EUROPEAN CENTRAL BANK
EUROSYSTEM

June 2016
Eurosystem staff macroeconomic projections for the euro area[1]

1 Euro area outlook: overview and key features

The economic recovery in the euro area is expected to continue, supported by the ECB's accommodative monetary policy stance, low oil prices, improving labour market conditions and some fiscal easing in 2016. Progress achieved in deleveraging across sectors should also support domestic demand growth over the projection horizon. At the same time, the drag from weak export growth is projected to fade, thanks to the expected gradual recovery of global trade. In annual terms real GDP is expected to grow by 1.6% in 2016 and by 1.7% in 2017 and 2018. HICP inflation is expected to remain very low in 2016, at 0.2%, strongly dampened by the past fall in energy prices. For 2017, a significant increase in headline inflation to 1.3% is foreseen, driven to a large extent by upward base effects in the energy component. The declining economic slack is expected to push up inflation somewhat further to 1.6% in 2018.

The recovery is driven by domestic demand, which is expected to be supported by a number of tailwinds. In particular, the ECB's accommodative monetary policy stance continues to be transmitted to the economy. While decelerating somewhat, private consumption growth is expected to remain robust, notably in 2016, as households are likely to spend most of the past oil price-related windfall gains in an environment of improving labour market conditions and pent-up consumer demand. The expected recovery will also contribute to a continued, albeit gradual pick-up in investment, in part owing to accelerator effects. Domestic demand will also benefit from some fiscal easing in the near term.

External headwinds dampen the short-term outlook, but are expected to fade in the medium term. Euro area foreign demand will continue to recover only

---

[1] Eurosystem staff macroeconomic projections are an input to the Governing Council's assessment of economic developments and the risks to price stability. Information on the procedures and techniques used is given in *A guide to Eurosystem staff macroeconomic projection exercises*, ECB, June 2001, which is available on the ECB's website. The cut-off date for technical assumptions such as oil prices and exchange rates was 10 May 2016 (see Box 1). The cut-off date for including other information in this exercise was 18 May 2016.
The current macroeconomic projection exercise covers the period 2016-18. Projections for a period 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.
A table containing the projections of certain country variables that underlie the projections of the euro area aggregates presented in this article will be published on the ECB's website two weeks after the publication of this article, following publication of national projections by the national central banks.

modestly in the first half of 2016, still dampened by weak demand in emerging market economies. This adverse impact on extra-euro area export growth remains only partly mitigated by the favourable lagged effects of the past strong depreciation of the euro. Looking ahead, global activity outside the euro area is expected to strengthen gradually during the projection period, thereby supporting euro area foreign demand and thus extra-euro area exports.

Developments in HICP energy prices remain crucial in explaining both the low level of headline inflation in 2016 and the sharp increase that is foreseen to take place between 2016 and 2017. Large negative contributions from HICP energy inflation are expected to persist in 2016 and to dampen headline inflation. Significant upward base effects imply a strong increase of HICP energy inflation into positive territory in 2017. Once these upward base effects have faded, HICP energy inflation is expected to remain relatively stable over the remainder of the projection horizon. Upward pressures on HICP inflation excluding energy and food are envisaged to increase gradually over the projection horizon. Improvements in labour market conditions and the expected further strengthening of the economic recovery are expected to bolster wage growth and profit margins. Given the assumed increases in oil and non-energy commodity prices, upward indirect effects from these increases on HICP inflation excluding energy and food should build and eventually outweigh the fading dampening effects from previous commodity price falls. Continued upward effects throughout 2017 are, moreover, expected from the ongoing pass-through of the past depreciation of the euro exchange rate.

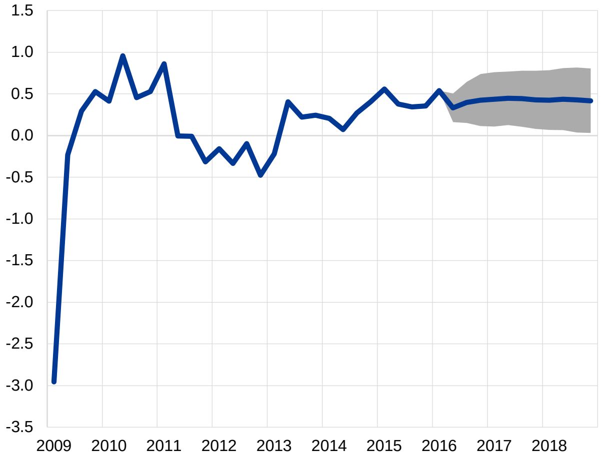
Chart 1

Macroeconomic projections[1)]

