

Developments in the Euro Area Economy

Overview

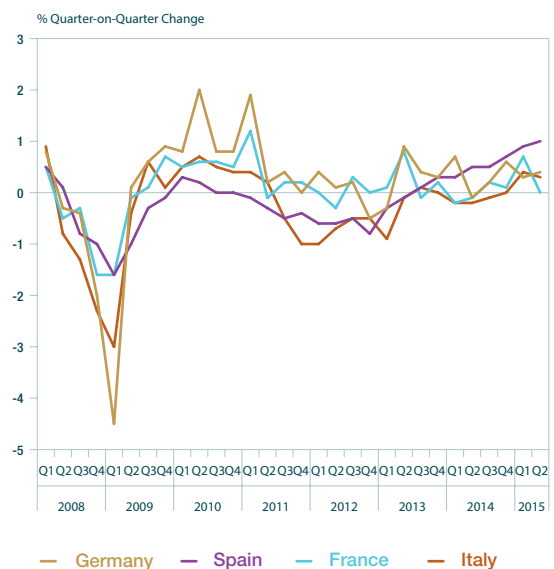
The economic recovery continued at a moderate pace during the first half of 2015. Low oil prices, a still-low external value of the Euro and the effect of the ECB's non-standard monetary policy measures continue to support euro area economic developments. However, recent growth and inflation figures have been lower than previously anticipated. Domestic dynamics, notably private consumption, supported economic activity in the last quarter, but investment fell unexpectedly. Financial markets have experienced a high degree of volatility driven by the ups and downs of the negotiations between the Greek authorities, European institutions and the IMF, doubts over the economic situation in China and growing expectations about the normalisation of monetary policy in other advanced economies. These external influences present sizeable downside risks to the prospects for euro area inflation and growth in the coming quarters. Recent ECB forecasts of real GDP in the euro area have been revised downwards to 1.4 per cent in 2015, 1.7 per cent in 2016 and 1.8 per cent in 2017.

Section 1: Growth and Inflation

Real GDP grew by 0.4 per cent in the second quarter of the year in both the euro area and the European Union as a whole, following a 0.5 per cent increase in the first quarter. This is the ninth consecutive quarterly increase; although the pace of growth remains slow. Across the euro area (EA), all Member States returned to growth, except France where it remained at zero per cent (Chart 1). The highest growth was recorded for Ireland (+1.9 per cent), Latvia (+1.2 per cent) and Malta (+1.1 per cent). The lowest positive growth rates were registered in the Netherlands and Austria (both +0.1 per cent).

The details of the Q2 euro area GDP figure confirm that growth has been driven by domestic demand, primarily due to an increase in household and government expenditure, reflecting in part the positive effects of lower oil prices and inflation. By contrast, investment fell by 0.5 per cent quarter-on-quarter. Net exports also contributed positively with 1.6 per cent growth over the quarter (Table 1).

Chart 1: Euro Area GDP Growth



Source: Eurostat.

Table 1: Growth Rates of Expenditure Components and Quarterly Changes in Euro Area GDP

	2014		2015	
	Q3	Q4	Q1	Q2
Consumption	0.5	0.6	0.5	0.4
Government	0.2	0.2	0.6	0.3
Investment	0.3	0.6	1.4	-0.5
Inventories	-0.1	0.0	0.0	-0.1
Exports	1.5	0.9	1.0	1.6
Imports	1.7	0.9	1.5	1.0
GDP	0.3	0.4	0.5	0.4

Source: Eurostat.

More recent, albeit preliminary, merchandise trade data show that the nominal value of exports increased by 1.4 per cent month-on-month in July while imports increased by 1.2 per cent, confirming indicators of more subdued levels of global trade. The seasonally-adjusted extra-EA trade surplus rose to €22.4 billion in July from €21.9 billion in June.

Both the economic sentiment index (ESI) and the composite purchasing managers index (PMI) stand above their respective average levels in the second quarter and point to a stabilisation and continued, albeit moderate, growth in Q3 (Chart 2). As a leading indicator of domestic consumption in the euro area, the seasonally-adjusted volume of retail trade in July rose by 0.4 per cent reversing falls recorded during June. Euro area consumer confidence also remained relatively stable in the three months to September. On the other hand, while households have reacted positively to lower oil prices since the start of the year, unless oil prices fall further this boost may not continue for the latter quarters of 2015.

