a stronger impact than projected. A more accommodative monetary policy in the US could result in a more moderate slowing than currently expected, with a more favourable development of global financing conditions that would benefit emerging market economies than currently expected. A stronger external environment would particularly provide additional support to export-oriented sectors and Member States in the EU.

- **Resolved trade disputes and diminishing uncertainty.** For example, trade uncertainty is likely playing a role in the manufacturing slowdown so that the resolution of trade disputes and the withdrawal of already implemented tariffs could boost confidence and release pent-up investment demand with a positive impact not only on manufacturing but on overall economic growth.

- **Domestic, fiscal stimulus in Europe could prove stronger than expected.** An upside risk to economic growth in the EU relates to a stronger-than-assumed fiscal loosening in countries with fiscal space that could result in stronger domestic demand and push growth, in particular in 2020 if the period of very moderate growth persists.

- **The confidence among business and consumers may be less sensitive** to trade tensions and policy uncertainty than assumed. The impact of trade tensions, domestic headwinds, and elevated uncertainty could then be much smaller than currently expected. As a result, domestic demand could be even more resilient and economic growth could continue at a stronger pace than forecast.

...with the overall growth impact strongly depending on policy responses.

The risks surrounding the central scenario remain interrelated and although central bankers in the US and Europe and policymakers in China have already responded to risks in their constituencies, the materialisation of important downside risks could still derail the economic expansion. But the size of the potential damage of a realisation of downside risks depends on policy responses.

Under the assumption of the absence of policy reactions that would follow the materialisation of risks to the euro area growth outlook, the balance appears to be on the downside. This is also visualised in the fan chart (Graph I.88), which depicts the probabilities associated with various outcomes for euro area economic growth over the forecast horizon and shows the most likely development in the darkest area. The very high degree of uncertainty of the central projection is reflected by the large width of the fan chart, most notable in 2020, and the depicted skew of the distributions of the forecasts illustrates the balance of risks of the forecasts, which is seen on the downside.

Risk to the inflation outlook relate to sources of external price pressures...

In recent months, a number of downside risks to the inflation outlook have materialised, while others have diminished. Oil prices fell sharply towards the end of last year and only rebounded partially, and domestic price pressures have been curbed a slowdown in economic activity. But some important risks have remain in place.

Lower commodity prices, which could arise in response to an unexpected deterioration in the global economic outlook could lower external price pressures such as those related to the oil price. On the upside, a faster-than-expected rebound in the external environment could push commodity prices and lift external price pressures. An escalation of trade tensions could also put
upward pressure on prices via higher import prices, e.g. due to tariffs, or via adjustment costs in the most affected sectors.

...and the strength of domestic price pressures...

A sharper-than-expected or more persistent slowing of economic activity in Europe could weaken the upward movement of wages and reduce the pricing power of companies, which would dampen the domestic price pressures. Also on the downside, the protracted period of low inflation could have a more negative impact on the anchoring of medium-term inflation expectations than visible in recent surveys (e.g. in the Survey of Professional Forecasters) and included in the central scenario. This could trigger a further downward movement of inflation. On the upside, the recent rapid increase in house prices in some Member States has increased the possibility of an abrupt price correction, which would lower housing-related components in the inflation basket.

...with the downside risks looking slightly more pronounced.

Overall, in light of the risks surrounding the growth projection, the balance of risks surrounding the inflation outlook also appear to be slightly skewed to the downside.

(81) See also Chapter 2 of the IMF’s Global Financial Stability Report, April 2019.
Euro area real GDP is forecast to grow by 1.2% in 2019, 0.7 pps. lower than expected in the 2018 autumn forecast and below its long-run trend for the first time since 2013. The downward revision of the forecast for real GDP has been accompanied by a weaker outlook for inflation and a slight reduction in the forecast for the euro area’s trade balance. The pace of employment growth is also expected to moderate. This box discusses the main drivers of expected growth in 2019 and the revisions compared to the autumn forecast through the lens of a structural model.

The advantage of using a detailed structural model to decompose macroeconomic dynamics is that such models exploit the rich information provided by the data. In particular, models allow for the driving forces to be identified on the basis of restrictions imposed by the model equations, i.e. by economic theory, across variables and over time. The sign and size of the different demand and supply shocks is determined by their ability to fit not only GDP, but also other observed variables (and their co-movement), such as consumption, investment, trade and employment.

The analysis builds on the Global Multi-Country Model, which is a macroeconomic model in the New-Keynesian tradition with micro foundations derived from utility and profit maximisation by households and firms respectively, featuring frictions in goods, labour and financial markets. The analysis uses a configuration with two regions, the euro area and the rest of the world (RoW), which has been estimated using quarterly data for the period from 1999-Q1 to 2018-Q4. The estimation of the model identifies the shocks, inspection of which provides an interpretation of the data from the perspective of economic theory.

The large number of shocks (the model includes 36 types which reflect the rich dataset) are summarised into seven groups of drivers, namely: (1) shocks to euro area productivity; (2) euro area labour and goods market adjustment as captured by wage and price mark-up shocks; (3) oil price shocks; (4) domestic demand shocks, i.e. changes in euro area consumption and investment demand that are not explained by fundamentals such as household income, interest rates and return expectations on capital and financial assets, and discretionary changes to fiscal policy; (5) euro area monetary policy shocks that capture deviations of short-term interest rates from the estimated policy rule; (6) exchange rate shocks, which affect the euro exchange rate independently of the monetary policy stance; and (7) shocks to world demand and international trade, including foreign demand and supply shocks and deviations of trade from the estimated demand and pricing equations. The remaining shocks and effects of initial conditions are summarised in ‘others’. The model-based decompositions in the following sections identify the importance of each of these groups of shocks.

The GDP growth slowdown in 2019 is driven by demand factors...

Graph 1 provides the model-based decomposition of annual real GDP growth. The solid black line depicts the historical data, and the dashed line represents the European Commission’s forecast for 2019. The coloured bars indicate the contribution of the driving forces to deviations of GDP growth from its long-run trend of 1.3%. Bars above (below) long-run growth indicate positive (negative) contributions.

(1) The exogenous factors that drive the short- and medium-term deviations of endogenous variables (including GDP, inflation, domestic demand, and trade) from their long-run trend paths.


(3) It should be noted that differences in identified shocks between two forecast vintages can result from the forecast revision itself, but also from revisions in historical data between two vintages.

(4) Trend growth of real GDP is determined by trend productivity and trend labour force growth.
(negative) contributions to GDP growth in a given year. The sum of positive and negative contributions matches the data (black solid line) for any point in time and the forecast (dashed line) for 2019. The trend line illustrates that expected GDP growth is below trend growth in the forecast for 2019.

The decomposition of real GDP growth points to world demand and international trade as a key driver of the growth slowdown between 2018 and 2019. Its contribution to annual GDP growth changes markedly (-0.7 pps.) between the two years. Domestic demand shocks become a dragging factor of similar size (-0.6 pps.). The contributions to deviations from trend growth move from positive in 2018 to negative in 2019 for both drivers. The shift in the contribution of foreign factors is dominated by a slowdown in trade associated with slowing growth in euro area export markets and some market share losses. The main component in the slowdown of domestic demand growth is a slowdown in investment growth. According to the model’s estimated shocks, however, the decline in export growth and investment is not exceptional by historical standards and points to a rather cyclical, temporary, impact on economic activity in the euro area.