(quarterly data)

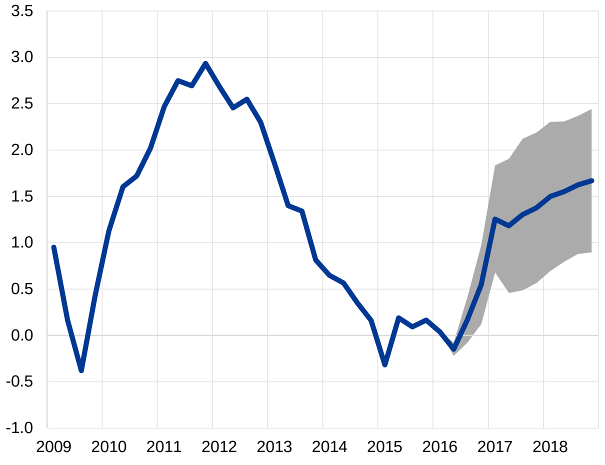
Euro area real GDP[2)]

(quarter-on-quarter percentage changes)



Euro area HICP

(year-on-year percentage changes)



1) 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.
2) Working day-adjusted data.

2 Real economy

The recovery in euro area activity is expected to remain resilient. Real GDP growth increased to 0.5% in the first quarter of 2016. Recent survey data show that business and consumer sentiment have stabilised at levels above their long-term averages, pointing to sustained economic growth in the near term.

Private consumption expenditure is projected to grow strongly in 2016, and to remain resilient beyond. Nominal disposable income growth should gradually accelerate over the projection horizon, supported by employment growth and accelerating nominal compensation per employee. Non-labour personal income will contribute positively to nominal disposable income growth, broadly in line with profit developments. Real disposable income growth is expected to accelerate in 2016, before losing momentum in 2017 and beyond, mostly reflecting the pattern of energy price inflation. Low financing costs, a modest recovery in loan growth and moderately rising household net worth, all reinforced by the ECB's monetary policy measures, should support private consumption and be only partly offset by the adverse impact of lower net interest receipts on disposable income. In addition, progress achieved in deleveraging should also support private consumption growth. Overall, annual growth in private consumption is projected to increase from 1.7% in 2015 to 1.9% in 2016 before decelerating to 1.7% in 2017 and 1.5% in 2018.

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

Compared with the March projections, the main changes in the technical assumptions are significantly higher US dollar-denominated oil and non-energy commodity prices, a small depreciation of the effective exchange rate of the euro, and lower long-term market interest rates.

Technical assumptions

	June 2016				March 2016			
	2015	2016	2017	2018	2015	2016	2017	2018
Three-month EURIBOR (percentage per annum)	0.0	-0.3	-0.3	-0.3	0.0	-0.3	-0.3	-0.2
Ten-year government bond yields (percentage per annum)	1.2	0.9	1.1	1.4	1.2	1.2	1.4	1.7
Oil price (in USD/barrel)	52.4	43.4	49.1	51.3	52.5	34.9	41.2	44.9
Non-energy commodity prices, in USD (annual percentage change)	-19.9	-3.3	4.3	4.6	-19.9	-14.8	3.0	4.7
USD/EUR exchange rate	1.11	1.13	1.14	1.14	1.11	1.11	1.12	1.12
Euro nominal effective exchange rate (EER38) (annual percentage change)	-7.1	4.2	0.2	0.0	-7.1	4.8	0.2	0.0

The technical assumptions about interest rates and commodity prices are based on market expectations, with a cut-off date of 10 May 2016. 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 2016, 2017 and 2018. The market expectations for euro area ten-year nominal government bond yields imply an average level of 0.9% in 2016, 1.1% in 2017 and 1.4% in 2018.[2] Reflecting the path of forward market interest rates and the gradual pass-through of changes in market rates to lending rates, composite bank lending rates on loans to the euro area non-financial private sector are expected to decline somewhat in 2016, remain broadly unchanged in 2017 and rise modestly in 2018. 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 10 May, the price of a barrel of Brent crude oil is assumed to fall from USD 52.4 in 2015 to USD 43.4 in 2016, before rising to USD 49.1 in 2017 and USD 51.3 in 2018, which is around USD 8 higher in 2016 and 2017 and around USD 6 higher in 2018 than in the March projections. The prices of non-energy commodities in US dollars are assumed to fall somewhat in 2016 and to rise in 2017 and 2018.[3] 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 10 May. This implies an average exchange rate of USD 1.13 per euro in 2016 and USD 1.14 per euro in 2017 and 2018, compared with USD 1.11 in 2016 and USD 1.12 in 2017 and 2018 in the March projections. The effective exchange rate of the euro (against 38 trading partners) is assumed to be 0.6% weaker over the projection horizon than assumed in the March exercise.

