

Eurosystem staff macroeconomic projections for the euro area



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Overview

Although real GDP growth was stronger than expected in the first quarter of 2019, recent indicators point to weaker growth in the second quarter and a moderate increase during the remainder of 2019. Economic sentiment indicators have continued to worsen across euro area countries over recent months, notably in sectors exposed to global trade. This reflects the ongoing weakness in global trade in an environment of continued global uncertainties (such as threats of an escalation of protectionism and the possibility of a disorderly Brexit). These factors weigh on export order books and on production expectations in the manufacturing sector, and are likely to continue to hold back euro area activity in the near term. At the same time, sentiment in the domestically-oriented services and construction sectors has been more resilient in recent months and the labour market situation has continued to improve. Overall, the fundamental domestic factors that should support the euro area expansion, namely the very accommodative stance of monetary policy, rising wages and some fiscal easing, remain broadly in place. In addition, foreign demand is expected to gradually recover during the course of 2019 and to provide a stronger impetus over the remainder of the projection horizon. Altogether, real GDP growth is projected to decline from 1.8% in 2018 to 1.2% in 2019 before increasing to 1.4% in 2020 and 2021. Compared with the March 2019 projections, real GDP growth in 2019 has been revised up slightly, as the upward impact of a stronger than expected first quarter more than offsets downward revisions to growth in the following quarters, mainly due to more persistent weakness in global trade. This implies a weaker carry-over into 2020. In addition, the medium-term projections have been revised down marginally.

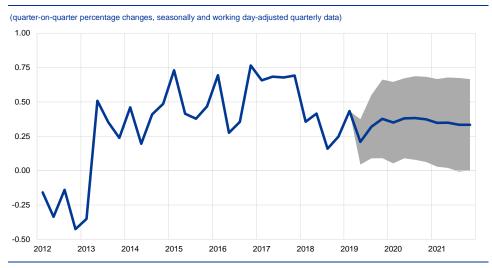
HICP inflation is expected to moderate this year but to recover thereafter, reaching 1.6% in 2021. Energy inflation will continue to decline in the short term, on the back of downward base effects and slightly declining oil price assumptions, and stabilise thereafter. HICP inflation excluding energy and food will pick up gradually, supported by the envisaged economic expansion. At the same time, past increases in labour costs will feed into prices and profit margins will recover. Compared with the March 2019 projections, HICP inflation has been revised marginally upwards in 2019 due to higher oil prices and marginally downwards in 2020 due to a more steeply downward sloping path of the oil price assumptions. HICP inflation excluding energy and food is revised down slightly in the near term reflecting weaker data outturns¹.

The cut-off date for technical assumptions, such as for oil prices and exchange rates, was 15 May 2019 (see Box 1). The cut-off date for including other information in this exercise was 22 May 2019. The current macroeconomic projection exercise covers the period 2019-21. Projections over such a long horizon are subject to very high uncertainty, and this should be borne in mind when interpreting them. See the article entitled "An assessment of Eurosystem staff macroeconomic projections" in the May 2013 issue of the ECB's Monthly Bulletin. See http://www.ecb.europa.eu/pub/projections/html/index.en.html for an accessible version of the data underlying selected tables and charts.

1 Real economy

Real GDP in the euro area rebounded in the first quarter of 2019 partly reflecting some temporary positive factors (see Chart 1). The increase in real GDP growth from 0.2% in the fourth quarter of 2018 to 0.4% in the first quarter of 2019 was in part related to specific factors which temporarily boosted growth. Some countries benefited from a spike in foreign demand related to exceptionally strong import demand from the United Kingdom, in anticipation of the original Brexit date. In addition, in Germany, private consumption rebounded strongly as private car registrations surged following disruptions in car production in the second half of 2018. Private consumption was also supported by fiscal measures which became effective in the first quarter and are expected to have their biggest impact in the same quarter. Construction also benefited from mild weather conditions in some countries. In Italy, the stronger growth reflected some rebound in manufacturing activity, after a strong fall in late 2018 due to policy uncertainty.

Chart 1
Euro area real GDP



Note: The ranges shown around the central projections are based on the differences between actual outcomes and previous projections carried out over a number of years. The width of the ranges is twice the average absolute value of these differences. The method used for calculating the ranges, involving a correction for exceptional events, is documented in "New procedure for constructing Eurosystem and ECB staff projection ranges", ECB, December 2009, available on the ECB's website.