On the upside, the negative growth contribution from the euro’s appreciation in 2018 abates in 2019, for which the forecast assumptions display a moderate depreciation against major currencies. The negative contribution from oil prices also diminishes in 2019, as the forecast assumption incorporates little price change after significant oil price increases in 2018. The model identifies a persistently positive and slightly strengthening contribution to growth from monetary policy, which remains expansionary compared to the estimated monetary policy rule in the model. Moderate wage growth in combination with falling unemployment, which the model explains by favourable labour supply shocks, contributes positively to real GDP growth through positive employment effects, but without further strengthening between 2018 and 2019.

The outlook for the labour market, however, shows employment growth in the euro area slowing less than real GDP growth. Importantly, employment continues to grow faster than the labour force, leading to a decline in the rate of unemployment. Real wage and labour cost growth are, furthermore, expected to remain unchanged or to slow slightly despite the projected decline in unemployment. The combination of falling unemployment and constant wage growth is interpreted by the model as a result of positive adjustment on the supply side of the labour market, leading to wage moderation (Graph 2).

The downward revision of expected real GDP growth in 2019 by 0.7 pps. compared to the 2018 autumn forecast is the result of a few factors. Actual euro area real GDP growth for 2018 was by 0.2 pps. lower than expected in the autumn, primarily due to a weaker contribution from domestic demand and external trade. Contrary to the present forecast, the 2018 autumn forecast included stronger growth in private consumption and did not incorporate the pronounced trade slowdown present in the current assessment. Investment demand and productivity growth have also seen a downward revision in the current forecast. All these elements are temporary factors affecting GDP growth. The long-term trend component of euro area growth in 2019 has remained unchanged.

(Continued on the next page)
Inflation, as measured by the annual growth of the private consumption deflator, is forecast to slow slightly to 1.4% in 2019 from 1.5% in 2018 (graph 3). The outlook for changes in private consumption price inflation between 2018 and 2019 is dominated by the outlook for oil prices. Given the important weight of fuel and energy in the consumption basket, transmission of oil price shocks to the private consumption deflator is strong and immediate. After increasing by 31% in 2018, oil prices in USD are assumed to fall moderately in 2019. Hence, the inflationary effect of oil price shocks in 2018 disappears in 2019. The change in the oil price assumption alone reduces inflation by -0.6 pps. in 2019 compared to 2018. The anti-inflationary impact of exchange rate shocks in 2018 diminishes the inflation outlook for 2019 as the effective appreciation of the euro in 2018 gives way to mild depreciation in 2019, although previous appreciation still affects inflation through the persistence in the production cost channel to some extent.

International trade contributes to the slowdown in inflation through a slowing of euro area import price growth. The slowdown of export growth, which is an important factor behind weakening GDP growth, has little immediate impact on consumer price inflation, due to the limited sensitivity of prices to activity in the short term. Instead, the contribution of exports to activity remains above its long-term average, which explains why the overall contribution of trade and world demand to inflation is still positive. Domestic demand continues to weigh negatively on the inflation outlook, but its negative effect does not increase in 2019 because inflation responds sluggishly to economic activity. Wage moderation, inferred from low wage growth despite positive employment dynamics, continues to dampen inflation in 2019.

Compared to the AF 2018 forecast, the current expectations for inflation are lower by 0.3 pps. The main factor behind the revision is a change in the oil price assumption, where the AF 2018 was based on a stronger and sustained price increase, complemented by upward pressure from stronger foreign and domestic demand.

**but affect the trade balance.**

The euro area’s net exports of goods and services remain in surplus, but are forecast to decline from 4.0% of GDP in 2018 to 3.8% of GDP in 2019. The major driver of the decline in the trade surplus is the negative impact of the euro’s depreciation on the terms of trade and the slowdown of world and export demand (counteracted in this group by a decline in import prices), whereas oil price developments raise net exports compared to 2018 by reducing the import bill.
Banks remain vital to the functioning of the EU economy notwithstanding an increased use of market funding by non-financial corporations over the last decade. Large corporations began disintermediating the banking sector during the sovereign debt crisis in 2010-2012, as high interest rates and credit rationing in some Member State economies, encouraged them to turn to financial markets, instead. More recently, progress made on the Capital Markets Union also contributed to an increased role of financial markets in funding the private sector. However, for households and SMEs – the backbone of the EU economy – banks remain the predominant source of funding. (1)

The banking sector’s ability to perform its role of main funding provider to the real economy is subject to its own financial health and stability. A lot has been done over the last ten years to make the banking system safer, notably a new supervisory and resolution architecture (the Banking Union) with a renewed institutional setup and a general overhaul of the regulatory framework.

This box shows that although the resilience of the euro area banking system appears to have improved, a number of challenges remain. (2) In particular, the profitability of euro area banks in general remains weak. Moreover, the quality and the composition of banks’ assets continue to pose some risks in certain Member States.

**Banks are more resilient**

The resilience of the euro area banking sector appears to have improved since the crisis, as banks have adapted their funding structures and strengthened their capacity to absorb losses in response to the Basel III regulatory framework and the EU’s Capital Requirements Regulation and Directive (CRR/CRD4). The sector has also benefited from the European Central Bank (ECB)’s accommodative monetary policy while the EU’s new common institutional framework has contributed to improving financial stability in the euro area and beyond. (3)

Banks’ liability structures suggest that their funding has become more stable, less expensive, and more immune to tensions in financial markets. This has been achieved by banks shifting away from wholesale markets towards deposits and ECB funding. The importance of market funding (4) has declined in most euro area Member States since 2008. This is also connected to relatively higher market funding costs, particularly during periods of tensions in financial markets. As a result, the reliance of euro area banks on market funding amounted on average to less than a third of their total liabilities at the end of 2017 (the most recent year for which data are available). (5) Just before the beginning of the crisis, market funding accounted for around 40% or more in most euro area Member States (see Graph 1). (6)

Meanwhile, deposits have risen quite significantly in all Member States, outpacing the rise in loans in most cases and resulting in lower loan-to-deposit ratios in the vast majority of countries with the notable exception of Greece. Deposit interest rates have also declined significantly and converged towards zero in most euro area Member States. Funding from the ECB, particularly in the form of Targeted Longer-term Refinancing Operations (7) The EU banking union is however not complete with only the first two pillars functional (Single Supervisory Mechanism, Single Resolution Mechanism). In particular, the SSM has been instrumental in ensuring convergence of supervisory standards and practices. The European Deposit Insurance Scheme (EDIS), as the last pillar, would complete the banking union.

Market funding refers to wholesale funding sources i.e. bond and money markets.

Total liabilities exclude capital and reserves.

There are no data available for Spain and Ireland.

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(2) The analysis conducted in this box focuses on euro area banks to ensure as much as possible cross-country comparability. This is not to say that most of challenges and issues discussed in this box are also true for EU banks outside the euro area.


(4) The EU banking union is however not complete with only the first two pillars functional (Single Supervisory Mechanism, Single Resolution Mechanism). In particular, the SSM has been instrumental in ensuring convergence of supervisory standards and practices. The European Deposit Insurance Scheme (EDIS), as the last pillar, would complete the banking union.