The saving ratio is expected to decline until mid-2017 and to remain broadly unchanged thereafter. A gradual pass-through of oil price-related real income gains is expected to continue to support the saving ratio somewhat in 2016, before unwinding in 2017. The saving ratio is then projected to stagnate over the remainder of the projection horizon, reflecting opposing factors. In general, declining unemployment, improving credit conditions and low interest rates point to a decline in the saving ratio. However, in some countries, debt deleveraging needs are expected to compensate for this and to lead to a rise in the saving ratio.

Residential investment in the euro area is expected to recover modestly. The projected acceleration of nominal disposable income growth and very low mortgage rates are expected to support a sustained recovery of residential investment. In addition, adjustment processes in the housing markets in many countries appear to have come to an end and house prices have bottomed out. Nonetheless, high unemployment and high levels of household debt in some countries as well as adverse demographic developments are likely to prevent a stronger increase in residential investment.

Business investment is expected to continue its recovery. Capital spending is projected to be supported by a number of factors, namely the very accommodative

[2] 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.

[3] Oil and food commodity price assumptions are based on futures prices up to the end of the projection horizon. The prices of other non-energy hard commodities are assumed to follow futures until the second quarter of 2017 and thereafter to evolve in line with global economic activity.

monetary policy stance, further strengthened by the recent monetary policy measures by the ECB; the projected strengthening of both domestic and external demand; the need to modernise the capital stock after several years of subdued investment; the low cost and wide availability of external financing; fiscal measures in some countries; and a strengthening of profit mark-ups in the context of an already cash-rich non-financial corporations sector. Moreover, the strong recovery in stock prices observed over the past few years and moderate debt financing growth have brought the leverage ratio (debt to total assets) in the non-financial corporations sector close to historical lows. However, the recovery of business investment will be dampened by rigidities in product and labour markets, expectations of weaker potential output growth than in the past and heightened geopolitical uncertainty.

Extra-euro area exports are projected to increase in line with euro area foreign demand. Foreign demand is projected to gradually gather pace from the second half of 2016 onwards, in line with stronger global activity, but to remain well below its growth performance seen before the crisis (see Box 2). Extra-euro area export market shares are expected to remain broadly unchanged over the projection horizon, following their recent increases. Extra-euro area imports are set to grow in line with their historical elasticity to total demand, albeit continuing to grow faster than exports and implying a negative contribution of net trade to growth in 2016 and a neutral one thereafter. The current account surplus is expected to decrease marginally from 3.2% of GDP in 2015 to 2.8% in 2018.

Box 2
The international environment

Global economic activity is expected to strengthen gradually, driven by still resilient growth prospects in most advanced economies and the progressive easing of the deep recessions seen in some large emerging market economies. Favourable financing conditions and improving labour markets should support the outlook for advanced economies. The gradual deceleration of the Chinese economy is likely to weigh on growth in other emerging market economies, particularly in emerging Asia. Although the recent commodity price rebound alleviates some of the more acute pressures, commodity exporters will continue their adjustment to low commodity prices. Moreover, despite the recent rebound in financial markets, emerging market economies face an environment of tighter external financing conditions, partly associated with the normalisation of US monetary policy. Political uncertainty and geopolitical tensions are also weighing on demand in some countries.

Global trade (excluding the euro area) returned to positive growth in the second half of 2015, after its pronounced weakness in the first half of last year. In the short term, global imports remain affected by weakness in some emerging economies, particularly in Brazil and Russia. Thereafter, world trade is expected to strengthen gradually, in line with the recovery in global activity. The projection continues to assume that the medium-term elasticity of trade to global growth is around 1, significantly below pre-crisis levels. Overall, euro area foreign demand is expected to increase from 0.6% in 2015 to 2.0% in 2016, 3.5% in 2017 and 4.0% in 2018.

Compared with the March 2016 projections, global activity and euro area foreign demand have been revised downwards.

