European Commission

ISSN 2443-8014 (online)

The Economic Outlook after the UK Referendum:

A First Assessment for the Euro Area and the EU

INSTITUTIONAL PAPER 032 | JULY 2016

EUROPEAN ECONOMY

Economic and Financial Affairs

European Economy Institutional Papers are important reports and communications from the European Commission to the Council of the European Union and the European Parliament on the economy and economic developments.

This paper exists in English only and can be downloaded from http://ec.europa.eu/economy_finance/publications/.

Europe Direct is a service to help you find answers to your questions about the European Union.

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

More information on the European Union is available on http://europa.eu.

Luxembourg: Publications Office of the European Union, 2016

KC-BC-16-032-EN-N (online)
ISBN 978-92-79-54339-5 (online)
doi:10.2765/726686 (online)

KC-BC-16-032-EN-C (print)
ISBN 978-92-79-54338-8 (print)
doi:10.2765/889576 (print)

European Commission

Directorate-General for Economic and Financial Affairs

The Economic Outlook after the UK Referendum:

A First Assessment for the Euro Area and the EU

EUROPEAN ECONOMY

Institutional Paper 032

CONTENTS

LIST OF TABLES

LIST OF GRAPHS

LIST OF BOXES

INCREASED UNCERTAINTY WEIGHING ON THE GROWTH OUTLOOK

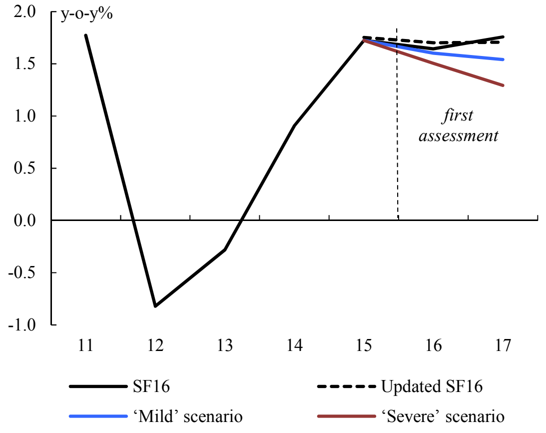
The economic landscape has not changed much in the weeks since the spring forecast was published on May 3, but the results of the UK referendum on 23 June have modified the conditions for the way ahead. *The 'leave' vote has resulted in financial market volatility, abrupt exchange rate changes, and a substantial increase in uncertainty. These developments and the uncertainty resulting from what is expected to be a protracted period of exit negotiations have the potential to damage the recovery in the EU. While uncertainty is expected to diminish over time, forthcoming changes in the economic and political relationships between the UK and Member States could have a longer lasting impact on the medium to long-term economic outlook.*

At the current juncture, the economic outlook is mainly affected by the uncertainty resulting from the UK's vote to leave the EU. *Without information about the situation after the UK's exit (e.g. trade patterns, mobility of goods, services and labour, policy responses), the 'new equilibrium' is difficult to pencil in and thus the adjustment path is impossible to specify. This implies that the uncertainty shock could evolve quite differently in terms of dimension and duration. The first assessment starts by looking at developments between the spring forecast and the UK referendum. Then, to get an idea about the near-term impact of referendum-related uncertainty, model-based scenario analyses and expert judgment are taken into account to evaluate a 'mild' and a more 'severe' uncertainty shock.*

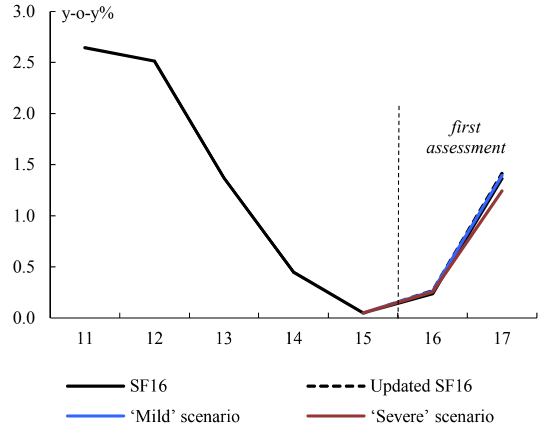
Increased uncertainty has resulted in a deterioration of the growth outlook for the UK but also for the rest of the EU in 2016 and 2017. *In recent months the EU economy has broadly developed in line with the spring forecast, i.e. the economic expansion has been sustained at a moderate pace, almost entirely driven by domestic GDP components. Private consumption has benefitted from low oil prices, very accommodative monetary policies and ongoing job creation; investment has accelerated slightly; and net trade has remained a drag on growth. Before the UK referendum, GDP growth in the euro area would have been expected to reach 1.7% in both 2016 and 2017. However, the UK's 'leave' vote is expected to slow private consumption and investment and impact on foreign trade. Taking into account the results of scenario analyses, growth in the euro area is expected to moderate in 2016 (to 1.5%-1.6%) and in 2017 (to 1.3%-1.5%). This implies a loss of GDP of ¼ to ½% by 2017, which is less than in the UK (1 to 2¾%). The impact on inflation is expected to be concentrated in 2017 both in the euro area (-¼ to 0 pps.) and in the UK (⅔ to 1 pps.).*

The UK's 'leave' vote has generally increased risks to the outlook, particularly on the downside. *The referendum has created an extraordinarily uncertain situation. Due to the lack of information about the new equilibrium after the UK's exit, many elements have not yet entered the assessment but nevertheless constitute substantial risks to the outlook. As studies on the potential impact of a 'leave' vote had suggested, most of these risks are on the downside. They come on top of the previously identified risks.*

Graph I.1: **Real GDP, euro area**



Graph I.2: **HICP, euro area**



1. UNCERTAINTY SHOCKS AND THE EURO AREA OUTLOOK

Since the UK referendum, standard measures point to a significant increase in uncertainty. [1] Financial asset prices such as the option-implied volatility or the exchange rate, measures of disagreement among forecasters and survey respondents, and measures of political uncertainty such as the Baker-Bloom index signal a significant increase in uncertainty.

