

# Developments in the Euro Area Economy

## Overview

The gradual, but modest domestic-demand led economic recovery in the euro area is continuing. Growth in the final quarter of 2015 remained at 0.3 per cent. Despite conditions being in place for the cyclical recovery in the euro area economy to accelerate, it has so far not gained pace. Weak global demand conditions, notably in emerging market economies, remain a drag. China's GDP growth slowed in line with forecasts with recent data indicating some progress towards rebalancing. Potential output growth in the euro area is likely to remain below pre-crisis levels for a while yet.

Downside risks have increased since the last Bulletin. External demand conditions – both in emerging markets and the major advanced economies – may weaken further. And, despite bouncing back, there has been increased downward pressure on stock prices in advanced economies, notably of the banking sector. The extent to which these market developments will undermine future intermediation and investment will have an important bearing on the outlook for growth for the years ahead.

In parallel to the declines in oil prices at the start of the year but also in light of weaker core inflation, estimates of inflation in the euro area turned negative in February. There is a risk that low imported inflation, through the size and the persistence of the fall in oil and commodity prices, may be passing through to inflation expectations with second-round effects on wage and price formation. Since the beginning of the year, forward inflation swap rates declined further. The weaker inflation outlook prompted a substantial review of the ECB's monetary policy stance with the announcement in March of a comprehensive policy package. Comprising reductions in interest rates, an increase in the size and scope of asset purchases and a new targeted longer term refinancing operation (TLTRO II), the package was designed to exploit the synergies between different instruments to ease financing conditions, stimulate new credit provision and thereby accelerate the return of inflation to levels below, but close to, 2 per cent.

## Section 1: Growth and Inflation

### *Euro Area Growth and Inflation Developments*

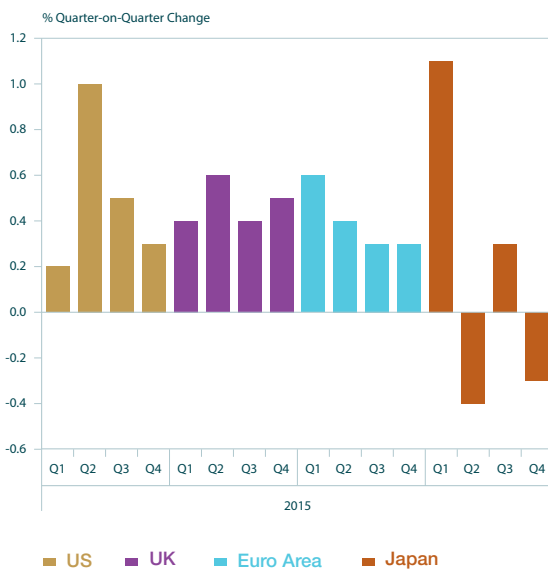
Euro area real GDP expanded by 1.5 per cent in 2015 as a whole, compared with 1.4 per cent in 2014. Real GDP in the final quarter of last year stood 3.3 per cent above the last trough reached in the first quarter of 2013. However, the recovery remains considerably

weaker than for some other advanced economies (Chart 1). The main source of GDP growth was private consumption, which in turn was supported by the low-inflation effect on real income, an improving labour market and by favourable financing conditions. These favourable effects were offset, however, by a negative contribution from net exports, reflecting the weakness in global trade. Furthermore, the level of total investment, has yet to return to its pre-crisis level (Chart 2).

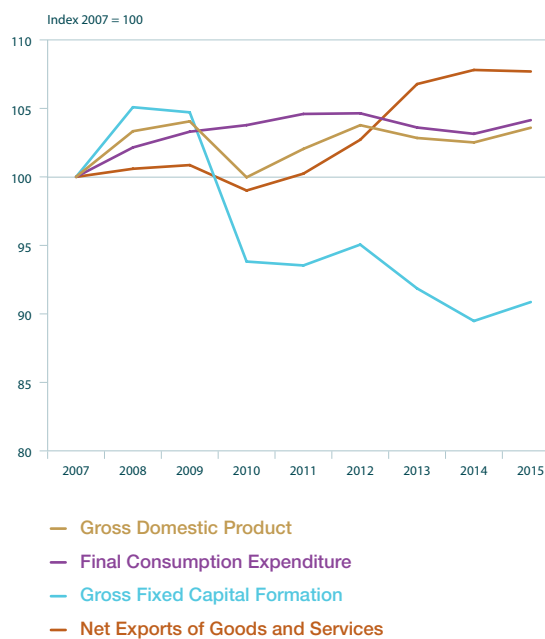
**Table 1: Contributions of Expenditure Components to Quarterly Change in Euro Area GDP (seasonally adjusted)**

	2015Q1	2015Q2	2015Q3	2015Q4
Consumption	0.3	0.2	0.3	0.1
Government	0.1	0.1	0.1	0.1
Investment	0.3	0.0	0.1	0.3
Inventories	0.2	-0.2	0.3	0.1
Exports	0.6	0.8	0.1	0.1
Imports	-0.9	-0.4	-0.5	-0.4
<b>GDP</b>	<b>0.6</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>

Source: Eurostat.

**Chart 1: GDP Growth in Advanced Economies**

Source: Thomson Reuters Datastream.

**Chart 2: Euro Area GDP and Components**

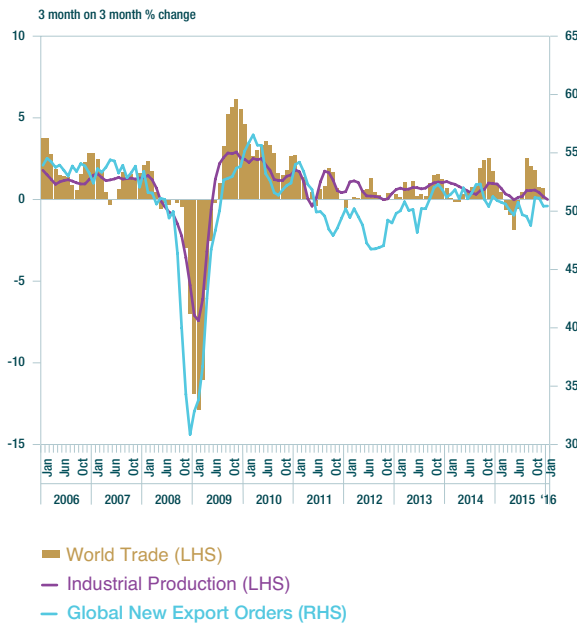
Source: Eurostat

Note: The series in the above chart show the level of Real GDP and its components relative to 2007.