Indicators point to a weakening of growth in the short term, after relatively strong growth in the first quarter. The Economic Sentiment Indicator compiled by the European Commission continued to decline overall in recent months, with the fall being broad-based across euro area countries and approaching its longer-term average level. This decline mostly reflected a further worsening of sentiment in the manufacturing sector, driven by a more negative assessment of current order books and less optimistic production expectations. This seems to reflect the ongoing weakness of global trade as well as the impact of uncertainty – in particular related to global trade disputes and Brexit. By contrast, sentiment in the more domestically-oriented services and construction sectors remained broadly unchanged in recent months and consumer confidence also remained fairly resilient. Recent

developments in the Purchasing Managers' Indices confirm this divergence across sectors, with manufacturing data remaining far below the zero-growth threshold of 50, while the indices related to the services and construction sectors stood well above 50. Overall, the latest indicators suggest a weakening of growth in the second quarter, mostly in Germany and Italy, partly reflecting the fading of the temporary boosts in the first quarter.

Over the medium term, the baseline assumes a gradual dissipation of global headwinds, allowing fundamental factors supporting the euro area expansion to regain traction (see Table 1). The baseline assumes an orderly exit of the United Kingdom from the EU and that the current level of uncertainty regarding the future of global trade will gradually normalise, in particular that there will be no further protectionist measures beyond those already announced. As these headwinds fade, they will give way to a number of favourable fundamental factors. The ECB's monetary policy stance is assumed to remain very accommodative and to continue to be transmitted to the economy. Lending to the non-financial private sector should strengthen moderately towards the end of the projection horizon, spurred by low interest rates and favourable bank lending conditions for both households and non-financial corporations. Lower deleveraging needs across sectors will also contribute to the dynamism of private expenditure. Growth in private consumption and residential investment should also benefit from rising wage growth and net worth as well as from declining unemployment. Euro area exports are expected to benefit from the projected recovery in foreign demand. Finally, the fiscal stance is expected to be mildly expansionary over the full horizon (see Section 3).

Nevertheless, the fading out of some tailwinds would lead to slower growth towards the end of the projection horizon. The technical assumptions imply that nominal interest rates will remain low but rise moderately over the projection horizon. Business investment is expected to weaken considerably over the projection horizon, reflecting a protracted period of low business confidence and the expiration of some tax incentives. Employment is also expected to slow down over the medium run, reflecting increasingly binding labour supply shortages in some countries as well as higher wage costs.

Table 1Macroeconomic projections for the euro area

(annual percentage changes) March 2019 2018 2019 2020 2021 2018 2019 2021 Real GDP 1.1 1.8 1.2 1.4 1.4 1.9 1.6 1.5 $[0.9 - 1.5]^{1)}$ [0.5 - 2.3]1) [0.4 - 2.4]1) $[0.7 - 2.5]^{1)}$ $[0.5 - 2.5]^{1)}$ [0.7 - 1.5]¹⁾ Private consumption 1.4 1.3 1.3 1.3 1.4 1.3 1.6 1.4 1.7 Government 1.1 1.4 1.4 1.4 1.1 1.6 1.4 consumption **Gross fixed capital** 3.3 2.7 2.0 2.0 3.3 2.1 2.4 2.0 formation Exports²⁾ 3.2 3.2 2.2 2.9 3.2 2.8 2.8 Imports²⁾ 3.2 2.7 3.2 3.4 2.7 3.7 4.1 3.5 **Employment** 1.5 1.0 0.6 0.6 1.4 0.7 0.6 0.6 Unemployment rate 8.2 7.7 7.3 8.2 7.9 7.5 (percentage of labour force) HICP 1.8 1.3 1.4 1.6 1.7 1.2 1.5 1.6 [1.2 - 1.4]¹⁾ [0.7 - 2.1]1) [0.8 - 2.4]1) $[0.8 - 2.2]^{1)}$ $[0.9 - 1.5]^{1)}$ $[0.8 - 2.4]^{1)}$ **HICP** excluding energy 1.3 1.2 1.5 1.7 1.2 1.4 1.6 1.6 **HICP** excluding energy 1.0 1.1 1.4 1.6 1.0 1.2 1.4 1.6 and food HICP excluding energy, 1.0 1.1 1.4 1.6 1.0 1.2 1.4 1.6 food and changes in indirect taxes3) **Unit labour costs** 1.9 1.8 1.7 1.4 1.6 1.8 1.6 1.7 Compensation per 2.2 2.5 2.5 2.2 2.1 2.4 2.6 2.1 employee Labour productivity 0.3 0.2 8.0 0.9 0.4 0.4 1.0 0.9 General government -0.5 -0.9 -0.9 -0.9 -0.5 -1.0 -1.0 -1.1 budget balance (percentage of GDP) Structural budget balance -0.9 -1.2 -0.4 -0.8 -1.0 -1.2 -0.6 -1.1 (percentage of GDP)4) General government gross 85.1 83.7 82.1 80.6 85.0 83.8 82.3 81.1 debt (percentage of GDP) **Current account balance** 2.9 2.4 2.4 2.4 3.0 2.4 2.3 2.2 (percentage of GDP)

Note: Real GDP and components, unit labour costs, compensation per employee and labour productivity refer to seasonally and working day-adjusted data.