(5) Market funding refers to wholesale funding sources i.e. bond and money markets.

(6) Total liabilities exclude capital and reserves.

(7) There are no data available for Spain and Ireland.
(TLTROs), has also come at low cost and has been supportive for banks’ funding conditions.

The latest European Banking Authority stress test confirms that EU and euro area banks have been successful at improving their capital ratios and therefore their capacity to absorb losses and withstand severe shocks. Tier 1 ratios increased across the euro area, from below 10% in 2008 to around 15% in 2018 (see Graph 2). (7) The ratio of capital to risk-weighted assets (RWA) has risen both as a result of capital increases and a reduction in banks’ RWA. Improvements in the Tier 1 capital appear to be less generalised and has even decreased in some euro area Member States. (8)

Meanwhile, the decline in RWA has been substantial and broad based across euro area Member States. The RWA have decreased in most Member States but to varying degrees. (9) Moreover, the increased regulatory and supervisory attention paid to internal models has contributed to the consistency of the RWAs of internal models, and has lifted RWAs in some banks with artificially low RWAs. (10) The sharpest reductions were recorded in Germany and Spain although substantial decreases have also taken place in Ireland, Italy and the Netherlands. However, the relative riskiness of banks’ assets (as measured by the share of RWA in total assets) has only marginally declined. This is largely due to an increase in loans, particularly those provided to SMEs, which are considered risky and have therefore relatively high-risk weights.

**Lending remains the key activity of euro area banks**

Loans have increased as a proportion of total assets in the euro area banking sector. Given that large corporations have partly migrated to markets for their external funding, bank lending to SMEs and to households in the form of mortgages has been growing much faster than lending to large corporations since the sovereign debt crisis. Developments in bank lending activity, however, have evolved differently across the euro area, leading to a rebalancing (see Graph 3).

The share of loans in total assets has declined the most in Member States where this share was relatively high in 2008 and where lending growth prior to the 2008 crisis was strongest (e.g. Spain, Slovenia, Greece). At the same time, it has increased in Member States that had low loan-to-asset ratios in 2008.

(7) The Tier 1 capital ratio is used in this box in order to ensure a greater comparability of banks’ capital situation relative to 2008 when less strict capital regulatory requirements prevailed. However, the common equity Tier 1 (CET1) represents the main variable used under the most recent capital regulatory requirements.

(8) In 2018-Q1, the first time use of International Financial Reporting Standard 9 (IFRS 9) impacted negatively on capital ratios as it requires higher provisioning. The International Financial Reporting Standard 9 introduced an “expected credit loss” framework for the recognition of impairments. It is a more forward-looking approach than its predecessor and will result in more timely recognition of credit losses. More pronounced decreases in capital ratios were observed in euro area Member States more affected by the sovereign debt crisis where capital ratios had been already lower.

(9) In some Member States, the increase in the share of sovereign debt holdings, which have zero-risk weights, have contributed to a decline in RWA.

(10) In December 2015, the ECB decided that it would carry out a targeted review of internal models (TRIM). On-site investigations started in 2017, following initial preparatory work in 2016 to identify the underlying methodology and tools and the models to be reviewed. Further on-site investigations will continue in 2019.
Bank lending conditions have converged across the euro area

During the euro area banking and sovereign crisis in 2010-2012, a number of dysfunctions within the banking sector such as the sovereign-bank nexus, deteriorated asset quality and lower capital ratios impaired the transmission of the ECB’s monetary policy. The progress made since then has been substantial but cross-country dispersion in most indicators for the banking sector remain. Positively though, bank lending rates for households and non-financial corporations have re-converged across the euro area since 2012, and are back to pre-2008 levels.

Resilience, as reflected by capital ratios, increased in all Member States between 2011 and 2018, but the dispersion of capital ratios in 2018 was still comparable to that prevailing in 2011. Meanwhile, interest rates for non-financial corporations declined for all countries and the dispersion narrowed significantly. It appears that in 2011 a negative correlation prevailed between capital ratios and bank lending rates with the least capitalised banks charging higher interest rates. This correlation is no longer apparent in the 2018 data (see Graph 4). However, this does not necessarily suggest a single causal link as other factors, such as the sovereign-bank nexus and asset quality, also played a role in the dispersion of interest rates during the 2011-2012 period.

Profitability remains weak

Banks’ profitability varies significantly across banks and despite some positive examples remains in many cases weak with lower levels in 2018 than in the pre-crisis period. While average profitability for euro area banks, as measured by the return on equity (ROE), was around 10% before the crisis, it has declined during the crisis and has not improved significantly since. It now stands at around 6.5%, which is well below the cost of equity, estimated at around 8% to 10% on average. Behind this decline in profitability lies both sluggish revenues and persistently high costs since the crisis. These are driven by inadequate business models, competition including from non-banks and, in some cases, crowded ‘overbanked’ domestic markets.

In addition to the convergence in bank lending rates, non-price credit conditions have also improved in all Member States since the peak of the euro area sovereign crisis. However, heterogeneity in bank

loan supply conditions persists across euro area Member States and has been related, inter alia, to differences in the composition and quality of assets (see discussion below). At the same time, the cross-country differences in lending volumes come on the back of differences in loan demand linked to Member States’ economic and sectoral specificities (see financial market section).

Overall, some of the factors that hindered the uniform transmission of monetary policy appear to have improved in recent years (e.g. capital ratios). Still, banks in some Member States continue to face structural weaknesses that could hamper their intermediation capacity and pose financial stability risks.

Developments in the Net Interest Income (NII) are a key differentiating factor between over- and underperforming banks in terms of profitability as it is the most important component of euro area bank revenues. Since the crisis, the bank NII has declined at the euro area level, although the situation differs among Member States (see Graph 5).

The protracted low interest rate environment and flattened yield curves have contributed to narrowing of net interest margins while the volume effect on interest-earning assets varies across banks. Banks with rising NII have managed to offset the negative impact on net interest margins with robust growth in interest-earning assets, while the banks with lower NII have recorded a decline in

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(11) See the quarterly series of ECB Bank Lending Survey.

(12) The NII contributes by nearly 60% to banks’ revenues, followed by net fee and commission income (around 30%) and net trading income (5%), (EBA 2018, Risk Assessment Report).

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both margins and volumes. In some Member States, banks have benefited from their activities in regions with higher yielding assets, which have helped to improve their NII. A competitive environment on the domestic lending market may also explain differences in bank NII across euro area Member States.

On the cost side, progress has been modest, with the average cost-to-income ratio at the euro area level unchanged since the end of 2008 (see Graph 6). This measure of banks’ efficiency appears to have improved in the euro area Member States where the cost-to-income ratio was generally higher than the average at the start of the crisis. However, the dispersion across Member States is still wide, with the cost-to-income ratio ranging between 40% and 74% in the last quarter of 2017 (the most recent period for which data are available). From this data, it is also clear that the cost-to-income ratios remain very high for banks in several Member States.

Overall, the low and poor prospects for NII combined with high operating costs suggest that the euro area is ‘overbanked’ and that there is a need for structural changes such as cross-border consolidation. According to the ECB’s analysis, the best performing banks in the euro area in terms of return on equity between 2009 and 2017 were those that were able to significantly reduce their costs, invest heavily in IT and diversify their sources of income. The ECB also indicates that levels of non-performing loans (NPL) and the pace of the reduction of these levels explain to a large degree the observed differences in profitability levels across banks over the last few years. Banks with faster reduction of NPL gradually improved their NII and hence the return on equity while banks with slower reduction of NPL continued to display persistent low return on equity.