Turning to the fourth quarter of 2015, real GDP growth remained at 0.3 per cent (Table 1), with the breakdown showing a domestic demand-led recovery characterised by stronger than expected investment offsetting weaker than expected private consumption. The former was partly driven by a mild winter which supported the construction sector. Government spending increased at its fastest pace since Q3 2009, potentially owing to the increased flow of refugees to the euro area. As in Q3, net exports detracted from GDP in Q4.

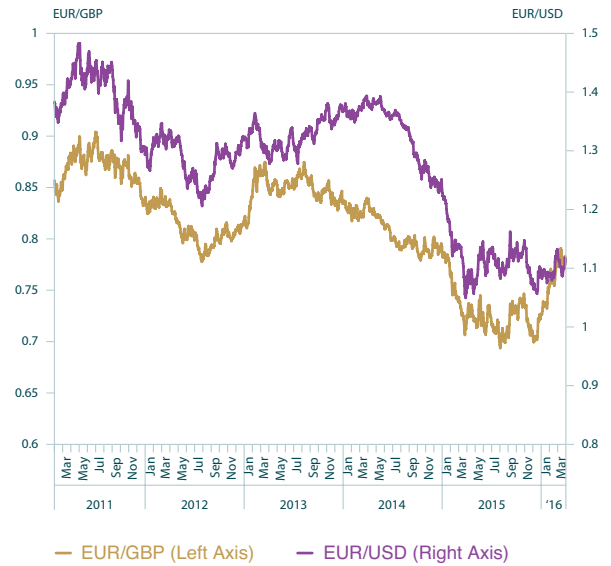
Euro area exports have suffered from the ongoing weakness in global trade (Chart 3). According to the OECD, exports across the world's largest economies fell by 11.3 per cent in 2015, while imports dropped by 13 per cent. Preliminary global merchandise trade data for December show that the volume of world trade remains unchanged from the preceding month, having declined by 0.3 per cent in November. At the same time, euro area exports have benefitted from favourable developments in the nominal exchange rate of the Euro (Chart

**Chart 3: Change in World Trade, Industrial Production & Global New Export Orders PMI**



Source: Thomson Reuters Datastream and Central Planning Bureau.

**Chart 4: Euro Exchange Rates**



Source: Thomson Reuters Datastream.

Note: The last observation for 14 March 2016. A decrease in the above lines corresponds to a depreciation of the euro.

4). Although, the current effective exchange rate is higher than projected earlier in the year, it is still lower than the average for 2014, thus enhancing the euro area's price competitiveness and partly offsetting the drag from weaker global demand.

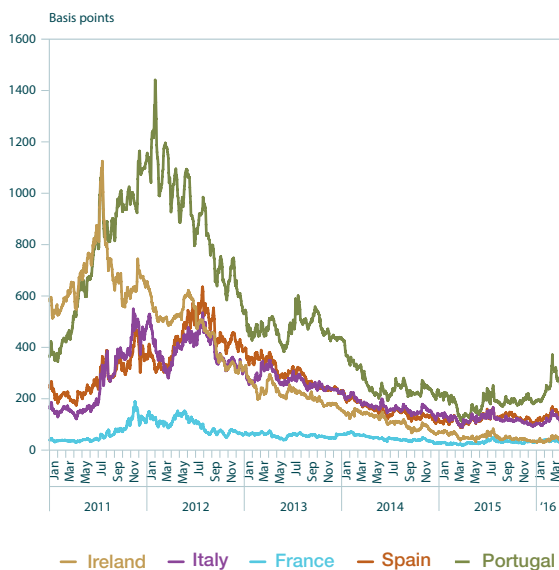
While euro area labour markets are continuing to improve, significant slack persists. Employment rose by 0.3 per cent in the fourth quarter of 2015 and stood 1.2 per cent above the level recorded one year earlier. This represents the highest annual increase since the second quarter of 2008. The seasonally-adjusted unemployment rate, which started to decline in mid-2013, fell further to 10.3 per cent in January. However, this remains well above the pre-crisis average of 8.5 per cent (2000-2007) and suggests significant spare capacity.

Given the modest economic recovery, the fiscal situation is improving slightly and the collective fiscal stance across the euro area is expected to be mildly expansionary in 2016. The euro area figure masks sizeable cross-country heterogeneity, where consolidation measures

in some countries and expansionary measures in other countries mostly offset each other in aggregate. The government debt-to-GDP ratio for the euro area is projected to decline gradually from a peak of 92.1 per cent of GDP in 2014 to below 90 per cent of GDP in 2018. According to ECB estimates, the impact on growth of expenditures related to the inflow of refugees is projected to be small in aggregate and concentrated in some countries, for example in Germany where it might add 0.2 percentage points to growth in each of the next two years.

Financing conditions in the euro area remain favourable. The January 2016 euro area bank lending survey showed that the demand for, and supply of loans, have risen. In particular there was a net easing of credit standards for loans to households for house purchase, marking a reversal from previous tightening. The annual growth rate of credit to the private sector improved marginally to 0.9 per cent in January compared to 0.8 per cent in December with most of the increase coming from loans to non-financial corporations.