The link between uncertainty and macroeconomic developments...

Uncertainty describes the inability of economic agents (e.g. consumers, investors, politicians) to form clear expectations about future economic developments. In the context of the UK's 'leave' vote there is for instance uncertainty about the future set-up of trade relationships after the UK's exit from the EU has been implemented. The causality between uncertainty and economic activity not clear cut. [2]

...offers explanations of the short-term impact of the referendum shock.

This first assessment considers two scenarios which differ with respect to the assumptions about the severity of the uncertainty shock. Estimates derived from simulations using the Commission's QUEST model (Box 1) are then combined with expert judgment to form a comprehensive picture of the short term impact.

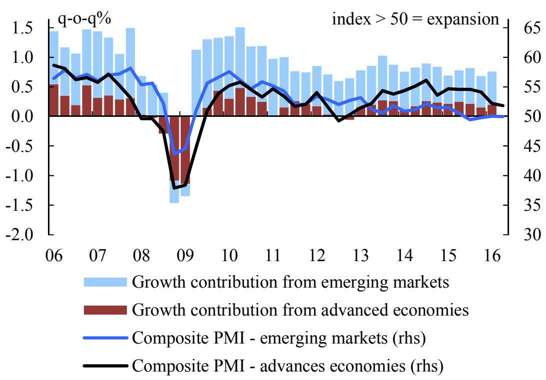
In a 'mild' scenario, moderate uncertainty related to the UK's 'leave' vote has a dampening impact on economic growth for a limited time period. A more 'severe' scenario incorporates a prolonged and more severe uncertainty shock, which increases the risk premium and thus financing costs, and induces precautionary savings by households. Both scenarios assume a 15% depreciation of the pound sterling vis-à-vis the euro, which boosts UK exports but reduces disposable incomes through higher import prices. Other Member States are directly affected through the depreciation of sterling, as well as through lower demand in the UK, which reduce their exports. Moreover, it is assumed that uncertainty also affects investment and consumption in the rest of the EU, though to a lesser degree than in the UK. None of these scenarios contain assumptions on the shape of any future trade or migration agreement between the UK and the EU, or on the possible impact of the UK's withdrawal from the EU budget, as these are likely to take place after the forecast horizon.

2. THE EXTERNAL ENVIRONMENT

The overall outlook slightly weakened in recent months and...

The outlook for GDP outside the EU and trade remains weak and may have weakened somewhat in recent months since the spring forecast. The situation continues to vary significantly across countries and regions, reflecting the impact of several, possibly offsetting, new developments, including the recent pick-up in oil prices, domestic crises and the results of the UK referendum (see Graph 3). The rebound in oil prices eased some of the distress across commodity exporters, lifting the outlook for e.g. Russia and Brazil. Yet in other regions, including the Middle East and North Africa (MENA) and Sub-Saharan Africa, this was offset by the rise in geopolitical tensions and aggravating domestic problems. Growth prospects in China and emerging Asia in general, remain resilient and have not changed materially since spring, even if the long-standing risks related to unwinding the country's imbalances have not disappeared.

Graph I.3: **Global GDP and global Composite PMI**



Source: OECD, IMF, EUROSTAT, and national statistical institutes for GDP, JPMorgan/Markit for PMI.

---

(1) See e.g. Fichtner, F. et al. (2016). 'Brexit decision is likely to reduce growth in the short term'. *DIW Economic Bulletin* 6(26-27), pp. 301–7.

(2) See Bloom, N. (2009). 'The impact of uncertainty shocks'. *Econometrica* 77(3), pp. 625–83.

...the UK's 'leave' vote could be felt via higher uncertainty, risk aversion and flight to safety.

While the impact of the UK referendum on non-EU economies is difficult to determine at this point, the dominant effect will most likely be the general and broad-based increase in uncertainty, both political and economic, rising risk aversion, and an ensuing flight to safety. This may increase upward pressures on 'safe haven' currencies (e.g. USD, CHF, JPY), weighing on exports and business confidence in a number of advanced economies (e.g. US, Switzerland, Japan). On the other hand, rising uncertainty will likely lead the Fed to adopt a more dovish approach to normalisation than assumed in spring, which may cushion these impacts to some extent, particularly for emerging markets.

In recent months, oil prices have increased faster than previously assumed.

Oil prices recovered towards 50 USD/bbl. in June, supported by the combination of supply and demand factors. Futures suggest an upward revision to forecast assumptions, to an average of 45.3 and 52.7 USD/bbl. for 2016 and 2017, respectively, which is about 10% and 15% higher than assumed in the spring forecast. The prices of other commodities, including metals and agricultural products are now expected to fall in 2016 by less than assumed in spring. But despite these upward revisions, prices of oil and many other commodities remain markedly lower than before the price declines started.