Real disposable income growth is expected to gain momentum in 2019 before weakening in 2020 and 2021. The strengthening in 2019 reflects an increase in nominal disposable income growth and a decline in consumer price inflation. Both weakening nominal income growth and gradually rising inflation are expected to dampen real income growth in 2020 and 2021. The contribution of gross wages and salaries to nominal disposable income growth is projected to decline somewhat in 2019 and 2020 (due to the impact of weaker employment growth) and to remain

¹⁾ The ranges shown around the projections are based on the differences between actual outcomes and previous projections carried out over a number of years. The width of the ranges is twice the average absolute value of these differences. The method used for calculating the ranges, involving a correction for exceptional events, is documented in *New procedure for constructing Eurosystem and ECB staff projection ranges*, ECB, December 2009, available on the ECB's website.

²⁾ Including intra-euro area trade.

³⁾ The sub-index is based on estimates of actual impacts of indirect taxes. This may differ from Eurostat data, which assume a full and immediate pass-through of tax impacts to the HICP.

⁴⁾ Calculated as the government balance net of transitory effects of the economic cycle and temporary measures taken by governments.

broadly unchanged in 2021. Other personal income is projected to increase moderately over the projection horizon, broadly in line with profits (as measured by the gross operating surplus). The contribution of net fiscal transfers is expected to turn positive in 2019, for the first time since 2010, reflecting a mix of cuts in direct taxation and rising transfers to households; it is expected to turn broadly neutral in 2020 and in 2021 in the context of lower transfers to households and gradually increasing revenues from direct taxation.

Private consumption is projected to be solid over the projection horizon. It is estimated to have accelerated in the first quarter of 2019 supported by robust real disposable income growth. Looking forward, still relatively favourable consumer confidence, expected improvements in labour market conditions and rising real wages per employee suggest strong consumption growth over the next few quarters, compounded by the positive effect of fiscal loosening in certain countries. Thereafter, the expected gradual slowdown in employment growth and more neutral fiscal transfers are assumed to weigh on private consumption.

Private consumption growth should be supported by favourable financing conditions and rising net worth. Nominal bank lending rates are projected to increase moderately over the projection horizon but will remain at low levels. The impact of rising bank lending rates on gross interest payments is expected to be limited due to the long maturity of household debt and the relatively low share of variable rate household debt. Thus gross interest payments are expected to remain at low levels and therefore continue to support private consumption. At the same time, gross interest revenues are expected to increase modestly, mainly owing to the continued accumulation of interest-bearing assets. In addition, net worth is projected to increase further, spurred by the continued robust valuation gains on real estate holdings. Together with the progress achieved in deleveraging, rising net worth should also support consumption.

Box 1Technical assumptions about interest rates, exchange rates and commodity prices

Compared with the March 2019 projections, the technical assumptions include higher oil prices and lower interest rates. The technical assumptions about interest rates and commodity prices are based on market expectations, with a cut-off date of 15 May 2019. Short-term rates refer to the three-month EURIBOR, with market expectations derived from futures rates. The methodology gives an average level for these short-term interest rates of -0.3% for 2019, -0.3% for 2020 and -0.2% for 2021. The market expectations for euro area ten-year nominal government bond yields imply an average level of 0.8% for 2019, 0.9% for 2020 and 1.1% for 2021. Compared with the March 2019 projections, market expectations for short-term interest rates have been revised down by about 10 basis points for 2020 and around 20 basis points for 2021, while euro area ten-year nominal government bond yields have been revised down by around 30 basis points for 2019 and 2020 and by about 40 basis points for 2021.

The assumption for euro area ten-year nominal government bond yields is based on the weighted average of countries' ten-year benchmark bond yields, weighted by annual GDP figures and extended by the forward path derived from the ECB's euro area all-bonds ten-year par yield, with the initial discrepancy between the two series kept constant over the projection horizon. The spreads between country-specific government bond yields and the corresponding euro area average are assumed to be constant over the projection horizon.

As regards commodity prices, on the basis of the path implied by futures markets by taking the average of the two-week period ending on the cut-off date of 15 May 2019, the price of a barrel of Brent crude oil is assumed to decrease from USD 71.1 in 2018 to USD 68.1 in 2019, and to ease further to USD 62.7 in 2021. This path implies that, in comparison with the March 2019 projections, although oil prices in US dollars are higher over the full horizon, the downward sloping path is much more pronounced. The prices of non-energy commodities in US dollars are assumed to decline in 2019 but to rebound over the subsequent years of the projection horizon.