The international environment

(annual percentage changes)

	June 2016				March 2016			
	2015	2016	2017	2018	2015	2016	2017	2018
World (excluding euro area) real GDP	3.1	3.1	3.7	3.8	3.1	3.2	3.8	3.9
Global (excluding euro area) trade [1]	0.7	1.8	3.5	4.0	0.7	2.2	3.8	4.1
Euro area foreign demand [2]	0.6	2.0	3.5	4.0	0.4	2.2	3.8	4.1

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

Overall, real GDP is expected to rise by 1.6% in 2016 and 1.7% in both 2017 and 2018.

The negative output gap is expected to narrow steadily over the projection horizon, reflecting only moderate potential output growth. Potential output growth is estimated to edge up during the projection period, but remain far below its pre-crisis rate of around 1.7%. The subdued momentum of potential output reflects primarily a fairly low contribution from capital following a protracted period of modest investment growth. The contribution from labour is projected to improve over the horizon, reflecting an increasing working age population in the context of increasing labour force participation, partly on account of some structural reforms, and also reflecting ongoing immigration.

Euro area labour market conditions should continue to improve over the projection horizon, somewhat faster than previously expected. Employment is projected to continue to increase over the projection horizon. The labour force is expected to expand strongly in 2016 and 2017, partly reflecting the inflow of refugees and the encouraged worker effect. The unemployment rate is expected to decline but to remain at a historically elevated level. Developments in employment imply a pick-up in labour productivity growth from 0.6% in 2015 to 0.9% in 2018, in line with its normal pro-cyclical pattern.

Compared with the March 2016 projections, the prospects for real GDP growth in 2016 have been revised up. The upward revision in 2016 partly reflects a more positive carry-over impact related to historical data revisions as well as stronger than expected growth in the first quarter of the year and a reduction in uncertainty related to the decline in financial market volatility. Beyond the near term, the growth outlook is broadly unchanged, masking downward impacts from higher oil prices and weaker foreign demand which are largely offset by the favourable impact of the March 2016 monetary policy measures.

3 Prices and costs

Recent developments in HICP inflation have been shaped by low energy prices and modest trends in HICP inflation excluding energy and food. HICP inflation stood at -0.1% in May 2016, reflecting a rate of -8.1% for the energy component and of 0.8% for the HICP excluding food and energy.

Over the projection horizon, external price pressures are expected to rise, contributing significantly to an increase in headline inflation. Upward oil price-related base effects in HICP energy inflation and the assumed further increases as embedded in oil futures prices should account for a significant part of the pick-up in headline inflation between 2016 and 2017. Upward pressures on headline inflation are also expected to continue to be passed through from the substantial past depreciation of the exchange rate of the euro as of mid-2014. HICP inflation excluding energy and food should increase gradually over the projection horizon as labour market conditions improve and the economic recovery strengthens, supported by the ECB's monetary policy measures.

Wage growth is moderate but projected to strengthen somewhat as labour market conditions gradually tighten. Wage growth is being dampened by elevated unemployment, low productivity growth, adjustment processes across countries to regain competitiveness, and higher wage flexibility following structural labour market reforms implemented during the crisis. In this respect, compositional effects are expected to continue to dampen aggregate wage growth, as new jobs appear to be created in particular in sectors with relatively lower labour productivity and, hence, lower wages levels. Overall, compensation per employee growth is expected to rise gradually from 1.3% on average in 2016 to 1.8% in 2017 and 2.2% in 2018.

Profit margins should benefit from the ongoing economic recovery. The envisaged further improvements in demand are expected to foster businesses' pricing power and, hence, profit margins. Profit margins have recently benefited from the windfall gains from lower oil prices, but this effect is expected to fade in the near term in line with the recent and assumed further increases in oil prices as indicated by the oil price futures curve. The foreseen increases in unit labour cost growth over the projection horizon are, moreover, envisaged to exert a dampening impact on profit margins in particular in 2018.

Compared with the March projections, the outlook for HICP inflation has been revised up slightly for 2016 and has remained broadly unchanged for 2017 and 2018. Upward revisions of HICP energy inflation related to changes in oil price assumptions have slightly outweighed the downward revisions of the non-energy components of the HICP for 2016. For 2017 and 2018 upward revisions of the energy and food components have been broadly offset by downward revisions in HICP inflation excluding food and energy.

4 Fiscal outlook

The fiscal stance is expected to provide a small positive contribution to demand in 2016 and to turn broadly neutral in 2017 and 2018. The fiscal stance is measured as the change in the cyclically adjusted primary balance net of government support to the financial sector. The expansionary fiscal stance in 2016 stems mainly from cuts in direct taxes and social security contributions in several countries and higher expenditures relating to the inflow of refugees.