The quality and composition of bank assets remain challenging in some Member States

Asset quality, particularly on loan portfolios, has remained very heterogeneous across euro area Member States. While NPL were not an issue in 2008, NPL rose significantly in some Member States until 2014 when they started to decline gradually, including in those Member States where


15] The comparison with 2008 may however be somewhat biased for some countries due to the rapid decline in bank revenues (the denominator of cost-to-income) while cost adjustments tend to be slower.
16] High cost levels in the banking sector are also due to the need to replace old ICT systems and invest in new financial technologies. Legal risks and fixed costs, such as regulatory compliance costs are also significant for small banks.

(Continued on the next page)
Box (continued)

they had increased the most. In 2014, the asset quality review conducted by the ECB with regard to the significant banking groups was a milestone for a more consistent recognition of NPL. The reduction of the stocks of NPL since 2014 has been helped by cures, liquidations and write-offs while an increasingly active secondary market for NPL has also contributed significantly, notably in Italy (19) (see Graph 7). In its third progress report on the reduction of NPL, the Commission highlighted that NPL in the European banking sector had declined further, now standing at an EU average of 3.4% (Report issued on 28 November 2018). In a number of Member States, coverage ratios of NPL have increased compared with 2014 when levels of NPL peaked, which suggests that euro area banks have made efforts in terms of provisioning since 2014. These will need to continue if provisioning levels are to return to where they were before 2008. (20) In March 2018, the Commission presented an Action plan to tackle high NPL ratios, and to speed up progress already made in reducing NPL and prevent their renewed build-up.

Market perceptions of banks remain negative

Despite the progress made on making banks safer, many investors retain a negative bias towards the euro area banking sector based on its poor profitability. Over the last year, equity prices of euro area banks fell significantly, underperforming other financial firms and the global market (see Graph 9).

Meanwhile, banks’ credit default swap spreads, which reflect their credit risk, widened broadly with sharp spikes for some banks. These developments reflect investors’ scepticism about the sustainability of banks’ profitability. In some euro area Member States, this has been accentuated by concerns about developments and shows that this particular objective of the Banking Union has not yet been achieved.

Graph 8: Banks’ holdings of domestic sovereign debt as share of total assets

Graph 9: European financial stocks by sector

In terms of the composition of bank assets, one important aspect is the high share of domestic sovereign debt in some euro area Member States. Banks holdings of domestic sovereign debt have increased since 2008 in the most vulnerable Member States (see Graph 8). This signals a rising risk due to the kind of harmful feedback loops seen during the crisis as it perpetuates a dangerous degree of interdependence between banks and their sovereigns. This could affect bank funding conditions if tensions were to hit sovereign debt markets. The episode of rising sovereign yields in Italy last year came as a reminder of such adverse developments and shows that this particular objective of the Banking Union has not yet been achieved.

(18) In this box, data on the gross non-performing debt instruments have been used to ensure a greater comparability over time.

Banks may face a number of challenges in the near future

Market expectations for interest rates point to low levels and a flat yield curve over the forecast horizon. This reflects expectations for continued growth but at lower pace than in 2017 and 2018 and a subdued inflation outlook. This context is rather unfavourable for banks as NII may struggle to grow over the coming years if interest margins remain narrow and lending volume growth is modest. (21) In addition, more subdued economic growth could lead to a reversal in the trend of declining NPL. All these factors could keep NII levels low and add pressure on banks to intensify their cost-cutting efforts at a time when they need to invest in digitalisation and protection against cyber-attacks.

Low profitability and a continued negative market perception could lead to additional pressure on funding costs in a context where banks have to meet forthcoming loss absorbing buffer requirements, i.e. Minimum Requirement of own funds and Eligible Liabilities (MREL) in the EU. (22) This would raise the cost of funding for banks as bail-inable instruments are more expensive than senior debt securities and certainly more expensive than the ECB funding.

If investor sentiment towards the banking sector deteriorates further, returns on equity could decline, as it could lead to higher funding costs while the cost of equity would increase. This risk of a widening gap between the return and the cost of equity appears for some banks and could only be addressed by structural changes in the banking sector. (23) Indeed, a more efficient banking system would not only lead to improved return on equity but also convince investors on banks’ safety and the sustainability of profits and hence lead to lower cost of equity. (24) A convergence between the return and the cost of equity would allow banks to raise capital when needed and ensure financial stability.

Conclusion

According to a number of indicators, the resilience of the euro area banking sector has clearly improved since the sovereign debt crisis and compared to pre-2008 levels. In particular, banks’ capacity to absorb losses as measured by their capital ratios has increased and funding structures have become more stable and less expensive. However, the performance of a number of indicators varies across banks, which also results in a still high dispersion across Member States. Meanwhile, despite differences in banking systems across the euro area, the transmission of monetary policy has become more effective, with interest rates on loans to the private sector converging across the euro area. Despite these clear achievements, banks continue to face certain challenges in the euro area and the EU.

The principal challenge is the weak profitability. Banks may need to reduce costs and diversify income sources if bank net interest income (NII) continues to stagnate in a context of persistently low interest rates and increased competition, including from non-banks. While the latest stress tests from the European Banking Authority showed that the resilience of EU banks has improved overall, a number of risks such as worsening macroeconomic conditions or renewed tensions on specific sovereign markets could hurt banks in some Member States disproportionately. Preventing this situation requires monitoring and well-designed policies in order to preserve financial stability and the effective transmission of monetary policy. Completing the Banking Union with a European common deposit insurance scheme (EDIS) and accelerating the integration of EU capital markets to enhance private risk sharing, should remain priorities as this would weaken the threat of the bank-sovereign nexus and enhance the stability of euro area banks.

(21) See Section I.3 for lending volumes forecast and the box “Some technical elements behind the forecast” for interest rate assumptions.

(22) The Bank Recovery and Resolution Directive (BRRD) requires banks to meet the Minimum Requirement of own funds and Eligible Liabilities (MREL) to enhance loss absorbing capacities. Aggregated MREL shortfall was estimated at €117 bn end 2017 but could rise under new BRRD2 rules. Essentially smaller EU banks are concerned by these requirements while most of the largest GSIBs have already reached the minimum TLAC (Total Loss Absorbing Capacity) requirements.

(23) See Dombret, A., Y. Gündüz and J. Rocholl, (2017), “Will German banks earn their cost of capital?”, Contemporary Economic Policy, Vol. 37, No. 1, for an empirical analysis of the German banks. However, this issue concerns a number of banks across the euro area and not particularly in Germany.

(24) See also ECB (2018), Financial Stability Review.
Box I.3: The impact of European Structural and Investment Funds on near-term forecasting

This box discusses the implications of the European Structural and Investment Funds (ESIF) (1) for near-term forecasting and assesses whether they are part of the explanation for higher growth over the forecast horizon in the main beneficiaries of these funds. ESIF are the major investment instruments in the EU budget and provide support to projects in a broad range of policy areas (2) to reduce the disparities between regions and to achieve ‘economic, social and territorial cohesion’ in the EU. (3) ESIF allocations are decided at EU level ahead of every seven-year programming period, the so-called Multiannual Financial Framework (MFF). For the current period (2014-2020), they amount to EUR 461 billion, accounting for 42% of the total MFF.