Bilateral exchange rates are assumed to remain unchanged over the projection horizon at the average levels prevailing in the two-week period ending on the cut-off date of 15 May 2019. This implies an average exchange rate of USD 1.12 per euro over the period 2019-21, which is 1.7% lower than in the March 2019 projections. The effective exchange rate of the euro (against 38 trading partners) is broadly unchanged from the March 2019 projections.

Technical assumptions

	June 2019				March 2019				
	2018	2019	2020	2021	2018	2019	2020	2021	
Three-month EURIBOR (percentage per annum)	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.2	0.0	
Ten-year government bond yields (percentage per annum)	1.1	0.8	0.9	1.1	1.1	1.0	1.3	1.5	
Oil price (in USD/barrel)	71.1	68.1	65.8	62.7	71.1	61.7	61.3	60.6	
Non-energy commodity prices, in USD (annual percentage change)	3.9	-3.4	3.9	3.8	3.9	1.2	4.3	4.3	
USD/EUR exchange rate	1.18	1.12	1.12	1.12	1.18	1.14	1.14	1.14	
Euro nominal effective exchange rate (EER38) (annual percentage change)	5.2	-1.0	0.1	0.0	5.2	-0.9	0.0	0.0	

The expansion of residential investment is expected to continue, albeit at a more moderate pace. Resilient confidence in the construction sector and rising numbers of building permits suggest a continued expansion of housing investment in the next few quarters. Nonetheless, the momentum is expected to ease. This weakening is suggested by recent surveys showing a decline in the share of households planning to undertake home improvements over the next year. The moderation may result from increasingly binding capacity constraints in the construction sector and adverse demographic trends in some countries.

Business investment is expected to increase over the projection horizon, albeit at a rather subdued pace. Business investment is estimated to have slowed in the first quarter of 2019 and is expected to remain rather subdued during the course of the year, reflecting the impact of the relative weakness of global trade and persistent concerns about global trade policies, a "no-deal" Brexit and a hard landing in China. In general, however, a number of favourable fundamentals are expected to continue supporting business investment in the euro area. First, capacity utilisation remains above its long-term average and a higher than usual share of manufacturing firms report lack of equipment as a factor limiting production. Second, financing conditions are expected to remain supportive over the projection horizon. Third, profits are expected to increase, which adds further to the sizeable liquid asset overhang firms

have built up in recent years. Finally, companies may increase investment as a means of compensating for labour-related supply-side constraints.

Box 2

The international environment

The underlying momentum in global activity has softened somewhat in the first quarter of 2019, despite some positive surprises in certain key advanced economies. In the United States, growth surprised on the upside, as positive contributions from net trade and the build-up of inventories partly offset weaker domestic demand reflecting the impact of the partial Federal Government shutdown. As the impact of these transitory factors is expected to diminish, growth in the United States is projected to slow down in the near term. Similarly, a stronger than expected real GDP outturn in the United Kingdom reflects the impact of transitory factors that could be linked to significant stock accumulation in the run-up to the original Brexit date. Activity in China decelerated gradually in line with the March projections.

Survey-based evidence suggests that the global growth momentum softened somewhat at the start of this year. The global composite output Purchasing Managers' Index, excluding the euro area, softened in the first quarter and weakened further in April. The latest developments reflect a deterioration in the service sector, which nevertheless remains relatively resilient, while manufacturing activity showed some stabilisation at low levels.

Global growth is projected to soften this year amid increasing headwinds. These headwinds include weaker global manufacturing activity and trade, in an environment of high and rising policy uncertainty. The latter has further increased in the light of the recent escalation of the US-China trade dispute and weighed on global financial conditions, especially in emerging market economies. Nevertheless, the sizeable pro-cyclical fiscal stimulus in the United States, including lower taxes and increased public expenditures, continues to provide impetus to US and global growth this year. In China, a slowdown in domestic demand is projected to persist in the first half of this year, as the policy support announced recently is expected to take some time to effectively materialise³. Looking through recent volatility, higher oil prices are expected to provide some support to growth in oil-exporting countries, while weighing on activity in oil importers.

Looking further ahead, global growth is projected to stabilise at around 3.6% over the medium term. This path is justified on the basis of three key narratives that are shaping the projected path of global growth. First, the cyclical momentum in advanced economies should slow as capacity constraints become increasingly binding and policy support gradually diminishes, amid positive output gaps and low unemployment rates across key advanced economies, with the boost to activity from the fiscal stimulus in the United States peaking in 2019. Second, China is expected to continue its orderly transition to a lower growth path, less dependent on investment and exports. And finally, the path for global activity also reflects the expected pick-up in growth in several key emerging market economies. Overall, the pace of global expansion should settle at below the pre-crisis rates, consistent with the latest estimates of potential growth across countries. Global growth (excluding the euro area) is projected to decline to 3.3% this year from 3.8% in 2018 and to increase slightly to 3.6% over 2020-21.