3. FINANCIAL MARKETS

The UK referendum began impacting financial markets well before the referendum day...

Developments in financial markets ahead of the UK's vote were driven by referendum-related concerns which added to a more general risk-aversion sentiment prevailing since the beginning of this year. Shortly before the referendum, market participants expected the 'remain' side to win, and positioned themselves accordingly, which exacerbated market reactions after the referendum result was published.

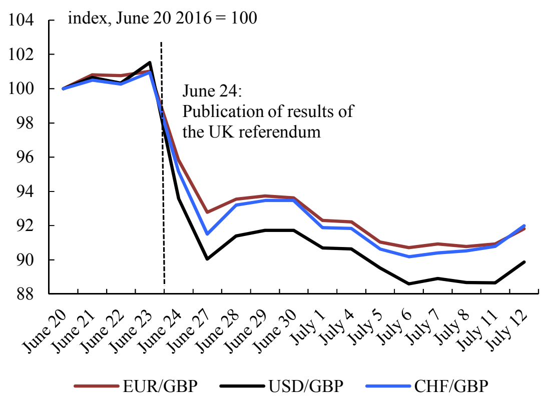
...but the 'leave' vote triggered significant market reactions,...

At the end of June, the UK referendum outcome triggered significant 'safe haven' flows with rising risk premia across market segments and falling sovereign bond yields. All benchmark 10-year sovereign yields declined significantly, including the German bund, which turned negative. Sovereign spreads of non-core euro area Member States widened only slightly in the direct aftermath of the vote, before starting to narrow somewhat amid increasing expectations of further ECB monetary policy easing. Euro area corporate bond markets also were hit relatively little, backed by the ECB's corporate bond purchases programme. Equity markets fell more abruptly, particularly for European banks. While a measured recovery has followed in several segments of financial markets, political and economic uncertainty over the medium-term impact of the UK referendum remains high and weighs on market sentiment.

...particularly in foreign exchange markets...

Following the UK referendum, developments in foreign exchange markets were dominated by the steep depreciation of sterling, which fell by about 10% on June 24. Most cross rates between 'safe haven' currencies (e.g. the USD-EUR rate) were less affected. In subsequent days, foreign exchange markets remained volatile and sterling depreciated further.

Graph I.4: **Bilateral exchange rates between sterling and euro, US dollar and Swiss franc**



Source: ECB

The broadly unchanged nominal effective exchange rate of the euro (between the referendum day and the cut-off date) masks an appreciation vis-à-vis sterling of about 10% and a depreciation of a similar magnitude vis-à-vis the Japanese yen. More generally, the euro has strengthened against other EU currencies (e.g. the Swedish krona, the Polish złoty) while it has weakened against the US dollar and most emerging market currencies.

...weighed on the European banking sector...

The European banking sector continues to be challenged by low profitability in an operating environment of low interest rates and low nominal economic growth. In this unfavourable context, bank shares recorded sharp losses in the wake of the 'leave' vote. The further flattening of the yield curve and the weaker growth outlook make it harder for many banks to improve their balance sheets by increasing capital and/or reducing nonperforming loans. The banking sector, particularly in Italy, has come under significant pressure recently as the UK referendum result exacerbated pre-existing vulnerabilities and led markets to question the capacity of these banks to repair their balance sheets. As regards bank lending, data up to May showed a positive trend in the euro area as a whole, but the current market jitters in the banking sector may end up having negative consequences on loan availability in some countries.

...and altered expectations about the path of major central banks' policies.

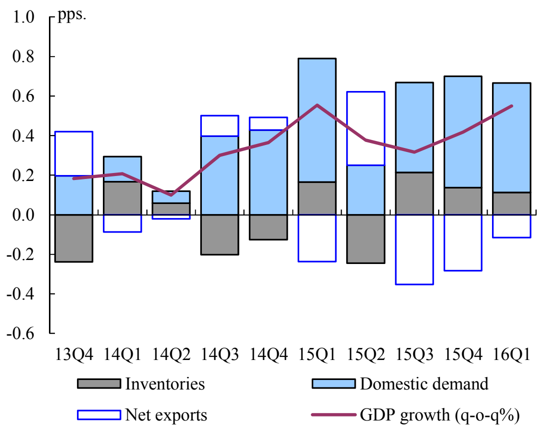
The monetary policy stance of major central banks has remained accommodative since the spring forecast. In early July, market-implied policy rates are pricing in additional monetary policy easing in some cases (e.g. in the UK and in the euro area) and further delays in the normalisation of monetary policy in other jurisdictions (e.g. in the US). The Bank of England took macro-prudential policy action by reducing the countercyclical capital buffer banks have to hold. It also hinted at a possible loosening of monetary policy as soon as this summer, voicing concerns about economic and financial stability risks which have become more visible following the outcome of the vote in the UK referendum. While the ECB has considerably eased its monetary policy stance in the past few months, it signalled it would react to an unwanted tightening of financial conditions that would alter the inflation outlook by using all available measures.

4. ECONOMIC ACTIVITY AND GDP

In 2016, the euro area stayed the course of moderate economic growth...