Over the projection horizon, both the general government budget deficit and debt ratios are projected to be on a downward path. The deficit reduction in 2016 stems from a decline in interest payments and the improvement in the cyclical component, which are partly offset by a loosening of the fiscal policy stance. In 2017-18 the favourable effect of lower interest payments is likely to be compounded by an improvement in the primary balance resulting mainly from favourable cyclical developments. Over the period 2016-18 the gradual reduction in government debt is expected to be supported mainly by the favourable growth-interest rate differential in the light of the projected economic recovery and assumed low interest rates. Small primary surpluses are also likely to have a favourable impact on the debt path.

Compared with the projections published in March, the fiscal outlook is more favourable. The government budget balance has been revised upward throughout the projection horizon owing to an assumption of less dynamic growth in government consumption, including the compensation of public employees, amid broadly unchanged nominal GDP growth in 2017-18.The debt-to-GDP ratio is also expected to be lower over the projection horizon, reflecting higher primary surpluses and, particularly in 2016, a more favourable growth-interest rate differential, which stems from the upward revision to nominal GDP growth.

Table 1

Macroeconomic projections for the euro area[1)]

(annual percentage changes)

	June 2016				March 2016			
	2015	2016	2017	2018	2015	2016	2017	2018
Real GDP [1)]	1.6	1.6	1.7	1.7	1.5	1.4	1.7	1.8
		[1.3 - 1.9] [2)]	[0.7 - 2.7] [2)]	[0.5 - 2.9] [2)]		[1.0 - 1.8] [2)]	[0.7 - 2.7] [2)]	[0.6 - 3.0] [2)]
Private consumption	1.7	1.9	1.7	1.5	1.6	1.9	1.8	1.6
Government consumption	1.3	1.5	0.8	0.9	1.4	1.5	1.1	1.2
Gross fixed capital formation	2.7	3.2	3.4	3.3	2.5	2.7	3.6	3.3
Exports [3)]	5.2	3.2	4.2	4.4	4.8	3.0	4.3	4.6
Imports [3)]	6.0	4.7	4.7	4.8	5.4	4.6	5.3	5.1
Employment	1.0	1.1	0.9	0.9	1.1	0.9	0.8	0.9
Unemployment rate (percentage of labour force)	10.9	10.2	9.9	9.5	10.9	10.4	10.2	9.9
HICP	0.0	0.2	1.3	1.6	0.0	0.1	1.3	1.6
		[0.1 - 0.3] [2)]	[0.6 - 2.0] [2)]	[0.7 - 2.5] [2)]		[-0.2 - 0.4] [2)]	[0.6 - 2.0] [2)]	[0.8 - 2.4] [2)]
HICP excluding energy	0.9	0.9	1.2	1.6	0.9	1.1	1.3	1.5
HICP excluding energy and food	0.8	1.0	1.2	1.5	0.8	1.1	1.3	1.6
HICP excluding energy, food and changes in indirect taxes [4)]	0.8	0.9	1.2	1.5	0.8	1.1	1.3	1.6
Unit labour costs	0.8	0.8	1.0	1.3	0.9	1.1	0.9	1.2
Compensation per employee	1.3	1.3	1.8	2.2	1.3	1.5	1.9	2.1
Labour productivity	0.6	0.5	0.8	0.9	0.4	0.4	0.9	0.9
General government budget balance (percentage of GDP)	-2.1	-1.9	-1.7	-1.4	-2.1	-2.1	-2.1	-2.0
Structural budget balance (percentage of GDP) [5)]	-1.6	-1.9	-1.8	-1.6	-1.7	-2.1	-2.2	-2.1
General government gross debt (percentage of GDP)	90.7	90.0	89.0	87.4	91.1	90.8	90.0	89.2
Current account balance (percentage of GDP)	3.2	2.9	2.8	2.8	3.0	3.0	2.6	2.5

1) Working day-adjusted data.
2) 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.
3) Including intra-euro area trade.
4) 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.
5) Calculated as the government balance net of transitory effects of the economic cycle and temporary measures taken by governments (for the ESCB approach, see *Working Paper Series*, No 77, ECB, September 2001, and *Working Paper Series*, No 579, ECB, January 2007). The projection of the structural balance is not derived from an aggregate measure of the output gap. Under the ESCB methodology, cyclical components are calculated separately for different revenue and spending items. For more details, see the box entitled "Cyclical adjustment of the government budget balance" in the March 2012 issue of the ECB's Monthly Bulletin and the box entitled "The structural balance as an indicator of the underlying fiscal position" in the September 2014 issue of the ECB's Monthly Bulletin.