For this year, China announced a fiscal stimulus package in the range of 2-3% of GDP. However, only some elements of this package have been implemented and announced in detail so far. These include a reduction in the VAT rate, effective as of 1 April, which is expected to have a stronger effect in the second half of this year, and an increase in the quota for local government borrowing as of the beginning of this year, which is expected to be channelled into infrastructure spending by local governments.

Compared to the March projections, the global growth projections for this year were revised downwards slightly.

The international environment

(annual percentage changes)									
		June	2019			Marc	h 2019		
	2018	2019	2020	2021	2018	2019	2020	2021	-
World (excluding euro area) real GDP	3.8	3.3	3.6	3.6	3.7	3.5	3.6	3.6	
Global (excluding euro area) trade ¹⁾	4.6	0.7	2.8	3.4	4.9	2.4	3.4	3.6	

1.7

26

3 1

4.0

22

3.3

3 4

Euro area foreign demand²⁾

Global trade momentum has weakened further, amid slowing industrial activity and heightened trade tensions, but is expected to recover over the projection horizon. As the impact of elevated policy uncertainty is expected to gradually dissipate, global imports are projected to grow in line with global activity over the medium term. Additional factors explaining the recovery in global trade include an improvement in domestic demand in China supported by recent policy actions, as well as improved global investment activity benefiting from the recent easing in financial conditions, especially in advanced economies. Overall, euro area foreign demand, which expanded by 3.6% last year, is expected to slow to 1.7% in 2019, before gradually recovering to 2.6% and 3.1% in 2020 and 2021 respectively. Compared to the March 2019 projections, it has been revised down. These downward revisions reflect weaker trade in Asia as well as slower import momentum across some key trading partners, including European countries outside the euro area.

Extra-euro area exports are projected to grow at a subdued rate in the course of 2019 before recovering over the remainder of the horizon, broadly in line with foreign demand. Following weak rates of growth and market share losses in the first three quarters of 2018, extra-euro area export growth surprised on the upside in the last guarter of 2018 and outpaced foreign demand. As the strength in exports in the fourth quarter of last year to some extent reflected idiosyncratic factors, and as short term indicators remain subdued, extra-euro area exports are projected to weaken and fall below the pace of foreign demand in the first half of 2019, amid an adverse international environment with persisting global uncertainty. Thereafter, over the medium term, extra-euro area exports are projected to recover and grow broadly in line with foreign demand. While some gains in price competitiveness would support stronger gains in export market shares, these are offset by the effects of trade uncertainty as the composition of euro area exports is tilted towards investment-related products that are particularly susceptible to the adverse effects of trade policy-related uncertainty. Meanwhile, extra-euro area import growth is also expected to weaken in the near term, reflecting both developments in exports themselves and at the same time weak investment and activity dynamics in some euro area countries. Looking further ahead, extra-euro area imports are expected to grow broadly in line with total demand (domestic demand plus exports). Overall, the contribution of net trade to real GDP growth is expected to turn negative during the remainder of 2019 before turning neutral from 2020 onwards.

¹⁾ Calculated as a weighted average of imports.

²⁾ Calculated as a weighted average of imports of euro area trading partners.

Employment growth is projected to be subdued in the short term, partially due to temporary factors, but also later on in the horizon as labour supply constraints kick in. Employment growth is projected to decrease in 2019 before increasing modestly again in 2020. The decline in the growth rate of employment expected during the course of 2019 is mainly a delayed response to the weakness in activity in some countries. In 2020, employment growth is expected to pick up somewhat, supported by stronger activity. In 2021, employment growth is projected to decrease again as labour supply is expected to limit further employment growth, while labour demand is also projected to moderate in line with the slowdown in activity.

The expansion of the labour force is expected to moderate over the projection horizon. The labour force is expected to continue to expand, reflecting the projected net immigration of workers, the expected integration of refugees, and ongoing increases in the participation rate. Nevertheless, these factors fade over the projection horizon and, therefore, the adverse impact of the ageing of the population on the labour force growth is expected to increase, as older cohorts leave the workforce in higher numbers than younger cohorts enter it.

The unemployment rate is expected to decline to 7.3% in 2021. The unemployment rate fell to 7.8% in the first quarter of 2019, which is the lowest level observed since the third quarter of 2008. Looking ahead, the unemployment rate is projected to remain broadly unchanged at its current level during 2019, and decrease

afterwards. The number of unemployed persons is projected to decline by around 0.8 million to 12.9 million by the end of the projection horizon, although still remaining somewhat above its pre-crisis trough level (12.2 million). While the corresponding fall in the unemployment rate is expected to be broadly shared across countries, the unemployment rates are still expected to differ substantially between countries.