The continuation of the moderate expansion[(3)] was confirmed in the first quarter of 2016 during which the output in the euro area exceeded its pre-crisis peak of 2008 for the first time. Euro area GDP growth strengthened from 0.4% (quarter-on-quarter) in 2015-Q4 to 0.6% in 2016-Q1, contrary to downbeat signals sent by most survey indicators in the first three months of the year. In the EU, GDP growth remained unchanged at 0.5%. Growth continued to be supported by domestic demand (Graph 5), while being dampened by weak exports. The previously identified tailwinds (e.g. low oil prices, very accommodative monetary policy, weak euro, slightly expansionary fiscal stance in the euro area in 2016) proved strong enough to offset the increased headwinds (concerns about emerging market economies, in particular the rebalancing in China, weak global trade momentum, increased uncertainty of an economic and non-economic nature).

Graph I.5: **Real GDP growth and contributions, euro area**

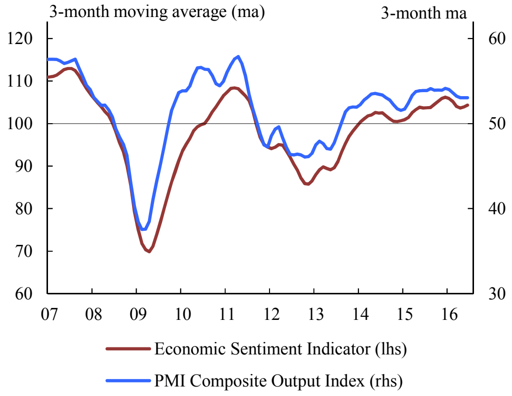


In line with the spring forecast, quarterly GDP growth in the euro area and the EU is expected to have slowed in the second quarter. Survey indicators moved in a narrow range in the second quarter of the year, after having fallen in the first months of the year from relatively high levels. Both the Economic Sentiment Indicator and the composite PMI remained broadly unchanged in 2016-Q2 compared to 2016-Q1, hinting at a continuation of the moderate recovery (Graph 6),

(3) See European Commission (DG ECFIN) (2016). 'Staying the course amid high risks'. In *European Economic Forecast – Spring 2016*. Institutional Paper 25, Section I, pp. 9–48.

but data for both indicators was collected before the UK referendum.

Graph I.6: **Economic Sentiment Indicator and PMI Composite Output Index, euro area**



Both the industrial production index for April and the average of the retail trade index for April and May point to slowing expansion. Taking on board all the information available prior to the UK's 'leave' vote, GDP would have been expected to grow by 1.7% in both 2016 and 2017 in the euro area and by 1.8% in both years in the EU (Table I.1).

…but the fallout of the UK's 'leave' vote is set to cloud the growth outlook.

The UK's vote will affect not only the UK but also the rest of the EU economy through several transmission channels, mainly uncertainty, investment, trade and migration. In the near term, the main impact will be a large increase in uncertainty, both economic and political. These factors are expected to slow private consumption and investment growth and to impact on foreign trade, mainly in the UK, but also in the other Member States. Simulations suggest a cumulated loss of GDP in the range of ¼ to ½ a percentage point in the euro area and 1 to 2¾ percentage points in the UK (see Box 1). Taking into account the results of scenario analyses, GDP growth in the euro area is expected to moderate marginally in 2016 (to 1.5%-1.6%) and to slow further in 2017 (1.3%-1.5%). A more substantial slowdown is expected for the UK (to 1.3%-1.6% in 2016 and to between -0.3% and 1.1% in 2017).

Investment has recently surprised on the upside…

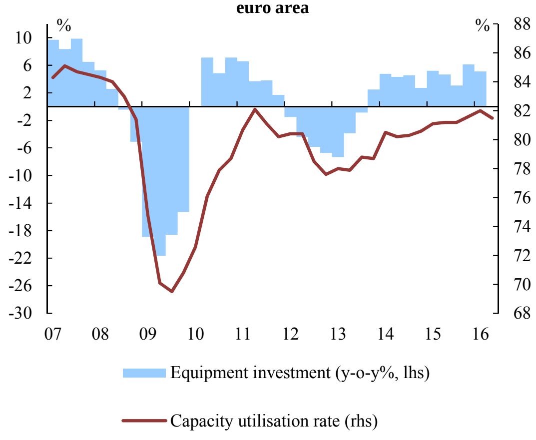
The very accommodative monetary policy environment in the euro area has lowered financing costs for non-financial corporates and improved access to credit, including for SMEs. Moreover, the recently initiated measures such as corporate bond purchases and the TLRTO II programme came on top of earlier measures. This has shifted the focus of investment decisions to other factors, such as capacity utilisation (see Graph 7), demand prospects, previously postponed investment decisions (pent-up demand), policy support such as the Investment Plan for Europe; and also obstacles that are legacies of the crisis (e.g. high corporate debt). As regards these factors little has changed in the last few months. This assessment is supported by the expansion of investment in the first quarter (0.8% q-o-q in the euro area, 0.5% in the EU) although some moderation was recorded after the upside surprise in the last quarter of 2015.

The Commission's surveys suggest that investor sentiment was broadly stable in the euro area in the second quarter, with small increases in the industry, services and construction sectors and a marginal decline in the retail sector. Overall, the outlook for investment in 2016 would have even been revised up a notch, while the outlook for 2017 looked less favourable due to subdued growth of trade volumes and global output and the stronger-than-assumed rebound in oil prices.