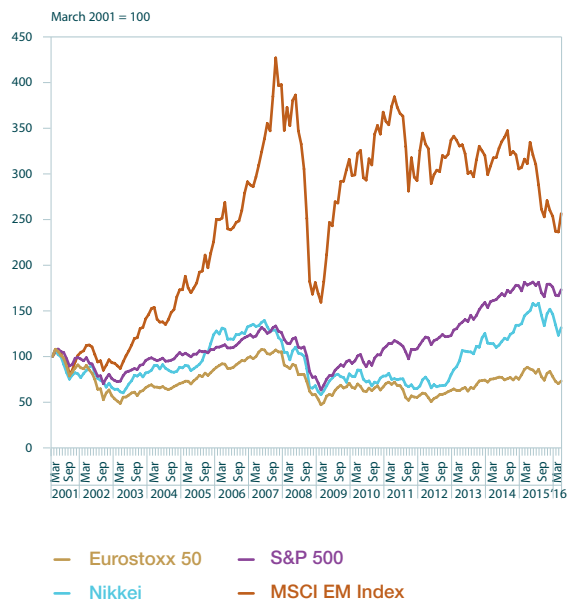
**Chart 5: Selected Euro Area 10 Year Sovereign Bond Spreads over Germany**



Source: Thomson Reuters, Datastream.

Note: The latest observation is for 14 March 2016.

**Chart 6: Indices of Global Equities**



Source: Bloomberg

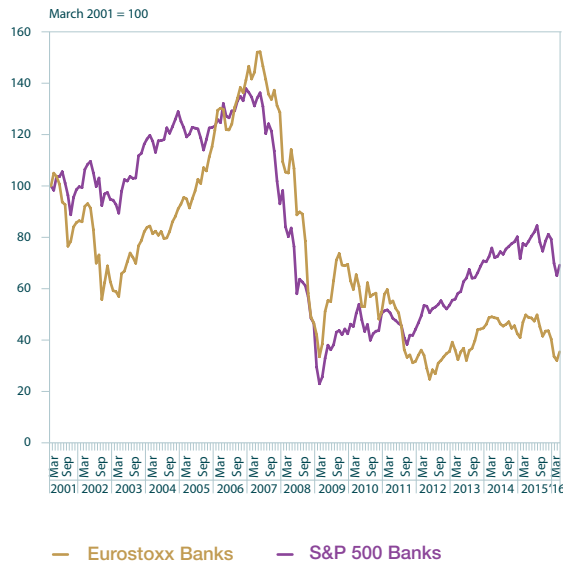
Note: The last observation is for 14 March 2016. The above chart shows the performance of 4 widely tracked equity indices scaled with their values for March 2001 scaled to 100.

A notable development in Q1 has been the increased volatility in financial markets (Charts 5 and 6). Market volatility can be partially explained by downward revisions to global growth, the weakness in oil prices and increased risk aversion. Stock prices of European listed banks have been affected and remain weaker than that of US peers (Chart 7). Structural factors that may be weighing on stock prices of banks include the persistence of high levels of non-performing loans and the low interest rate environment. In addition, markets are adjusting to the implementation of the Bank Recovery and Resolution Directive (BRRD) which stipulates that capital shortfalls at troubled banks requires raising capital on the markets or the “bailing in” of certain classes of bank bonds. However, these and other reforms since the financial crisis have also increased the resilience of individual institutions and the financial system as a whole. Indeed, euro area banks have increased their core equity tier 1 capital ratios — a key measure of financial strength — from 9 per cent in 2011 to 13 per cent in 2015.

Inflation has declined further, with Eurostat flash estimates showing euro area annual HICP inflation at -0.2 per cent in February, down from 0.3 per cent in January and turning negative for the first time since September 2015 (Chart 8). Moreover, HICP inflation excluding energy declined to 0.7 per cent after hovering around 1 per cent since May 2015. Energy price inflation dropped to -8.0 per cent while the unprocessed food component registered a drop to 0.3 per cent in February from 1.4 per cent in January.

Domestic price pressures remain moderate. Inflation in the services sector declined to 1 per cent in February having hovered around 1.2 per cent since May 2015. Moreover, the annual growth in compensation per employee declined to 1.1 per cent in the third quarter of 2015 from a previous growth rate of 1.3 per cent in Q2. Thus, inflationary pressures in the labour market remain contained due to the still-elevated unemployment rate, slow productivity growth, and in part, to the effect of the implementation of structural reforms.

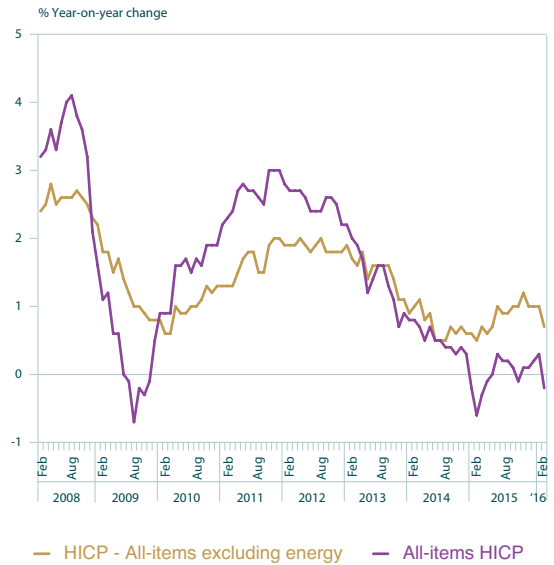
**Chart 7: Indices of Bank Equities**



Source: Bloomberg.

Note: The last observation is for 14 March 2016. The above chart shows the performance of two indices of bank equities with the values scaled to 100 as of March 2001.

**Chart 8: Euro Area Inflation**



Source: Eurostat.