Labour productivity is projected to recover over the projection horizon.

Following its strong momentum in 2017, labour productivity growth per worker declined in 2018, reflecting the unexpected weakening in activity. A moderate rise in productivity growth in quarter-on-quarter terms is expected later in 2019 as activity regains momentum. Over the medium term, labour productivity growth should remain slightly below its pre-crisis average rate (of 1.0%⁴).

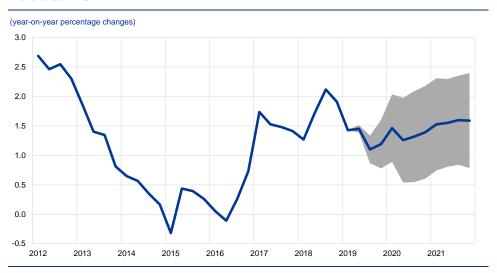
Compared with the March 2019 projections, real GDP growth is revised up for 2019 and is revised down for 2020 and 2021. In 2019 the upward surprise in growth in the first quarter more than offsets downward revisions for the rest of the year. The latter are due to: (a) the unwinding of the temporary factors which boosted growth in the first quarter, (b) weakened sentiment and downward revisions to foreign demand that largely reflect more prolonged global policy uncertainties (e.g. Brexit and trade disputes), and (c) persisting policy uncertainty in Italy. These downward revisions to the short-term outlook imply a weaker carry-over in 2020. The medium-term outlook has been revised down only slightly.

The average between 1999 and 2007.

2 Prices and costs

HICP inflation is expected to average 1.3% in 2019 and then rise to 1.6% in 2021 (see Chart 2). The decline in headline inflation in 2019 is mainly accounted for by a significant decrease in HICP energy inflation on the back of downward base effects and slightly declining crude oil prices in euro. In 2020 and 2021, HICP energy prices are expected to rise at subdued rates, partly reflecting the slightly downward sloping oil price futures curve. After a downturn in the near term reflecting an easing of the pace of increase in food commodity prices, HICP food inflation is envisaged to hover around rates of 2%. HICP inflation excluding energy and food will be on a gradual upward path as from the end of this year, reaching 1.6% in 2021. The pick-up in HICP inflation excluding energy and food is expected to be supported by the more gradual but ongoing economic recovery. Moreover, tightening labour markets will continue to support wage growth, while unit profits are expected to recover, as economic activity regains pace and as past increases in labour costs are passed through to prices. As a result, domestic cost pressures would rise. Rising non-energy commodity prices are also expected to support HICP inflation excluding energy and food.

Chart 2
Euro area HICP



Note: The ranges shown around the central projections are based on the differences between actual outcomes and previous projections carried out over a number of years. The width of the ranges is twice the average absolute value of these differences. The method used for calculating the ranges, involving a correction for exceptional events, is documented in "New procedure for constructing Eurosystem and ECB staff projection ranges", ECB, December 2009, available on the ECB's website.

Growth in compensation per employee is projected to rise from 2.2% in 2018 to 2.5% in 2021 as labour markets continue to tighten. At the same time, following a spike in 2018 in the context of the cyclical slowdown in productivity and one-off factors affecting compensation per employee, unit labour cost growth is expected to moderate somewhat over the projection horizon as productivity growth strengthens, but to stand at higher levels than those seen in recent years. The main driver supporting wage growth is the envisaged increase in labour market tightness in some parts of the euro area. Beyond the cyclical momentum, the pick-up in headline inflation over the last two years can also be expected to contribute to a pick-up in nominal wage growth in those

euro area countries where wage formation processes include backward-looking elements. Some countries have also introduced increases in minimum wages, which might pass through to the wage distribution.

Profit margins are expected to develop more favourably over the projection horizon than in 2018. Profit margins have been squeezed over the past few quarters by a surge in unit labour costs and past increases in oil prices that weighed on the terms of trade. These downward factors should fade as economic activity regains pace and as the terms of trade are expected to improve (see Box 3).

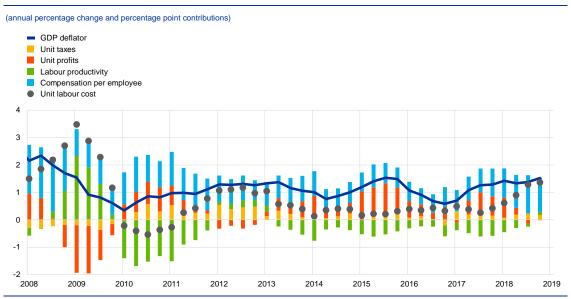
External price pressures are expected to recede in 2019 and to rise moderately over the remainder of the projection horizon. The annual growth rate of the import deflator is envisaged to decrease in 2019, compared with 2018, and to rise somewhat thereafter. This profile is strongly determined by movements in oil prices, which pushed up import prices in 2018 and will dampen them in 2019. At the same time, rising non-oil commodity prices and underlying global price pressures should bring some, albeit more moderate, support to import price inflation.