Table I.1:
Overview - The first assessment, GDP growth

	Outturn	Spring forecast		Pre-referendum update		Impact assessment of the UK vote				Impact assessment of the UK vote (cumulated pps.)			
						'Mild' scenario		'Severe' scenario		'Mild' scenario		'Severe' scenario	
	2015	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Euro area	1.8	1.6	1.8	1.7	1.7	1.6	1.5	1.5	1.3	-0.1	-0.3	-0.2	-0.6
EU27 (-UK)	**1.8**	**1.8**	**1.9**	**1.9**	**1.8**	**1.8**	**1.7**	**1.7**	**1.4**	**-0.1**	**-0.3**	**-0.2**	**-0.6**
United Kingdom	2.2	1.8	1.9	1.8	1.9	1.6	1.1	1.3	-0.3	-0.2	-1.0	-0.5	-2.7
EU28	**1.8**	**1.8**	**1.9**	**1.8**	**1.8**	**1.7**	**1.6**	**1.6**	**1.1**	**-0.1**	**-0.4**	**-0.3**	**-1.0**

Graph I.7: **Equipment investment and capacity utilisation, euro area**



...but increased uncertainty is expected to hamper investment.

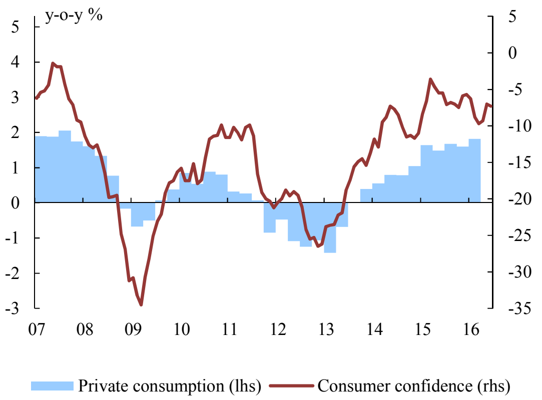
The aforementioned short-term indicators were compiled ahead of the UK referendum, so may not reflect the current level of investor sentiment. Overall, the increased uncertainty in the UK and other Member States is expected to hamper investment decisions either by delaying them or by taking them off the table, at least until uncertainty diminishes. Accordingly, scenario analyses of uncertainty shocks of different severities show investment growth declining already in 2016 and even more so in 2017. This impact could be exacerbated should the shock also hit the financial system very severely and lead to tighter credit supply conditions. Depending on the dimension and duration of the uncertainty shock, the impact on investment could even lead to recession in the most-affected regions such as the UK.

Private consumption has so far been the main growth driver and underlying fundamentals have remained supportive...

Ongoing employment growth, rising wages, still moderate rates of inflation and high levels of consumer confidence continued to support private consumption in the first months of 2016. The role of private consumption as the main growth driver was confirmed in the first quarter of the year by an expansion of 0.6% (q-o-q) in both the euro area and the EU28, which was stronger than forecast and suggested a marginal uptick to the annual forecast for 2016. The short-term indicators for the second quarter point to a slight moderation in consumption growth, which to some extent, might reflect the pass-through of higher oil prices or, more generally, the expected uptick in inflation in the coming months.

Consumer confidence fell towards the end of the first quarter and has remained broadly flat since (see Graph 8). In June, fewer respondents seemed concerned about future unemployment, but their assessments of the future general economic situation deteriorated. In May, retail trade volumes were up by 0.4% in both the euro area and the EU, while the 3m-on-3m rate fell from 0.4% to -0.1% in the euro area and from 0.5% to 0.3% in the EU. Overall, developments up to the UK referendum were broadly in line with the spring forecast for private consumption.

Graph I.8: **Private consumption and consumer confidence, euro area**



...but increased uncertainty tends to delay spending decisions, so consumption growth is likely to slow.

The factors behind the strength of private consumption are affected directly and indirectly by the impact of increased uncertainty. Higher uncertainty can have a direct effect on consumption by encouraging households to increase their precautionary savings and delay purchases. This pattern has been observed during earlier periods of rising uncertainty, for instance during the sovereign debt crisis, when consumers became more reluctant to make major purchases or to increase spending [(4)] and when measures of consumer uncertainty sharply increased. [(5)] This effect should fade once uncertainty diminishes and

[(4)] See ECB (2011). 'Household spending, consumer confidence and durable consumption'. ECB *Monthly Bulletin*, July, Box 4, pp. 42–4.

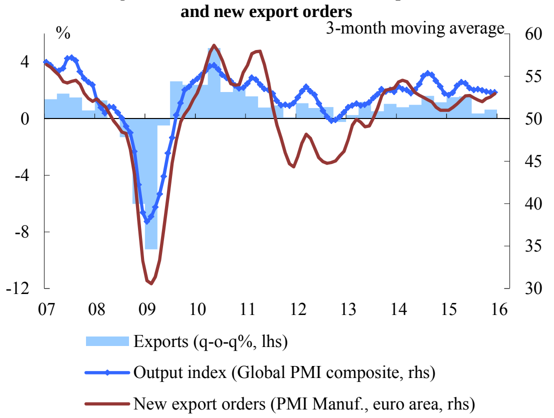
[(5)] See Balta, N., Valdés Fernández, I. and E. Ruscher (2013). 'Assessing the impact of uncertainty on consumption and investment'. *Quarterly Report on the Euro Area* (European Commission – DG ECFIN) 12(2), pp. 6-18.

pent-up demand is released. Higher uncertainty can also affect consumption indirectly through its negative impact on economic growth and employment creation, which lower the growth of disposable incomes more than they lower inflation. Household consumption growth is therefore expected to be reduced. But while the direction of these short-term effects is known, the size of the impact hinges on the size and duration of the uncertainty shock.