The ESIF are organised in national envelopes broken down by year and allocated mainly according to the relative regional and national GDP per capita. As a result, less developed Member States and regions receive more than 80% of the funding, giving rise to important differences in aid intensity as presented in Graph 1. On average, ESIF account for a substantial percentage of national GDP in many Member States, and over 2.5% in eight Member States, mainly Central and Eastern European countries. (4)

ESIF are an important determinant of economic activity in the main beneficiary states. From a short-term macroeconomic forecasting perspective, it is of special interest to assess the likely impact of ESIF implementation on real GDP growth over the forecast horizon. This is often difficult to forecast due to the profile of disbursements over time, which is determined by various factors, such as the phase of implementation of the funds, administrative capacity issues, etc. Yet, looking at historical data and past developments (including during and after the late 2007-2009 crisis), one can identify broad patterns of disbursements related to the MFF cycle and, in turn, estimate range-estimates of their impact on GDP. While not constituting an actual forecast, these patterns could be used as a central scenario for near-term forecasting.

The impact of European Structural and Investment Funds on near-term forecasting

Graph 1: ESIF allocations per fund and per Member State in the period 2014-2020 as a share of GDP of the same period

Note: The total ESIF allocation for the period 2014-2020 is divided by the total cumulative GDP over the same period (including forecasts for 2019 and 2020) to provide an indicative annual average.

(1) ESIF operate under a common legal framework across the EU and include the following funds: European Regional Development Fund (ERDF), European Social Fund (ESF), Cohesion (CF), European Agriculture and Rural Development Fund (EARDIF), European Maritime and Fisheries Fund (EMFF) and Youth Employment Initiative.

(2) These are inter alia Research, technological development and innovation, Information and Communication Technologies, support to Small and Medium Enterprises (SME), low-carbon economy, climate change and environment, transport education, employment and social inclusion, rural development, fisheries and maritime development and the strengthening of institutional capacity, contributing to the delivery of the Europe 2020 targets.

(3) This objective is enshrined in Article 174 of the Treaty on the Functioning of the European Union (TFEU). ESIF are also closely linked to the European Semester of economic policy coordination. In particular, operational programmes agreed between the Commission and the Member States had to take into account new challenges identified in the CSRs. There is also a link with the Excessive Deficit and the Macroeconomic Imbalances Procedures through the possible suspension of funding in case of non-effective action by the Member State concerned. Finally, the ESIF operate under a common legal framework across the EU.

(4) This comparison and further analysis in this box does not net out Member States’ contributions to the EU budget, and focuses only on the impact of payments for projects, which are finally captured in the expenditure side of national accounts.

(Continued on the next page)
Measurement in national accounts

In order to estimate the impact of ESIF on short-term GDP growth, it is useful to briefly explain the process of ESIF implementation. The seven-year investment strategy agreed between the Member States and the European Commission comprises the yearly amounts allocated to Member States in ‘envelopes’ known as ‘commitment appropriations’. They are the basis for the actual payments, which can take the form of limited ‘advance’ payments (pre-financing) or much larger ex-post ‘interim payments’ that reimburse actual expenditure certified by Member States under the principle of co-financing. (5) ESIF hence operates mostly through reimbursements that co-finance (ex-post) certified national expenditure. (6) Commitments and payments do not need to correspond to the same year. In fact, Member States may declare expenditure until the third financial year following that of the budget commitment; payments corresponding to the current programming period 2014-2020 could thus extend until 2023 (so-called “N+3 rule”). (7)

Although the data on ESIF payments collected by Commission Services for accounting purposes are ‘cash basis’, the recording of ESIF payments in National Accounts follows the ‘accrual basis’ of accounting. According to the Eurostat manual on government debt and deficit, Member States compute ESIF revenues when the actual spending on the selected project occurs, rather than the ‘cash basis’ accounting that would register revenue when the actual EU reimbursement happens. (8) This ensures that the impact of ESIF on GDP is measured when actual ESIF-related investment takes place, whether by the private or public sector, and not when the Commission reimburses the Member States. Given that the most up-to-date statistics on ESIF payment profiles are available only in cash terms, one should allow for a degree of adjustment over a central scenario built with the available data. This central scenario should be considered as a broadly indicative starting point for forecasting and adjusted on the basis of more detailed country-specific information on their intended ESIF implementation per year.

Principle of additionality and the profile of the absorption rate

The proper accounting of ESIF payments allows the identification of the short-term demand effect derived purely from ESIF-financed projects. As already mentioned, patterns of disbursement are based on a medium-term strategy set ex-ante for a seven-year period. Thus, from a macroeconomic forecasting perspective, these funds are not timed according to the cyclical position of the country, and are to be seen over a medium-term growth perspective. At the same time, there could be a risk for some ESIF-related projects to substitute or crowd-out some (national) investment rather than leverage it. This is why according to the agreed principle of ‘additionality’, which is enshrined in the ESIF regulation, Member States shall not use EU funding to replace national expenditure. (9) In practice, however, the risk of ‘crowding out’ particularly increases during periods of budgetary stress and may in certain cases stall the efficient implementation of projects.

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(5) Interim payments constitute the bulk of these payments, whereas advance payments are usually disbursed to provide some limited up-front liquidity at the beginning of a programme.
(6) The co-financing rates differ across Member States, funds and, in some cases, policy areas.
(7) In some cases, final payments could extend after the closure of the programme.
(8) This delay is due to the time it takes for receipts to be submitted by the national authorities and vetted by the European Commission. Accrual basis accounting therefore ensures that the possible misalignment between the recording of investment (accrual, just-in-time) and the timing of EU payments (cash, largely ex-post) does not have an impact on national accounts, since the investment is recorded when it takes place. For more details, please refer to Eurostat. Manual on Government Deficit and Debt. 2016.
(9) When using EU funds, Member States shall comply with the principle of additionality. According to this principle, EU funding should not replace the national or equivalent expenditure by a Member State. In the programming period 2007-2013 all Member States except Greece complied with this principle, while six of them (Czechia, Germany, Italy, Hungary, Lithuania and Portugal) observed it because of the downward revision of the baseline at the mid-term verification in 2010. The downward deviations in these Member States resulted in an actual estimated loss of public investment of at least EUR 10.7 billion in 2007-2013. In contrast, countries like Poland, Slovakia or Bulgaria were able to mobilise more national investment than expected. COM (2016) 414 final.
For instance, after the difficulties caused by the late 2007-2009 economic crisis, the EU introduced a top-up clause (10) that allows Member States, upon request, to receive a temporary reduction in national matching funds (e.g. lower national co-financing), meaning temporary budgetary relief for national treasuries, the advancement of EU payments in the financial plan, and a reduction of the risk of losing ESIF. (11) Although the clause was extremely useful as a liquidity buffer, it could not prevent a procyclical drop in public investment (Graph 2). One could in fact observe an increase in ESIF payments and a contraction in total public investment in the countries benefiting from the top-up between 2011 and 2015, partly explained by the reduction in the national matching funds for ESIF-related investment. This is relevant not only for policy reasons, but also for short-term forecasting. In the countries that used the top-up facility, the absorption rate during the previous MFF was very uneven and idiosyncratic and the absorption profile in the current MFF may be smoother and closer to an average profile. Looking forward, taking an EU average absorption rate is thus considered as more appropriate for the likely absorption for 2019 and 2020. (12)

Estimating the likely short-term impact on growth

In this section, certain assumptions are adopted to try to estimate the likely use of ESIF in 2019 and 2020 and then to arrive at an approximate contribution to GDP levels and growth rates. The results partially explain why growth in large recipients is projected to be higher than in the other EU Member States.