Compared with the March 2019 projections, HICP inflation is revised up for 2019 and down for 2020. These revisions are largely explained by the energy component which is revised notably upwards for 2019, due to stronger growth in oil prices, and downwards for 2020, due to a more steeply downward sloping profile for oil price futures. In addition, HICP inflation excluding energy and food is revised marginally downwards for the near term, mainly reflecting weaker data outturns.

Box 3The role of profits in domestic price pressures

Profits can play an important role in inflation developments and the degree to which wage pressures are passed through to prices. The GDP deflator, a measure of domestic price pressures, can be decomposed into contributions from labour costs, profits and taxes (see Chart A). The rising contribution of unit profits (gross operating surplus divided by real GDP) explained a substantial part of the strengthening of the GDP deflator inflation measure between 2016 and 2017, and the declining contribution of unit profits in 2018 explains why domestic price pressures essentially moved sideways despite a strong pick up in wage and unit labour cost growth. This points to a buffering role for unit profits.

Chart ADecomposition of the GDP deflator



Sources: Eurostat and ECB calculations.

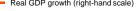
Developments in unit profits are strongly linked to cyclical movements in economic activity and, at times, are also significantly affected by the terms of trade. During the economic slowdown in 2018 profits were squeezed, as they had to buffer the increase in unit labour costs, partly associated with the slowdown in activity and productivity developments. Moreover, the increase in oil prices and its reflection on the terms of trade are also likely to have exerted some downward impact on profits in that year, provided that firms adjusted their selling prices upwards by less than the increase in their input costs (see Chart B). An opposite, favourable impact of the terms of trade was observed in 2014 and 2015 when oil prices had dropped sharply and these declines were only partially passed through to price developments. The outlook in the June projections entails a return to higher rates of real GDP and productivity growth, while the oil price assumptions support an unwinding of the past negative rates of growth in the terms of trade. Together, these factors support a strengthening of the unit profit contribution to inflation as measured by the GDP deflator over the projection horizon. Moreover, in such an environment, past increases in wages and labour costs could be more visibly passed through to prices.

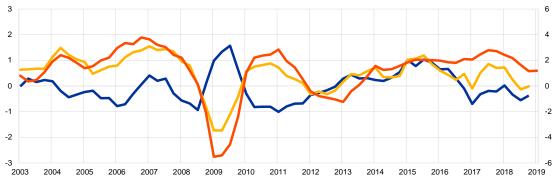
Chart B

Determinants of unit profits

(annual percentage change and percentage point contributions)

- Terms of trade (contribution to GDP deflator) (left-hand scale)
 Unit profits (contribution to GDP deflator) (left-hand scale)
 Real GDP growth (right-hand scale)





Sources: Eurostat and ECB calculations.

3 Fiscal outlook

The euro area aggregate fiscal stance is assessed to be mildly expansionary over the entire projection horizon. The fiscal policy stance is measured as the change in the cyclically adjusted primary balance net of government support to the financial sector. After having been neutral in 2018, the fiscal stance is projected to become mildly expansionary in 2019, mostly on account of cuts to direct taxes as well as public expenditure increases in some countries. In 2020, the main contributions to the expected additional easing of the fiscal stance stem from further cuts to direct taxes and social security contributions, and higher transfers. In 2021, a further slight easing is mostly related to expenditure growth and direct tax cuts in some countries.

The euro area budget balance is projected to deteriorate in 2019 and remain broadly unchanged in the following years, while the debt ratio remains on a downward path. The widening in the government deficit is due to a deterioration in the cyclically adjusted primary balance, because of the expected expansionary fiscal stance. This is partly offset by a slight decline in interest expenditures, resulting from the replacement of high-cost old debt with new debt issued at lower interest rates. The declining path of the government debt-to-GDP ratio is supported by an increasingly favourable interest-growth rate differential and enduring positive primary balances, which are however declining over time.

The euro area deficit outlook has improved marginally compared to the March 2019 projections. The slightly lower budget deficits reflect a somewhat less expansionary fiscal stance compared to the March 2019 projections, without however changing the overall picture of a mildly expansionary fiscal stance. The projection for the debt ratio remains broadly unchanged as there were only marginal revisions to the deficit.

Box 4 Sensitivity analyses

Projections rely heavily on technical assumptions regarding the evolution of certain key variables. Given that some of these variables can have a large impact on the projections for the euro area, examining the sensitivity of the latter with respect to alternative paths of these underlying assumptions can help in the analysis of risks around the projections. This box discusses the uncertainty around some key underlying assumptions and the sensitivity of the projections with respect to these variables.