**Outlook for growth and inflation**

The euro area recovery is likely to continue to be driven by domestic demand supported by labour market developments, the recent ECB monetary policy measures and their favourable impact on financial conditions, as well as past progress made with fiscal consolidation and structural reforms. Moreover, in aggregate, sustained lower oil prices should provide continued support for households' real disposable income and corporate profitability. Private and public consumption is expected to broaden and a more robust contribution from investment is expected by the end of the year. The outlook is projected to be negatively affected by external conditions: global GDP growth in 2016 is projected by the IMF to be no higher than in 2015, reflecting still below-average growth in advanced economies and ongoing weakness in emerging markets (Chart 9). The OECD has recently revised down its projection of global growth by 0.3 percentage points in both 2016 and 2017.

The latest data give mixed signals regarding the near-term growth outlook. Although industrial production excluding construction increased by 2.1 per cent month-on-month in January, other indicators such as the European Commission's economic sentiment indicator point to a slowdown in growth. As a leading indicator of domestic consumption in the euro area, the seasonally-adjusted volume of retail trade in January increased by 0.4 per cent, month-on-month, building on gains recorded during December. However, euro area consumer confidence has fallen consistently in the three months to February.

Compared with the December Broad Macroeconomic Projection Exercise (BMPE), the recent March ECB staff forecasts point to a weaker outlook for activity (Table 2). Expected real GDP growth in 2016 was revised down to 1.4 per cent. A pick-up in the growth rate of private consumption in 2016 is projected to bring about a broadly stable real

**Table 2: Latest Forecasts of Euro Area Growth in Real GDP**

	Date	2015	2016	2017
<b>EU Commission</b>	February 2016	1.5	1.7	1.9
<b>ECB</b>	March 2016	1.5	1.4	1.7
<b>IMF</b>	January 2016	1.5	1.7	1.7
<b>OECD</b>	February 2016	1.5	1.4	1.7

Sources: IMF WEO Update, 19 January 2016; OECD Interim Economic Outlook, 18 February 2016; European Commission, Winter Forecast, 4 February 2016; ECB March 2016 MPE.

**Chart 9: BRIC Growth Rates**

Source: Thomson Reuters, Datastream.

GDP growth rate between 2015 and 2016 despite a weakening external environment. The downward revision in 2016 reflects the combined adverse impacts of lower euro area foreign demand as well as some increase in uncertainty and weakened sentiment indicators. These adverse effects more than offset the favourable impact of continued lower oil prices and the impact of the additional

monetary policy measures taken in December 2015 on domestic demand. Looking further ahead, real GDP growth is projected to be 1.7 per cent in 2017 and 1.8 per cent for 2018. ECB staff project potential output growth to be only around 1 per cent over the two-year projection horizon. The output gap is expected to narrow but remain negative.

The outlook for inflation in the euro area has also been revised downwards, mainly reflecting the decline in oil prices. The March 2016 ECB staff macroeconomic projections for the euro area foresee annual HICP inflation at 0.1 per cent in 2016, 1.3 per cent in 2017 and 1.6 per cent in 2018. This represents a considerable downward revision from the December 2015 Eurosystem staff macroeconomic projections.

Price pressures in the pipeline continue to be limited. The annual rate of industrial producer price inflation excluding construction and energy remains negative. Moreover, PMI survey indicators for input prices in the manufacturing sectors dropped to 49.4 in February after being below 50 since August, where a reading below 50 signals a decrease in prices on the previous month. Also the PMI survey indicators for output prices in the manufacturing sectors continue to remain below 50 after showing some feeble signs of recovery at the end of 2015.

**Box A: Oil prices and inflation expectations: An investigation into the contribution of global demand and oil supply shocks to euro area inflation expectations***By John Larkin<sup>1</sup>*

Oil prices have declined sharply since mid-2014. For much of this period, there has been considerable co-movement between financial market measures of inflation expectations in the euro area (EA) such as inflation swap rates and oil prices. This is somewhat surprising as changes in the oil price, while certainly affecting relative prices and price levels, should in theory have only temporary effects on the inflation rate. Forward looking and rational financial markets should therefore largely discount oil price movements when assessing future inflation, particularly at longer horizons. Elliott *et al.* (2015) recently argued that the relationship between oil prices and inflation swap rates is possibly being driven by common macroeconomic shocks. For instance, expectations of weaker future aggregate demand may be driving the decline in both oil prices and inflation expectations over some longer period. This Box seeks to investigate this further by examining some of the principal dynamics between oil and inflation expectations in the euro area. We proceed with a three step approach, considering data going back to 2004 and looking at different time intervals. First, we determine the sensitivity of inflation expectations to oil price movements; second we decompose oil price changes into global demand and idiosyncratic supply shocks and third; we use this decomposition to statistically explain movements in inflation expectations over time.

For this analysis we examine medium term euro area inflation expectations derived from 5 year 5 years ahead inflation swap rates.<sup>2</sup> Using monthly data we regress medium term inflation expectations on the year-on-year change in oil prices, allowing for a different effect for three time periods: pre 2009, between 2009 and 2014 and post 2014.<sup>3</sup> Breaking up the time periods allows us to determine the more recent impact of oil prices on inflation expectations, after correlations intensified. The regression coefficients<sup>4</sup> are displayed in Chart 1, which illustrates the percentage point change in inflation expectations at different horizons, caused by a 10 per cent change in oil prices. The results for the pre-crisis effect are somewhat intuitive and in line with what might be expected: oil price changes have no significant estimated impact on medium term inflation expectations. After the crisis, the dynamics change somewhat, with oil price changes having a significant impact and this intensifies after 2014.

How could this be explained? Next, we look at the potential role global demand may have played in determining oil market movements and inflation expectations. We follow the methodology of Sussman and Zohar (2015) decomposing oil price movements into two elements: one capturing global demand effects and the other capturing idiosyncratic supply effects. We then estimate a regression of medium term inflation expectations on the global demand and oil supply time series we generated above, controlling for core inflation and again allowing for different effects in the three time periods. The results of this are displayed in Chart 2.<sup>5</sup> We again observe a clear change in the dynamics post crisis, with demand being the dominant contributory factor in the 2009/2010 period but supply having an increasing impact on the decline in expectations since 2014.