With the knowledge of the overall ESIF allocation and the absorption to-date, the key assumption is the profile of absorption rates for the next two years. So far, the implementation rate of the ESIF in the MFF programming period 2014-2020 has decelerated in comparison to the 2007-2013 period (see Graph 3). This is especially evident when measuring the utilisation of funds during the first five years of both programming periods (2007-2011 versus 2014-2018). Different factors contributed to this initial low uptake of ESIF, mainly the late adoption of programmes, overlaps with the previous MFF and the delay in the approval of the management and control systems of certain Member States.

On the basis of the profile of yearly payments from the previous MFF (see Graph 3), one can see that they tend to increase towards the end of the MFF period and to diminish after the eighth year when the new seven-year MFF would be already in operation. For the purposes of this analysis, it is assumed that in 2019 and 2020, each country will follow a similar EU average absorption profile as in the corresponding years (2013 and 2014) of the previous MFF, adjusted and apportioned proportionally by each country’s remaining


(11) In concrete terms, eligible countries are those under an economic adjustment programme. They could receive payments up to 10 percentage points above their maximum EU co-financing rate on all their declared expenditure. The Commission frontloaded over EUR 3 billion of ‘top-up’ for the ERDF, ESF and Cohesion Fund in Cyprus, Greece, Hungary, Ireland, Portugal and Romania from 2011 to 2015. Greece benefited mostly from this top-up facility with a total amount of 1.3 billion. Other countries only requested a partial reduction to certain programmes (i.e. Cyprus, Ireland, Portugal, Hungary and Romania) or even declined this possibility (i.e. Latvia).

(12) The average absorption profile of the EU is not very different from the average for the Member States that joined the EU in 2004 and later.

(Continued on the next page)
funds. It is further assumed that all funds will be used by 2023, that is the end of the MFF period plus the additional three years permitted. National co-financing is not included in our simulations since we are interested in providing a central scenario for the impact of ESIF payments from the EU budget to be adjusted over time with country-specific information, including national co-financing rates. The profiles calculated in these simulations respect the official figures presented in the EU Budget 2019 and the Draft Budget 2020. 

Given that the overall implementation rate up to 2018 is actually lower compared to the previous MFF for the same period (2007-2011) and that the sixth and seventh year usually show increasing payments, the assumed payments for 2019 and 2020 are quite strong and in line with the amounts in the EU budget. These assumptions are quite simple but useful to provide a reasonable central scenario for the main beneficiaries of ESIF. It is important to clarify that a full economic assessment per country would need to be adjusted on the basis of country-specific information (e.g. higher or lower multipliers due to the cyclical position, import-intensity of expenditure, overall contributions to the EU budget, etc.).

Using this profile of expected ESIF payments, the results show that ESIF-related payments could represent a substantial and increasing proportion of national GDP levels. For example, in a number of countries ESIF payments could represent more than 2.5% of GDP in 2019 and 2020 (see Graph 4). Furthermore, considering that an acceleration in payments can be expected in the last two years of an MFF, the impulse to growth (in nominal terms) over the forecast horizon is set to be quite significant in some Member States. This could reach more than 1 pps. in some countries and more than 0.5 pps. in many Central and Eastern European Member States (Graph 5). This impact is more pronounced for those countries which lag behind in absorption since it is assumed that this is fully compensated by an acceleration in payments towards the end of the MFF. Should this not materialise, or happen more gradually than expected, the impulse to GDP growth would be postponed.

Indeed, while certainly useful and indicative, these estimates have to be used with caution. As mentioned earlier, they are based on cash data on payments that may not fully reflect the actual timing of expenditure used to estimate GDP on an accrual basis. They do provide, however, a clear indication of the direction of the impulse coming from ESIF in the coming two years, which is likely to be quite positive due to an expected acceleration of the implementation of ESIF projects.

If the forecast is performed in the first three years of a MFF, then payments should take into account receipts from two overlapping MFFs (the current and the previous one). Since we forecast payments for the last two years of the MFF 2014-20, there is no overlapping between MFF cycles.

See working documents of the general budget 2019 https://ec.europa.eu/info/publications/working-documents-services-commission-2019_en and the Draft Budget 2020. The impulse to growth is calculated as the change in total ESIF payments over 2019 and 2020 as a percentage of the base GDP level in 2018. In the case of Croatia (not shown in Graph 5), this is its first MFF and these assumptions would show a stronger impact.

(Continued on the next page)
The medium-term impact

The ultimate objective of the ESIF is to achieve significant economic growth in the less developed Member States and regions to reduce their gap with the EU average. As seen in the previous section, the macroeconomic impact of ESIF is first visible over the short-term through the demand channel. Supply-side effects start to materialise over the medium term as potential output is increased due to the productivity-enhancing effects of investment in infrastructure, R&D and human capital. The impact of these investments strengthens gradually and generates large output effects in the long run. The EC’s QUEST model estimates that EU investment through the Cohesion Policy funds, which account for more than 75% of ESIF, should increase GDP by more than 2.5% on average in the major recipient countries, by 2023. For example, GDP in Croatia is estimated to be around 4% higher by 2023 than in the baseline scenario of an absence of this policy. In the long-run (2030), the increase in GDP is largest in Croatia and Poland (more than 4% in each case) and over 3% in the largest beneficiaries. (16)

Conclusion

The European Structural and Investment Funds are not only a major instrument for supporting long-term economic, social and territorial cohesion but also an important determinant of short-term economic activity over this forecast horizon, explaining part of the high growth rates especially in Central and Eastern European Member States. Whereas simulations of their medium-term impact have been extensively analysed, the short-term impact is often difficult to measure due to the variations in the pattern of disbursements over time. Yet, looking at past developments, patterns of absorption rates and the remaining funds to be utilised in the current MFF that ends in 2020, allows to estimate the likely magnitude of their impact on GDP in 2019 and 2020. These are expected to be positive both in terms of GDP levels and first differences (contribution to GDP growth) for the major beneficiaries of ESIF. The former effect is due to the magnitude of support provided, which has traditionally been substantial and broadly stable for the EU as a whole. The latter effect is due to an expected acceleration in ESIF payments and implementation at the end of the current MFF and, according to assumptions, especially in 2019. While not constituting a fully-fledged forecast (that would require further assumptions on the accrual timing of investment, multipliers by project envelope, import-content of ESIF-related investment, assumptions about national co-financing rates and ‘additionality’ of EU support) the estimates are useful to provide a horizontally consistent central scenario to be adjusted on the basis of country-specific information.