1) Alternative oil price paths

This sensitivity analysis aims to assess the implications of alternative oil price paths. The technical assumptions for oil price developments underlying the baseline projections, based on oil futures markets, predict a declining profile for oil prices, with the price per barrel of Brent crude oil at about USD 62 by the end of 2021. Two alternative oil price paths are analysed. The first is based on the 25th percentile of the distribution provided by the option-implied densities for the oil price on 15

May 2019. This path implies a gradual decrease of the oil price to USD 47 per barrel in 2021, which is 25% below the baseline assumption for that year. Using the average of the results from a number of staff macroeconomic models, this path would have a small upward impact on real GDP growth (around 0.1 percentage points in 2020 and 2021), while HICP inflation would be 0.1 percentage points lower in 2019, 0.6 percentage points lower in 2020 and 0.4 percentage points lower in 2021. The second path is based on the 75th percentile of the same distribution and implies an increase of the oil price to around USD 78 per barrel in 2021, which is 24.5% above the baseline assumption for this year. This path would entail a faster increase in HICP inflation, which would be 0.1 percentage points higher in 2019, 0.5 percentage points higher in 2020 and 0.3 percentage points higher in 2021, while real GDP growth would be slightly lower (down by 0.1 percentage points in 2020 and 2021).

2) An alternative exchange rate path

This sensitivity analysis investigates the effects of a strengthening of the exchange rate of the euro. This scenario is consistent with the distribution of the option-implied risk-neutral densities for the USD/EUR exchange rate on 15 May 2019, which is heavily skewed towards an appreciation of the euro. The 75th percentile of that distribution implies an appreciation of the euro vis-à-vis the US dollar to an exchange rate of USD 1.27 per euro in 2021, which is 13.5% above the baseline assumption for that year. The corresponding assumption for the nominal effective exchange rate of the euro reflects historical regularities, whereby changes in the USD/EUR exchange rate correspond to changes in the effective exchange rate with an elasticity of just above one half. In this scenario, the average of the results from a number of staff macroeconomic models points to both real GDP growth and HICP inflation being 0.5 percentage points lower in 2020 and 0.4 percentage points lower in 2021.

Box 5

Forecasts by other institutions

A number of forecasts for the euro area are available from both international organisations and private sector institutions. However, these forecasts are not strictly comparable with one another or with the ECB/Eurosystem staff macroeconomic projections, as they were finalised at different points in time. Additionally, they use different (partly unspecified) methods to derive assumptions for fiscal, financial and external variables, including oil and other commodity prices. Finally, there are differences in working day adjustment methods across different forecasts (see the table).

As indicated in the table, most other institutions' currently available projections for real GDP growth and HICP inflation are within the ranges surrounding the Eurosystem staff projections (shown in square brackets in the table).

Comparison of recent forecasts for euro area real GDP growth and HICP inflation

(annual percentage changes)

		GDP growth			HICP inflation			
	Date of release	2019	2020	2021	2019	2020	2021	
Eurosystem projections	June 2019	1.2	1.4	1.4	1.3	1.4	1.6	
		[0.9 - 1.5]	[0.5 - 2.3]	[0.4 - 2.4]	[1.2 - 1.4]	[0.7 - 2.1]	[0.8 - 2.4]	
OECD	May 2019	1.2	1.4	-	1.2	1.5	-	
Euro Zone Barometer	May 2019	1.1	1.3	1.3	1.4	1.4	1.6	
Consensus Economics	May 2019	1.1	1.3	1.2	1.4	1.4	1.6	
European Commission	May 2019	1.2	1.5	-	1.4	1.4	-	
Survey of Professional Forecasters	April 2019	1.2	1.4	1.4	1.4	1.5	1.6	
IMF	April 2019	1.3	1.5	1.5	1.3	1.6	1.7	

Sources: OECD Economic Outlook, May 2019; MJEconomics for the Euro Zone Barometer, May 2019 survey for 2019, 2020 and April 2019 survey for 2021; Consensus Economics Forecasts, May 2019 survey for 2019, 2020 and April 2019 survey for 2021; European Commission Economic Forecast, Spring 2019 European Economic Forecast; ECB's Survey of Professional Forecasters, 2019Q2; IMF World Economic Outlook, April 2019.

Notes: The Eurosystem and ECB staff macroeconomic projections and the OECD forecasts both report working day-adjusted annual growth rates, whereas the European Commission and the IMF report annual growth rates that are not adjusted for the number of working days per annum. Other forecasts do not specify

whether they report working day-adjusted or non-working day-adjusted data.

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For specific terminology please refer to the ECB glossary (available in English only).

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