Weak exports but solid imports mean that net trade has weighed on economic growth, as expected…

In early 2016, the slowing economic growth in the EU's external environment and the weakness of global trade remained a drag on exports of goods and services from the euro area (see Graph 9). The divide between trade within the EU and the euro area on the one hand, and trade with partners outside on the other hand, made outcomes more dependent on developments in the EU. As recent developments in economic activity were broadly in line with the spring forecast, the expected drag on growth from net trade looks to be materialising, with first quarter net trade lowering GDP growth by 0.1 pps. in both the euro area and the EU. In the euro area, the lack of momentum in the export-oriented manufacturing PMI in the second quarter of the year (52.0, only marginally up from 51.7 in the first quarter) is compatible with this view.

Graph I.9: **Global demand, euro-area exports and new export orders**



Source: EC, Markit Group Limited

…and weaker sterling and slowing trade growth could make net trade an even bigger drag on growth in the euro area.

An increase in uncertainty and higher volatility in financial markets has already increased the search for 'safe havens' and strongly affected foreign exchange markets. The external assumptions underlying this first assessment already incorporate a strong depreciation of the pound sterling, which is expected to dampen exports to the UK and worsen the price competitiveness of companies vis-à-vis their UK competitors in third markets. In addition, over the forecast horizon, slowing economic growth is expected to lower trade volumes and thus also euro area imports. The dimension of this transmission of increased uncertainty depends on the size and duration of the shock, but also on country-specific characteristics, such as openness to trade and national export and import structures. Overall, the combination of increased uncertainty and deteriorating terms of trade is expected to impact negatively on euro area GDP growth in 2016 and 2017.

5. THE LABOUR MARKET

Labour market conditions in the euro area and the EU have continued to improve…

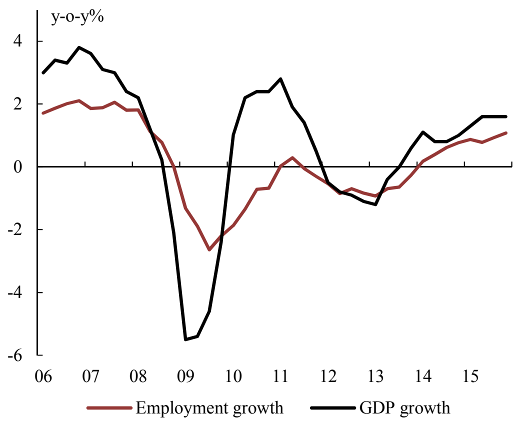
In the first quarter 2016, net job creation continued to expand by 0.3% q-o-q in both the EU and the euro area, in line with GDP developments (see Graph 10). The higher post-crisis response of employment growth to cyclical developments mirrors wage moderation, shifts towards higher consumption of more labour-intensive goods and services and sectoral re-allocations of labour. [6] Employment has been also benefited from structural reforms implemented during the current recovery.[7] In some Member States, temporary fiscal measures seem to have supported recent employment growth. Similarly, unemployment in the euro area fell further in May (to 10.1%, its lowest level since July 2011) and in the EU (to 8.6%, its lowest level since March 2009). The Commission's survey data on employment expectations in the second quarter, collected before the referendum, point to further net job creation in almost all sectors in the euro area. In the EU, in the second quarter employment expectations only increased in industry, partly reflecting the decline

(6) Anderton R., T. Aranki, B.Bonthuis and V. Jarvis (2014). 'Disaggregating Okun's Law. Decomposing the impact of the expenditure components of GDP on euro area unemployment'. *ECB Working Paper Series* 1747.

(7) Structural reforms implemented during upswings yield long run benefits for employment and minimise short term employment losses. See, also OECD (2016). 'Short-term labour market effects of structural reforms: Pain before the gain?'. Chapter 3, *OECD Employment Outlook*. OECD: Paris, pp.111–67.

in employment expectations in all other sectors in the UK.

Graph I.10: **Employment growth and GDP growth, euro area**



...but the impact of the UK's vote on economic activity is expected to slow the ongoing labour-market recovery.

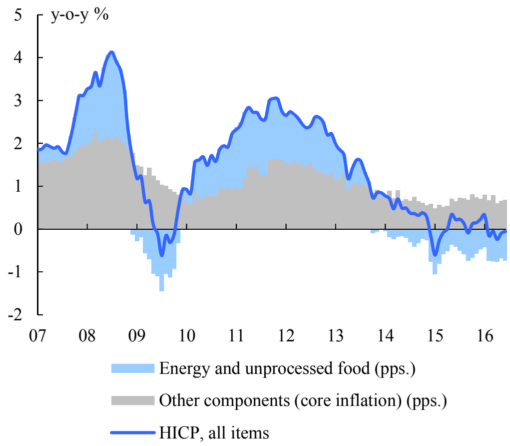
Heightened uncertainty and weaker domestic demand are expected to weigh on labour market conditions from the second half of this year but even more so in 2017. Labour market fundamentals in the euro area and the EU27 on aggregate are expected to move broadly in line with economic activity developments in both the scenarios of the impact of the UK 'leave' vote. Increased risk aversion and subdued domestic demand should have a negative impact on firms' hiring decisions, which would be somewhat more pronounced under the 'severe' scenario.