Moreover, in the context of the broader EU outlook in 2019 and 2020, ESIF can explain part of the decoupling in real GDP growth rates of the main beneficiaries from the rest of the EU. However, due to the mean-reversing property of ESIF payments over MFF cycles, other factors are likely to play a role, especially after 2019. Indeed, although yearly changes in ESIF payments do affect GDP growth, their economic impact is mostly relevant in terms of GDP levels. The central scenario estimates show that 2-4 pp.s. of GDP levels in several of the main beneficiaries in both 2019 and 2020 can be explained by ESIF payments. Followed with the right policies, these countries are likely to benefit from further positive effects in the long-term, as productivity-enhancing supply-side effects also materialise.

This technical box presents changes to the HICP methodology introduced in February 2019 and explores their impact on the inflation aggregates most commonly used in Commission forecasts.

**Box I.4: Changes to HICP methodology**

From early 2019, Eurostat implemented several modifications in the methodology used for the calculation of the harmonised indices of consumer prices (HICP). Modifications in the methodology of the calculation of HICP are carried out regularly (yearly updates of country and item weights in particular). However, the change in early 2019 is of a different nature since it affects both the way certain underlying prices are measured and introduces new ways of obtaining so-called ‘special’ aggregates using the HICP classification.⁽¹⁾

In particular, the recent modification to the measurement of underlying prices concerns processed and unprocessed food items where the way price data are collected has been improved with a more extensive use of supermarket scanner data and so-called ‘web-scraping’.⁽²⁾ On top of this, Eurostat has introduced a more precise allocation of goods and services items across the five main HICP sub-indices. This was done mostly for the processed and unprocessed food sub-indices and to a minor extent across the energy, non-energy industrial goods and services sub-indices. This affects the inflation rates for these aggregates and has implications for the analysis of inflation developments.

The more precise allocation of products across categories in use since January 2019 is based on the European Classification of Individual Consumption according to Purpose (ECOICOP), which guides the allocation of items across the different categories. The ECOICOP introduced a fifth level of disaggregation, which contains a much larger number of categories compared to the previous version of the product classification.⁽³⁾ Since detailed price series are available now at the five-digit classification, the allocation of individual price items to specific special aggregates has been improved, to be more aligned with the definition of the main aggregates and especially with the definition of underlying inflation measures. Given the level of detail required, the availability of series according to the ECOICOP varies across member states.⁽⁴⁾

⁽¹⁾ Prices of individual products consumed by households are grouped into aggregates. The most known aggregates are at a low level of disaggregation (food, energy, non-energy industrial goods and services). At a more detailed level, there are around 30 special aggregates; for details see Eurostat, European Classification of Individual Consumption according to Purpose adapted to the needs of the Harmonised Indices of Consumer Prices (Metadata), RAMON (Reference And Management Of Nomenclatures), Luxembourg, 2019.

⁽²⁾ Both scanner data and web-scraping represent a response to the growing importance of e-commerce, which changes pricing landscape (a larger number of varieties, dynamic nature of pricing, etc.) and requires a response in terms of obtaining information on more products and prices. Web-scraping is a process that obtains prices of a specified product(s) from automatically retrieved webpages of criteria-based-chosen vendors at present time. Such a collection can be repeated often with minimal costs, but requires specialists for data processing and system maintenance. For further information see: New Techniques and Technologies for Statistics 2019, Brussels, March 2019 (URL: https://ec.europa.eu/eurostat/cros/NTTS2019_en).

⁽³⁾ There are around 300 categories at the fifth level of disaggregation and around 90 at the fourth level of disaggregation, which is the one used in the HICP calculation. For example, the previously used category (4th level) Shoes and other footwear including repair and hire of footwear has been splitted into Shoes and other footwear (with three sub-categories) and a separate category for related services (Repair and hire of footwear). For further details on the new classification of individual products according to the ECOICOP, see Annex I of the Framework Regulation (EU) No 2016/792. However, the ECOICOP HICP excludes some categories (seven) because of collections data problems or non-existence of a harmonised treatment (such as imputed rentals for housing or FISIM).

⁽⁴⁾ While some member states recalculated all series back to 1990s, some other provide data only after 2017 with possible extensions in future. However, that creates a methodological break in euro area series.

(Continued on the next page)
Finally, there is a change in the calculation of the price index for 'package holidays' in Germany, which is an important part of the services inflation sub-index and with changes sizable enough to have a visible impact on euro area HICP (for details see Eiglsperger, 2019a), (5)(6)

The methodological changes introduced represent an improvement in the ability to monitor inflation in a timely manner and with a wider coverage. However, as a result of the changes, the series of prices may become more volatile and larger/additional revisions of price indices (and thus HICP and special aggregates) may be observed. Experts are still discussing how to overcome those difficulties.

The impact of the changes on the series

It is important to notice that there is a structural break in the series, as the aforementioned changes affect published series for the euro area beginning in January 2017, (7) In addition, the change in the calculation of the price index for package holidays in Germany, which affects indices back to 2015, (8) is bundled with the previously described ones.

For illustrative purposes, both series (computed according to the old and new methodologies) for headline and underlying inflation (9) and both series for unprocessed and processed food are shown in Graphs 1 and 2. In most of the months, the differences between the old and the new series are relatively minor, especially for the overall HICP index (between 0.0 and +0.3 pps. in 2015, and between -0.1 and +0.1 pps. in 2016–2018 for the year-on-year inflation rate). However, this is not always the case, including for underlying inflation, where differences can be up to 0.3 pps. More precisely, the range of changes to the year-on-year rate is between 0.0 and +0.3 in 2015, and between -0.1 and +0.1 pps. over 2016–2018. In particular, there are visible differences in 2015 for both headline and underlying inflation, but not only. Moreover, there are quite visible implications for the profiles of these series. This is true in particular for certain relevant aggregates like underlying (core) inflation as computed by the European Commission (see also Table 1). This bears an impact on the quality of (core) inflation analysis, as the latter requires relatively long series.

Table 1: Weights of selected special aggregates before and from February 2019, Euro area

<table>
<thead>
<tr>
<th></th>
<th>Old weights [%]</th>
<th>New weights [%]</th>
<th>Difference [p.p.]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2018</td>
<td>2017</td>
</tr>
<tr>
<td>HICP (all-items)</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Food, alcohol &amp; tobacco</td>
<td>195.9</td>
<td>195.7</td>
<td>195.9</td>
</tr>
<tr>
<td>Processed food alcohol &amp; tobacco</td>
<td>120.8</td>
<td>121.1</td>
<td>149.4</td>
</tr>
<tr>
<td>Unprocessed food</td>
<td>73.1</td>
<td>74.8</td>
<td>46.5</td>
</tr>
<tr>
<td>Energy</td>
<td>95.3</td>
<td>97.1</td>
<td>94.5</td>
</tr>
<tr>
<td>Non-energy industrial goods</td>
<td>253.1</td>
<td>263.3</td>
<td>254.2</td>
</tr>
<tr>
<td>Services</td>
<td>445.7</td>
<td>443.9</td>
<td>444.4</td>
</tr>
<tr>
<td>EC core (HICP excl. energy and unprocessed food)</td>
<td>829.6</td>
<td>828.2</td>
<td>859.0</td>
</tr>
</tbody>
</table>

Source: Eurostat (2019), table 1, own calculation.