<sup>1</sup> Financial Markets Division. Thanks to Neil Lawton for research assistance.

<sup>2</sup> This measure of inflation expectations is often looked at by policy makers. For further analysis on developments in this measure see L. Moretti, "Recent Developments in Market-Based Inflation Expectations", *Central Bank of Ireland Quarterly Bulletin* 04, October 2015.

<sup>3</sup> These time periods were chosen based on a Bai-Perron multiple breakpoint test on a regression of inflation expectations and oil prices.

<sup>4</sup> The coefficients are estimated with Newey West standard errors (\* 10% significance level, \*\* 5% significance level, \*\*\* 1% significance level, no asterisks – effect is not significant).

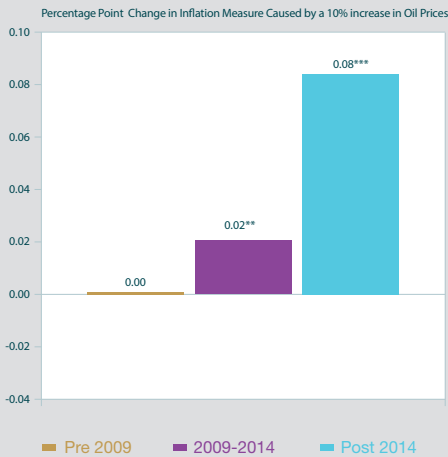
<sup>5</sup> The regression coefficients on both the demand and the supply variables are small but negative pre-crisis and large and positive in the subsequent two periods.



### Box A: Oil prices and inflation expectations: An investigation into the contribution of global demand and oil supply shocks to euro area inflation expectations

By John Larkin

**Box A Chart 1: The Effect of Oil Price Changes on 5-Year in 5-Year Inflation Expectations**



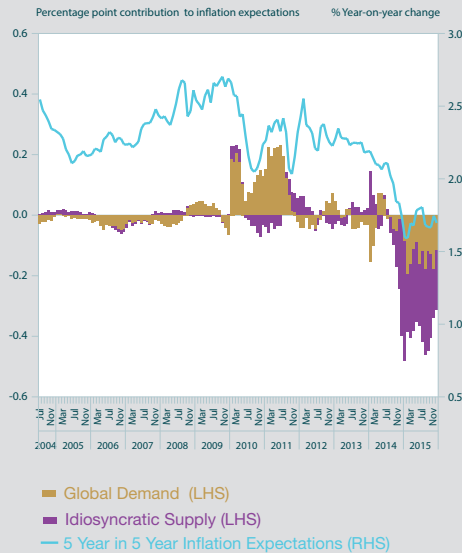
Source: Author's own calculations.

Note: The coefficients are estimated with Newey West standard errors

(\* 10% significance level, \*\* 5% significance level,

\*\*\* 1% significance level, no asterisks – effect is not significant).

**Box A Chart 2: 5 Year in 5 Year Inflation Expectations and the Contribution of Global Demand and Idiosyncratic Supply Shocks**



Source: Bloomberg and Author's Own Calculations.

A number of conclusions can be drawn from this analysis. There appears to be an empirical link between oil price movements and inflation expectations and this relationship has changed since the crisis and particularly since 2014. The contribution of global demand and oil supply shocks to medium-term euro area inflation expectations is estimated to be small in the period before the crisis, with the dynamics changing post crisis. While global demand factors may have played some role in the decline in inflation expectations post 2014 there is also an estimated large oil supply factor at play. While it is understandable that inflation expectations may in theory have declined due to weaker expected global demand, it is less clear why the oil supply factor should drive long run inflation expectations. Perhaps because inflation has been so low for so long in the euro area, medium term inflation expectations have become more sensitive to factors that would otherwise have had no effect. An alternative explanation is that changes in risk and liquidity premia are driving the recent movements in inflation expectations.<sup>6</sup> In any case, further work on explaining the dynamics post 2014 clearly seems desirable.

#### References

Sussman, N. and Zohar, O. (2015), "Oil prices, inflation expectations, and monetary policy", *Bank of Israel* DP092015.

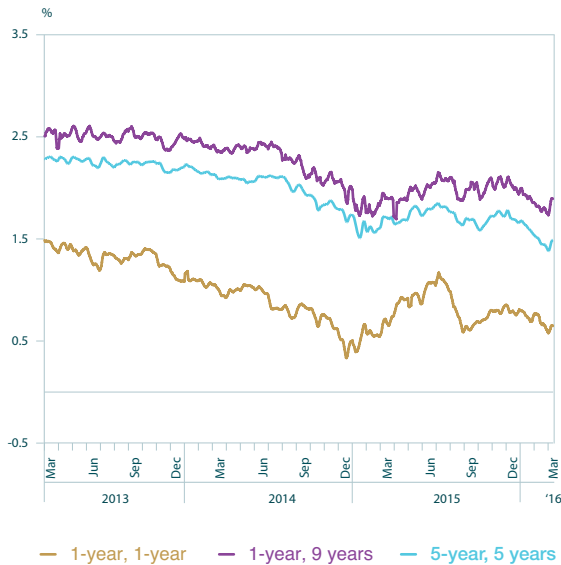
Elliott, D., Jackson, C., Raczko, M. and Roberts-Sklar, M. (2015), "Does oil drive financial market measures of inflation expectations?" [online] *Bank Underground*.

N. Gospodinov (2016), "Are Long-Term Inflation Expectations Declining? Not So Fast, Says Atlanta Fed", [online] *Macroblog*, January 15, 2016

<sup>6</sup> See for example Gospodinov (2016).



**Chart 10: Market Based Measures of Inflation Expectations**



Source: CBI staff calculations, data extracted from Bloomberg.