Box 3

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) An alternative oil price path

Alternative oil price models point to a risk of oil prices rising somewhat faster over the projection horizon than suggested by futures. The technical assumptions for oil price developments underlying the baseline projections, based on futures markets, predict an increasing path for oil prices, with the price per barrel of Brent crude oil reaching USD 52 at the end of 2018. This path is consistent with a moderate recovery of world oil demand, a scenario possibly associated with the global economic recovery gaining traction, and with a small decline in oil supply. A combination of alternative models used by Eurosystem staff[4] to project oil prices over the projection horizon currently suggests a higher oil price in 2017 and 2018 than assumed in the technical assumptions. This could emerge owing to a stronger recovery in world oil demand thanks to a stronger than expected pick-up in global activity, and/or a stronger reduction in oil supply owing to lower investment in the oil sector and thus to a reduction in oil exploitation capacity in some oil-producing countries. The materialisation of an alternative path, in which oil prices would be 10% higher than in the baseline by 2018, would marginally dampen real GDP growth, while entailing a somewhat faster increase in HICP inflation (up by about 0.1 percentage point in 2017 and 0.2 percentage point in 2018).

2) An alternative exchange rate path

This sensitivity analysis investigates the impact of a lower path of the exchange rate of the euro compared with the baseline. Depreciation risks to the euro exchange rate mainly stem from a divergence in the monetary policy stance on either side of the Atlantic. In particular, further monetary policy accommodation in the euro area as well as an earlier than expected rise in the US federal funds rate could put further downward pressure on the euro. The alternative path of the exchange rate of the euro is based on the 25th percentile of the distribution provided by the option-implied risk-neutral densities for the USD/EUR exchange rate on 10 May 2016. This path implies a gradual depreciation of the euro vis-à-vis the US dollar to an exchange rate of 1.04 USD/EUR in 2018, which is 8.8% below the baseline assumption for that year. The corresponding assumptions for the nominal effective exchange rate of the euro reflect historical regularities, whereby changes in the USD/EUR exchange rate reflect changes in the effective exchange rate with an elasticity of around 50%. This assumption results in a gradual downward divergence of the effective exchange rate of the euro from the baseline, bringing it to a level 4.6% below the baseline in 2018. In this scenario, the average of the results from a number of staff macroeconomic models points to higher real GDP growth (up by 0.1-0.2 percentage point) and higher HICP inflation (up by 0.1-0.3 percentage point) in 2016, 2017 and 2018.

---

4 See the four-model combination presented in the article entitled “Forecasting the price of oil”, *Economic Bulletin*, Issue 4, ECB, 2015.

Box 4
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 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 of the currently available forecasts from other institutions show similar or slightly lower real GDP growth over the projection horizon, while for inflation, they show a similar or slightly higher outlook. The projections for real GDP growth and HICP inflation do not differ greatly from the point forecasts of the June Eurosystem staff projections and are well within the ranges surrounding these projections (shown in brackets in the table).

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

(annual percentage changes)

	Date of release	GDP growth			HICP inflation		
		2016	2017	2018	2016	2017	2018
ECB staff projections	June 2016	1.6	1.7	1.7	0.2	1.3	1.6
		[1.3-1.9]	[0.7-2.7]	[0.5-2.9]	[0.1-0.3]	[0.6-2.0]	[0.7-2.5]
European Commission	May 2016	1.6	1.8	-	0.2	1.4	-
OECD	June 2016	1.6	1.7	-	0.2	1.2	-
Euro Zone Barometer	May 2016	1.6	1.7	1.6	0.3	1.4	1.7
Consensus Economics Forecasts	May 2016	1.6	1.6	1.6	0.2	1.3	1.6
Survey of Professional Forecasters	April 2016	1.5	1.6	1.7	0.3	1.3	1.6
IMF	April 2016	1.5	1.6	1.6	0.4	1.1	1.3

Sources: European Commission's European Economic Forecast, Spring 2016; IMF World Economic Outlook, April 2016; OECD Economic Outlook, June 2016; Consensus Economics Forecasts; MJEconomics; and the ECB's Survey of Professional Forecasters.
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.

Postal address: 60640 Frankfurt am Main, Germany
Telephone: +49 69 1344 0
Website: www.ecb.europa.eu