6. INFLATION

In the first half of the year inflation remained as low as forecast ...

In the last few months, inflation remained very low mainly reflecting energy price inflation (see Graph 10). After slipping back into negative territory in April and May, the euro area flash estimate euro area for headline inflation turned slightly positive in June, which lifted the average in the second quarter to -0.1%, as forecast. Core inflation (i.e. HICP excluding energy and unprocessed food) averaged 0.8% in the second quarter, less than in the first quarter. Services inflation picked up during the quarter. On the other hand, non-energy industrial goods inflation slowed, mirroring subdued global price pressures and industrial producer prices in the domestic markets. Domestic wage dynamics remain contained by the moderate momentum of growth and the remaining slack in the labour market.

Graph I.11: **Inflation breakdown, euro area**



Looking ahead, the assumed rebound in oil prices should finally exhaust the drag of energy inflation on headline inflation in the third quarter. In turn, base effects in the energy index will clearly turn positive in the fourth quarter and more so in the beginning of next year. Since the spring forecast, the market assumption for the price of oil has been revised higher, and this essentially is expected to neutralise the negative impacts on euro area inflation reflecting revised exchange rate assumptions. Not taking into account the UK referendum, euro area HICP inflation in 2016 would have been slightly revised upwards to 0.3%, whereas the outlook for 2017 would have remained unchanged at 1.4%.

...whereas increased uncertainty is expected to impact only marginally on euro area inflation.

The expected negative short-term impact of an uncertainty shock on economic activity is expected to weigh on domestic price pressures in the euro area, whereas any further appreciation vis-à-vis sterling and its impact on import prices could exacerbate this effect. However, the impact of the UK's currency depreciation is assumed to be temporary. Although the magnitude of the uncertainty shock is difficult to quantify, the overall impact on inflation in the euro area is expected to be low and concentrated in 2017. This view finds support in simulation analyses of a 'mild' and a 'severe' uncertainty shock.

7. RISKS

A few of the risks surrounding the spring forecast have slightly diminished, but....

On the external side, the risk that slowing growth in emerging market economies, in particular China, could trigger stronger spillovers or turn out worse than currently forecast, may have become smaller as a result of recent policy measures. Also, the risk of a faster-than-assumed normalisation of monetary policy in the US, which would have detrimental effects on global growth, looks now less acute than in spring. But geopolitical tensions (e.g. in Ukraine and Syria) are keeping uncertainty at high levels and could still affect the EU and the euro area more negatively than currently expected.

On the domestic side, legacies of the crisis could still weigh more heavily on private consumption and investment activity than expected. This includes deleveraging needs in the household and corporate sector and non-performing loans on bank balance sheets. The implementation of structural reforms could still be slower than expected. An extended period of very low nominal interest rates also carries substantial risks to financial stability. And the failure to find common solutions to common challenges at the EU level remains a risk (e.g. handling of migration flows and trade agreements).

...the outcome of the UK referendum has created a multitude of new, mostly downside risks.

The uncertainty surrounding the spring forecast had already been substantial. The referendum has created an extraordinarily uncertain situation, which is likely to prevail for some time. Due to the lack of information about the possible new equilibrium after the UK's exit from the EU and the adjustment path associated with it, many elements have not yet entered this first assessment but constitute substantial risks to the outlook for growth and inflation. As studies on the potential impact of a 'leave' vote had suggested, [8] many of these risks are substantial and on the downside, many related to the outlook for trade, investment, and financial services. These new risks come on top of the previously identified risks and thus keep the balance of risks tilted to the downside.

Moreover, the vote has increased or even created political risks which, if they were to materialise, could alter the forecast massively. However, such risks are extremely difficult to quantify as they could affect a large number of variables. Overall, the UK's 'leave' vote has increased risks to the outlook with downside risks strongly dominating.

---

[8] See e.g. OECD (2016). 'The economic consequences of Brexit: a taxing decision'. *OECD Economic Policy Paper* 16, OECD Publishing; IMF (2016). 'United Kingdom: Selected issues' *IMF Country Report* 16/169.

Box I.1: Model-based scenarios of increased uncertainty following the UK referendum

The outcome of the UK referendum has led to a sharp increase in uncertainty. This is expected to have an important impact, not only on the UK economy, but also reverberate across the rest of the EU. The pound sterling has fallen sharply and stock markets have shown increased volatility. While it is too early to assume any form of future trade agreement between the EU27 and the UK, significantly higher uncertainty is likely to negatively affect investment and economic growth in the short run.

This box presents two model-based scenarios of higher uncertainty and its economic impacts related to the UK referendum, a 'mild' and a 'severe' scenario, using the Commission's QUEST model. These scenarios should not be seen as conditional forecasts, as no hard information from financial markets was available to be used. They are merely illustrative scenarios that describe the possible impacts of a period of mild uncertainty and a situation of more prolonged and more severe uncertainty starting in 2016-Q3. Both scenarios include a 15% depreciation of the sterling in effective terms on impact, reflecting the depreciation in the days after the referendum. In the UK, the depreciation boosts exports but also reduces disposable incomes through higher import prices. In the model, the uncertainty shocks operate by increasing the risk premium as part of financing costs. Households' precautionary savings are increased as well.

Other Member States are directly affected through sterling's depreciation as well as lower demand in the UK, which reduce their exports. Moreover, it is assumed that uncertainty also affects investment and consumption in the rest of the EU, though to a lesser degree than in the UK.