Note: The latest observation is for 10 March 2016. The chart displays 5 days moving averages. "1 year, 1 year" refers to swap rates with a maturity of 1 year beginning in 1 year; "1 years, 9 years" refers to swap rates with a maturity of 1 year beginning in 9 years; and "5 years, 5 years" refers to swap rates with a maturity of 5 years beginning in 5 years.

Turning to expectations, market-based measures of inflation compensation have declined since January (Chart 10). Over the last couple of years, these measures have been strongly influenced by movements in oil prices [see Box A]. The five-year in five-year forward inflation swap rate, the expected average inflation (plus risk premia) between 2021 and 2026, slid further since January when it reached 1.4 per cent at the end of February. Longer-term market based-measures of inflation expectations have also started to decline in early 2016. The one-year in nine-year forward inflation swap rate, which presents the markets' expected inflation (plus risk premia) between 2025 and 2026, after hovering around 2 per cent in the past year, reached 1.7 per cent at the end of February, before stabilising above 1.8 per cent after the announcement of new ECB monetary policy measures.

**Risks to the outlook for the Euro Area**

The downside risks to growth have increased. These include a weaker external environment, higher financial volatility and

higher uncertainty which could adversely affect private consumption and investment. Such risks could be prompted by renewed shocks notably from a broader spillover from China to neighbouring Asian economies due to weak commodity prices or slowing growth. Intensified geopolitical tensions or setbacks in the European reform process would also adversely affect the outlook for the euro area. Finally, a number of idiosyncratic factors have been weighing on sentiment with the potential to lower real activity going forward. Concerns about a "Brexit" could undermine investor confidence and the political tensions around the refugee crisis may be affecting perceptions about the stability of the Schengen Area.

Downside risks from developments in emerging markets appear high. In particular, risks from financial instability in China and possible spillovers to vulnerable emerging market economies and commodity exporters have increased. China has experienced very substantial capital outflows since August 2015 in the context of a sudden sharp depreciation in the Renminbi. Effective control over capital outflows and stabilisation of their reserves would have important implications for China's economic outlook as well as the stability of its currency which will be included in the IMF's SDR basket from 1 October 2016 (see Box B).

Foreign-currency denominated external liabilities are significant as a share of GDP for many emerging market economies which makes them vulnerable to an appreciation of the US dollar and rising interest rates, notably in the context of large current account deficits. Financial markets are reassessing the prospects of spillovers to advanced economies liabilities, given their weaker real growth and stronger financial linkages.

Economic growth in the US could turn out to be lower than envisaged. The minutes of the January meeting of the Federal Open Market Committee (FOMC) showed that Federal Reserve policymakers maintained a positive assessment of incoming economic data amid growing concerns over the implications of the continued volatility in US equity and credit markets, which may be resulting in tighter financial conditions. Employment and wage developments lag economic conditions and a tighter labour market could now explain why profit margins and corporate profits are

underperforming. The sharp downward shift in the federal funds futures curve since mid-December also points to weaker inflation prospects and implies that the US monetary policy normalisation could be slower than previously anticipated. At its meeting on March 16, the FOMC judged that the economic expansion continued, albeit at a moderate pace, and decided to maintain the target range for the Federal Funds Rate at 0.25 per cent to 0.50 per cent.

longer-term inflation expectations could weaken the outlook for wage growth and inflation in the euro area. Self-reinforcing second-round effects could arise if households and firms respond to a decline in expected inflation rates by lowering wage demands and price increases. Further, ongoing labour market reforms have the potential to make nominal wage inflation more responsive to labour market conditions where a substantial amount of slack still exists.

Turning to inflation, following an extended period of low inflation, a de-anchoring of

### Box B: The Impact of the Renminbi's Inclusion in the SDR Basket: some considerations

By Bernard Kennedy<sup>1</sup>

In the final quarter of 2015, the IMF decided to include the Renminbi (RMB) in the Special Drawing Rights (SDR) basket beginning on 1 October 2016 as part of the quinquennial review of the SDR basket. In this box, we focus on three issues related to this decision: the factors that lead to the inclusion of the RMB in the SDR basket, how this change in policy will impact the pricing of IMF lending facilities, and finally the broader macroeconomic effects.

The SDR is an interest-bearing international reserve asset created by the IMF in 1969 to supplement other reserve assets of member countries. It is based on a basket of international currencies comprising the U.S. dollar, the yen, the euro, and pound sterling. The SDR is therefore a potential claim on the freely usable currencies of IMF members. Holders of SDRs can obtain these currencies in exchange for their SDRs. Every five years, the basket of currencies that make up the SDR is subject to review in order to ensure that the underlying currencies continue to reflect the world's trading and financial system.

In recent years, the most substantial change to the SDR basket occurred in 2000 when the Euro entered the basket of currencies, replacing the Deutschmark and the French Franc. At the same time, a decision was also made to shift to a currency-based method of SDR valuation so that the economic variables and their weights reflect the characteristics of currencies rather than IMF member countries.

#### What is necessary for a currency to enter the SDR basket?

Under the SDR valuation framework there are two currency selection criteria: (i) the export criterion and (ii) the freely useable criterion. The export criterion is intended to reflect a currency's relative importance in global trade and is based on data on merchandise exports, services, and income credits. The freely useable criterion requires the currency to be widely used to make payments for international transactions, and to be widely traded in the principal foreign exchange markets.<sup>2</sup> The requirement for currencies in the SDR basket to be freely usable was incorporated in 2000 to allow the currency selection criteria to formally reflect the importance of financial transactions. It is important to note that a freely useable currency need not be fully floating, nor does it need to be fully convertible (i.e. international financial transactions can be subject to some degree of capital controls).