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This has a relatively large weight in the consumer price index in Germany, the largest euro area member. In 2019, the yearly weight of this component is around 2.7% in Germany (the ten-year average equals 3.6%), but less than 1.5% (the ten-year average equals 1.6%) for the euro area as a whole.

February 2019 release was the first one with the new series.

(5) The main difference is in the use of fixed annual weights in a given year instead of changing them through the year as done previously. However, this change requires further estimation and imputations of values.

(9) Underlying inflation (EC core) is computed as headline inflation (HICP) excluding energy and unprocessed food.
As expected, the modifications affect the processed and unprocessed food inflation aggregates. While the effect on the processed food series is between -0.5 and +0.1 pps. (no effect on food, alcohol and tobacco series), that for the unprocessed food series varies between -0.9 and 1.8 pps.

While these fluctuations do not change the overall picture in terms of underlying price pressures, these changes pose some analytical and forecasting challenges. On top of the presence of structural breaks in the series, a different pattern results from an increased seasonal variation, which appears in more pronounced seasonal peaks and troughs linked to the new computation of price indices for summer and winter holidays, or to the already mentioned seasonal effects because of more detailed information. This is compounded by the lack of relatively long time series for the changed categories.

Graph 1: Headline inflation (HICP), euro area

Graph 2: HICP excluding energy and unprocessed food, euro area

Graph 3: Inflation development for processed food, euro area

Graph 4: Inflation development for unprocessed food, euro area

For some suggestions see Eiglsperger (2019a).
Box I.5: Some technical elements behind the forecast

Given the ongoing ratification process of the Withdrawal Agreement in the UK, projections for 2019 and 2020 are based on a purely technical assumption of status quo in terms of trading relations between the EU27 and the UK. This is for forecasting purposes only and has no bearing on future negotiations between the EU and the UK.

The cut-off date for taking new information into account in this European Economic Forecast was 24 April 2019. The forecast incorporates validated public finance data as published in Eurostat’s news release 67/2019 of 23 April 2019.

External assumptions
This forecast is based on a set of external assumptions, reflecting market expectations at the time of the forecast. To shield the assumptions from possible volatility during any given trading day, averages from a 10-day reference period (between 14 and 24 April) were used for exchange and interest rates, and for oil prices.

Exchange and interest rates
The technical assumption regarding exchange rates was standardised using fixed nominal exchange rates for all currencies. This technical assumption leads to an implied average USD/EUR rate of 1.13 both in 2019 and in 2020. The average JPY/EUR is 125.57 in 2019 and 125.73 in 2020.

Interest-rate assumptions are market-based. Short-term interest rates for the euro area are derived from futures contracts. Long-term interest rates for the euro area, as well as short- and long-term interest rates for other Member States are calculated using implicit forward swap rates, corrected for the current spread between the interest rate and swap rate. In cases where no market instrument is available, the fixed spread vis-à-vis the euro area interest rate is taken for both short- and long-term rates. As a result, short-term interest rates are assumed to be -0.3% in 2019 and -0.3% in 2020 in the euro area. Long-term euro area interest rates are assumed to be 0.1% in 2019 and 0.2% in 2020.

Commodity prices
Commodity price assumptions are also based on market conditions. According to futures markets, prices for Brent oil are projected to be on average 69.19 USD/bbl in 2019 and 67.84 USD/bbl in 2020. This would correspond to an oil price of 61.28 EUR/bbl in 2019 and 60.19 EUR/bbl in 2020.

Trade policies
On what trade policy is concerned, this forecast pencils in only the measures that have been implemented until the cut-off date. Compared to the winter interim forecast, there were a number of limited changes to the baseline scenario.

- US 10% tariffs on $200 billion of imports from China took effect on 24 September 2018 and were taken into account. China retaliated by imposing countermeasures on $60 billion of imports from the US (with tariff rates of 5% and 10%). The US administration announced an increase of the tariffs to 25% on 1 January 2019, which was subsequently postponed first until 1 April 2019 and then without specifying a new date. The initially announced increase to 25% on 1 January and then 1 April was incorporated in the baseline in previous forecasts; it is no longer included in this forecast.

- On 17 February, the US authorities submitted a report to the President concluding an investigation under Section 232 of the Trade Expansion Act of 1962 into whether automotive imports into US threatened national security. The President has now time until 18 May to take a the decision whether to impose tariffs on US imports of autos and car parts from all or some of its trade partners.

Budgetary data and forecasts
Data up to 2018 are based on data notified by Member States to the European Commission before 1 April and validated by Eurostat on 23 April 2019. (1)


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Eurostat is expressing a reservation on the quality of the data reported by Hungary in relation to the sector classification of the Hungarian Association for the Stockpiling of Hydrocarbons (MSZKSZ).

Eurostat considers that this entity should be classified inside general government. This would lead to an increase in government debt in 2015 by 0.3% of GDP, in 2016 and in 2017 by 0.4% of GDP and in 2018 by an estimated 0.3% of GDP. The deficit figures would remain virtually unchanged.

Eurostat is maintaining the reservation on the quality of the data reported by Hungary in relation to the sector classification of the foundations created by the Hungarian National Bank. Eurostat considers that these foundations, including their subsidiaries, should be classified inside general government. This would lead to an estimated increase in government deficit in 2015 by 25.3 bn HUF (0.1% of GDP), in 2016 by 54.0 bn HUF (0.2% of GDP) and in 2017 by 33.7 bn HUF (0.1% of GDP). The debt figures would remain unchanged.

Eurostat is expressing a reservation on the quality of the data reported by Slovakia in relation to the recording of certain expenditures incurred by government, which could increase the deficit by 0.3% of GDP in 2018. Eurostat will investigate the issue in cooperation with the Slovak statistical authorities.

The public finance forecast is made under the ‘no-policy-change’ assumption, which extrapolates past revenue and expenditure trends and relationships in a way that is consistent with past policy orientations. This may also include the adoption of a limited number of working assumptions, especially to deal with possible structural breaks. The forecast includes all fiscal policy measures that imply a change to these past policy orientations on the condition that they are sufficiently detailed as well as adopted or at least credibly announced. For 2019 in particular, the annual budgets adopted or presented to national parliaments are taken into consideration.

EU and euro area aggregates for general government debt in the forecast years 2019-20 are published on a non-consolidated basis (i.e., not corrected for intergovernmental loans, including those made through the European Financial Stability Facility). To ensure consistency in the time series, historical data are also published on the same basis. For 2018, this implies an aggregate debt-to-GDP ratio which is somewhat higher than the consolidated general government debt ratio published by Eurostat in its news release 67/2019 of 23 April 2019 (by 0.2 pps. in the EA19 and by 1.5 pps. in the EU).

ESA 2010

The current forecast is based on the ESA 2010 system of national accounts for all Member States, the EU and the euro area aggregates.

Calendar effects on GDP growth and output gaps

The number of working days may differ from one year to another. The Commission’s annual GDP forecasts are not adjusted for the number of working days, but quarterly forecasts are.

The working-day effect in the EU and the euro area is estimated to be limited in 2018 and 2019, implying that adjusted and unadjusted annual growth rates differ only marginally (by up to ±0.1 pps.). In 2020, this difference will be close to ¼ pps. in the euro area.

Estimations of potential GDP and output gaps are not adjusted for working days. Furthermore, since the working-day effect is considered temporary, it is not expected to affect cyclically-adjusted balances.