No assumptions are made on the shape of any future trade agreement. Monetary policy is assumed not to react to the increase in consumer prices and interest rates are left unchanged for two years. No policy change is assumed for fiscal policy, but automatic stabilisers are operating through lower tax returns and higher unemployment benefits payments.

The table summarises the model-based impacts on GDP in the largest Member states and in the EU aggregates as yearly averages for the years 2016 and 2017, all level percentage difference from a baseline which is the pre-referendum outlook. In the 'mild' scenario the cumulative growth effect over 2016-17 for the UK is slightly below -1%. Increased uncertainty has a negative impact on investment, both equipment and construction. Higher import prices raise consumer prices and lower real wage growth, which results in a decrease in consumption growth. While the depreciation of the sterling boosts exports and reduces imports, these effects are not as strong as might be expected because of the UK's specialisation in services, which are less price-sensitive. The current account improves slightly by 0.5 pps., but there is a deterioration in public finances as lower growth affects tax returns. Altogether, GDP growth decreases by 0.3 pps. this year and 0.6 pps. next year, mainly due to lower investment.

Table 1:
Cumulative GDP growth effects as % from baseline

	Mild scenario		Severe scenario	
	2016	2017	2016	2017
UK	-0.3	-0.9	-0.6	-2.6
EA	-0.1	-0.2	-0.2	-0.5
EU27	0.0	-0.2	-0.2	-0.5
EU28	-0.1	-0.3	-0.3	-0.9

The rest of the EU is also affected by the increase in uncertainty. GDP is 0.2% lower by 2017 in the euro area and the rest of EU27 countries, due to lower growth in the UK, and uncertainty shocks affecting investment in the EU27 countries directly.

In the 'severe' scenario, a sharper and more prolonged markets' risk reassessment is assumed, which affects investment more strongly. Consumption is also more deeply affected by negative confidence shocks. In this scenario, GDP growth decreases by 0.6 pps. this year and a further 2 pps. next year. As a result the cumulative growth effect over 2016-2017 is around 2.5% in the UK, with strong declines in investment and consumption There is a sharper deterioration in public finances, with the government balance falling by 1.3 pps. Spillovers to the rest of the EU are more strongly negative in this scenario. GDP decreases by 0.5 % by 2017 in the euro area and the rest of the EU27 countries, and there is further downward pressure on inflation.

Box I.2: Some technical elements behind the assessment

Technical background

The present assessment tries to quantify the economic impact of the UK 'leave' vote on the UK and the rest of the EU. This assessment provides a partial update of the Spring 2016 forecast which was published on 3 May. The cut-off date for taking new information into account in this impact assessment was 12 July. The assessment covers annual real GDP growth and annual HICP inflation for 2016 and 2017.

External assumptions

This assessment is based on a set of external assumptions, reflecting market expectations and recent developments at the time of the assessment. To shield the assumptions from possible volatility during any given trading day, averages from a 10-day reference period between 24 June and 7 July were used for exchange rates, interest rates and for oil prices.

Exchange 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 1.12 in 2016, and 2017. As regards other major currencies, following the same technical assumption, the average GBP/EUR rate is assumed to be 0.81 in 2016 and 0.84 in 2017. The assumption implies an average JPY/EUR of 119.71 in 2016 and 115.17 in 2017.

Interest rates

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 2016 and 2017 in the euro area. Long-term euro area interest rates are assumed to be 0.1% in 2016 and 2017.

Commodity prices

Commodity price assumptions are also, as far as possible, based on market conditions. According to futures markets, prices for Brent oil are projected to be on average 45.3 USD/bbl in 2016 and 52.7 USD/bbl in 2017. This would correspond to an oil price of 40.7 EUR/bbl in 2016 and 47.5 EUR/bbl in 2017.

EUROPEAN ECONOMY INSTITUTIONAL SERIES

European Economy Institutional series can be accessed and downloaded free of charge from the following address:
http://ec.europa.eu/economy_finance/publications/eeip/index_en.htm

Titles published before July 2015 can be accessed and downloaded free of charge from:

- http://ec.europa.eu/economy_finance/publications/european_economy/index_en.htm
  (the main reports, e.g. Economic Forecasts)
- http://ec.europa.eu/economy_finance/publications/occasional_paper/index_en.htm
  (the Occasional Papers)
- http://ec.europa.eu/economy_finance/publications/qr_euro_area/index_en.htm
  (the Quarterly Reports on the Euro Area)

Alternatively, hard copies may be ordered via the “Print-on-demand” service offered by the EU Bookshop: http://bookshop.europa.eu.

HOW TO OBTAIN EU PUBLICATIONS

Free publications:

- one copy:
  via EU Bookshop (http://bookshop.europa.eu);

- more than one copy or posters/maps:
  - from the European Union's representations (http://ec.europa.eu/represent_en.htm);
  - from the delegations in non-EU countries (http://eeas.europa.eu/delegations/index_en.htm);
  - by contacting the Europe Direct service (http://europa.eu/europedirect/index_en.htm) or calling 00 800 6 7 8 9 10 11 (freephone number from anywhere in the EU) (*).

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

Priced publications:

- via EU Bookshop (http://bookshop.europa.eu).

KC-BC-16-032-EN-N

Publications Office

ISBN 978-92-79-54339-5