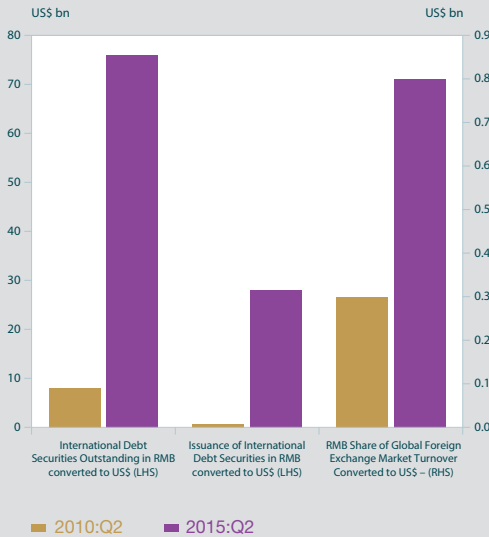
<sup>1</sup> Monetary Policy Division.

<sup>2</sup> For the RMB, the data on openness correspond to mainland China as Hong Kong, Macau, and Taiwan have their own currencies.

**Box B: The Impact of the Renminbi's Inclusion in the SDR Basket: some considerations**

By Bernard Kennedy

**Box B Chart 1: Indicators of the Growing Use of the Renminbi**



Source: IMF.

Note: The Series displayed in the above chart are used, along with numerous other series, to determine whether or not a currency can be considered 'Freely Useable' which is one of the criterion used by the IMF in assessing whether or not a currency should be included in the SDR basket.

During a previous review of the SDR basket in 2010, China met the export criterion, consistent with its growing importance in international trade, but the RMB was not included in the SDR basket as the currency was not considered 'freely useable'. Since then, the use of the RMB in international finance has increased considerably across all of the metrics used by the IMF in determining whether or not a currency is considered freely useable. Chart 1 shows the increased use of the RMB across a selection of these metrics in 2015 compared with 2010. Indeed, during these five years, China has initiated a number of policies that have increased the usability of the RMB. The most high profile is typically referred to as Circular 168, initiated in 2013, which spurred increased foreign RMB usage.<sup>3</sup>

**What are the expected effects of the RMB inclusion?**

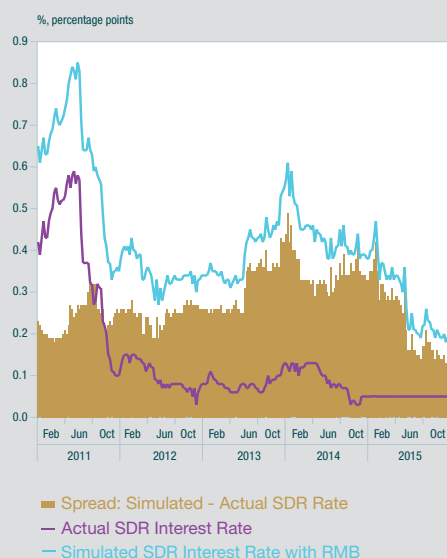
From October 2016 onwards, the RMB will account for 13 per cent of the SDR basket and the immediate impact is likely to be reflected in the SDR interest rate used in the pricing of IMF lending facilities. In recent years, the yield on Chinese Treasury bonds has been noticeably higher than comparable interest rates in the U.S, the euro area, the U.K. and Japan. By way of illustration, and looking back, Chart 2 shows that had the RMB entered the SDR basket following the previous review in October 2010, the SDR interest rate would have been higher by between 0.12 and 0.50 percentage points since February 2011.

Beyond its impact on the SDR interest rate and the pricing of IMF lending facilities, the direct effects of the RMB's entry to the SDR basket are not expected to be substantial in the short run given the limited use of the SDR as a reserve currency.

<sup>3</sup> The People's Bank of China Circular 168 allows onshore corporates (both domestic and foreign) to conduct one way RMB lending to offshore counterparts belonging to the same group. This has helped corporates, particularly multinationals, to unlock cash previously trapped in China to support their offshore funding needs. Circular 168 has been a big boon to offshore RMB deposits since H2-2013. It was a precursor to the more comprehensive cross boarder liquidity programmes rolled out in 2014. Other measures included the creation of offshore clearing banks in 2014 and 2015 and along with other reforms, these measures facilitated greater access by foreign investors to RMB denominated assets.

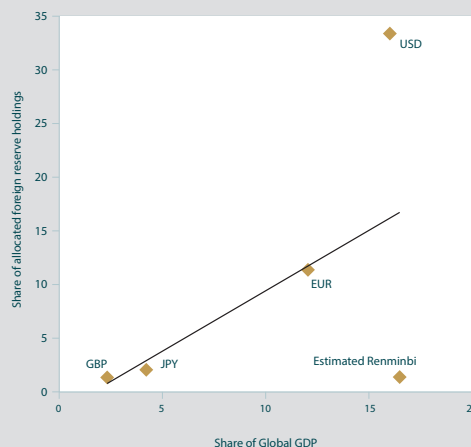
**Box B: The Impact of the Renminbi's Inclusion in the SDR Basket: some considerations**

By Bernard Kennedy

**Box B Chart 2: Actual and Simulated SDR Interest Rates**

Source: Bloomberg; and IMF Staff Calculations.

Note: The above chart shows the actual SDR interest and what the SDR interest rate would have been in the Renminbi had featured in the SDR basket from February 2011.

**Box B Chart 3: Share of Global GDP Relative to Share of Global Foreign Exchange Reserves**

Source: IMF Currency Composition of Foreign Exchange Reserves and OECD.

Note: The proportion of allocated reserves held in RMB is not disclosed. One can approximate the proportion of allocated reserves held in RMB by using claims in other currencies as a percentage of total allocated reserves.

The impact could be more substantial over the longer term. To satisfy the aforementioned SDR basket inclusion criteria, the bulk of liberalisation measures introduced by the authorities over the past few years are unlikely to be reversed, thus supporting the on-going integration of China into the global financial system. Furthermore, one can see three additional interrelated channels in operation in support of the latter: through global central banks' reserve holdings of RMB, by allowing more exchange rate variability, and by encouraging further financial openness.

**Central bank reserve holdings:**

The entry of the RMB to the SDR basket means that IMF members under lending programmes may receive some of their funding in RMB, with implications for the balance sheets of their central banks. The easier access and the liquid nature of RMB markets, are also likely to encourage central banks to hold a greater proportion of reserves in RMB. Chart 3 is indeed suggestive of further growth in RMB foreign exchange reserves: relative to China's share in global GDP, the estimated holdings of RMB by global central banks remains comparatively low.<sup>4</sup>

**Exchange rate flexibility and financial openness:**

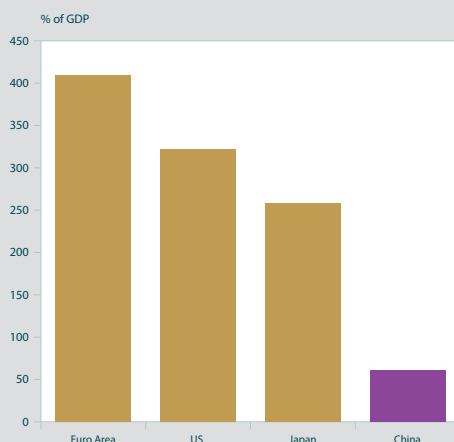
During 2015, the Chinese authorities moved away from the U.S. dollar / RMB exchange rate peg towards a broader trade-weighted exchange rate basket. As stated by the Chinese policymakers, given the large size of the Chinese economy, the financial liberalisation path naturally reinforces the gradual trend towards a more flexible and market-based exchange rate regime. This in turn increases the need for more developed foreign exchange markets and appropriate risk management tools.<sup>5</sup> Also, the increasing openness of the capital account should in turn be expected to support higher levels of cross boarder financial activity and integration in line with the growing size of China in the global economy (as suggested by Chart 4.<sup>6</sup>)

- 4 The line displayed in Box B Chart 3 is based on least squares estimation. Given the small number of observations, the line is merely intended as a visual aid.
- 5 One indeed observes an increasing number of swap lines between the People's Bank of China and central banks throughout the world in recent years
- 6 One indication of the higher levels of cross boarder financial integration that could emerge following the RMB's entry to the SDR was provided in a speech by the Deputy Chief Executive of the Hong Kong Monetary Authority where it was mentioned how 'based on market projections, the RMB's inclusion in the SDR basket could bring up to \$1 trillion worth of investments in RMB assets by central banks, sovereign wealth funds, supranational organisations, large pension funds and institutional investors over the next five years', see Yue (2015).

**Box B: The Impact of the Renminbi's Inclusion in the SDR Basket: some considerations**

By Bernard Kennedy

**Box B Chart 4: Gross Financial Assets and Liabilities as a Percentage of GDP**



Source: IMF International Financial Statistics and OECD.  
 Note: The series presented in the above chart are calculated as the sum of gross financial assets and liabilities in 2013 divided by nominal GDP.

**Conclusion:**

The RMB's entry to the SDR basket this October represents an important milestone in the economic and financial integration of China into the world economy. It follows years of financial and economic reform in China and demonstrates the importance of the RMB as a nascent reserve currency. In itself, the inclusion of the RMB in the SDR is likely to only have limited implications. In the short run, there may be slightly higher borrowing costs on IMF lending facilities as the three month benchmark yield for Chinese bonds has been higher than the benchmark interest rate used for the U.S dollar, the euro, the yen, and sterling (policy rates have reached the zero lower bound in these four economies). Over the longer run, the expanded SDR basket is likely to reinforce the ongoing integration of China into the global financial system through increased reserve holdings, greater exchange rate flexibility, and further step-by-step capital account liberalisation.

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**Section 2: Euro Area Monetary Policy Developments**

There have been two monetary policy meetings of the ECB's Governing Council since the last Quarterly Bulletin. At the first of these, on January 21, the Governing Council left both its standard and non-standard policy measures unchanged. However, increasing uncertainty regarding the growth prospects of emerging market economies, combined with geopolitical risk and volatility in financial and commodity markets, led the Governing Council to signal that it would be necessary to review and possibly reconsider the monetary policy stance at its meeting in March, raising

market expectations of a further easing of the monetary policy stance. On March 10 the Governing Council announced a package of measures comprising interest rate reductions, and expansion of the size and scope of its asset purchase programs and a new targeted longer-term refinancing operation. The Governing Council noted that this package of measures was necessary in order to meet the ECB's price stability objective. In particular, it was felt that the measures were necessary to avoid deflationary second-round effects arising from recent oil price declines. In terms of interest rates, the Governing Council reduced the Main Refinancing Operations (MRO) and the Marginal Lending Facility rates by 5 basis

points each to 0.00 per cent and 0.25 per cent, respectively, and the rate on the deposit facility by 10 basis points to -0.40 per cent.

There were also a number of non-interest rate measures. First, the monthly purchases under the asset purchase programme were increased from €60 billion to €80 billion. To ensure the continued smooth implementation of these purchases, the issuer and issue share limits for the purchases of some securities<sup>1</sup> were raised to 50 per cent from 33 per cent. For the first time, it was decided that investment-grade euro-denominated bonds issued by non-bank corporations established in the euro area would become eligible for the asset purchase programme.

In addition, the Governing Council announced a series of four new targeted longer-term refinancing operations (TLTRO II), starting in June 2016. These operations are intended to strengthen the transmission of monetary policy by incentivising bank lending to the real economy. Specifically, counterparties can borrow up to 30 per cent of the stock of eligible loans at the MRO rate at the time of take-up, which will then apply for the four-year life of each operation. Additionally, net lending in excess of a benchmark can be funded at a more reduced interest rate, which can be as low as the deposit facility prevailing at the time of take-up.

Finally, the Governing Council augmented its forward guidance, noting that it expects interest rates to remain at present or lower levels for an extended period of time, and well past the horizon of its net asset purchases, which is currently March 2017.

<sup>1</sup> Specifically, securities of eligible international organisations and multilateral development banks.