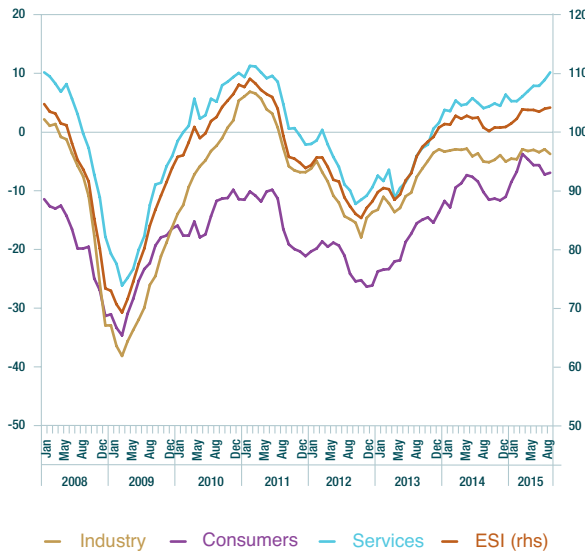
Euro area labour markets are improving slowly with employment rising by 0.3 per cent in Q2. The seasonally-adjusted unemployment rate, which started to decline in mid-2013, fell to 10.9 per cent in July 2015 from 11.1 per cent a month earlier. This is the lowest rate recorded in the euro area since February 2012. Among the Member States, the lowest unemployment rate was recorded in Germany at 4.7 per cent. Compared with a year ago, the

unemployment rate fell in most Member states with the largest decreases registered in the high-unemployment countries including Spain, Slovakia, Portugal and Ireland. Available survey data point to continued moderate employment growth in the current quarter.

Turning to price developments, HICP inflation in the euro area has stabilised in recent months at low positive rates following a rebound from the negative rates seen earlier in the year. According to the Eurostat flash estimate, euro area annual HICP inflation was 0.1 per cent in August down from 0.2 per cent in July. Inflation excluding energy (Chart 4) was 1.1 per cent in August recovering from a slight decline to 0.9 per cent in June and July after the stable recovery up to 1 per cent in May. The stabilisation in the headline HICP inflation rate conceals two contrasting dynamics. The persistent slide in energy inflation, which was -7.2 per cent in August, was counteracted by an increase in inflation in food (in particular a relevant pick-up of inflation in unprocessed food) and non-energy industrial goods.

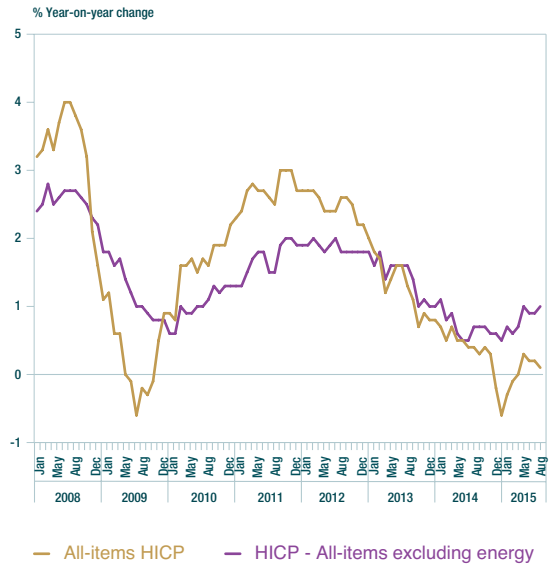
The steady increase in non-energy industrial goods suggests there are signs of a slow pass-through of the depreciation in the Euro. Non-energy industrial goods inflation has been rising steadily from 0.0 per cent in March to 0.6 per cent in August. However, there are not yet signs of pass-through in the early stages of the production chain where price developments remain subdued. Producer price inflation, excluding construction and

Chart 2: Economic Sentiment Indicator & Selected Components



Source: European Commission.

Chart 3: Euro Area Inflation



Source: Eurostat.

energy, has been declining since June after a slight recovery in May. PMI survey indicators in the manufacturing sector remain stable in the output prices. However, there has been a gradual decline in input prices since June after the recovery observed in May.

Domestic price pressure continues to remain subdued. Inflation in the non-tradable services sector services remained constant at 1.2 per cent in July and August returning to the May level after a slight decline. This dynamic suggests limited domestic price pressure and contained wage growth that might be the result of the persistent slack in the labour market and of increased price flexibility due to the successful implementation of structural reforms. The unemployment rate, although gradually improving, still hovers around 11 per cent.

The fiscal situation is improving and the collective stance – measured as a change in the cyclically adjusted primary balance net of government assistance to the financial sector – across the euro area is expected to be broadly neutral in 2015. ECB staff projections indicate

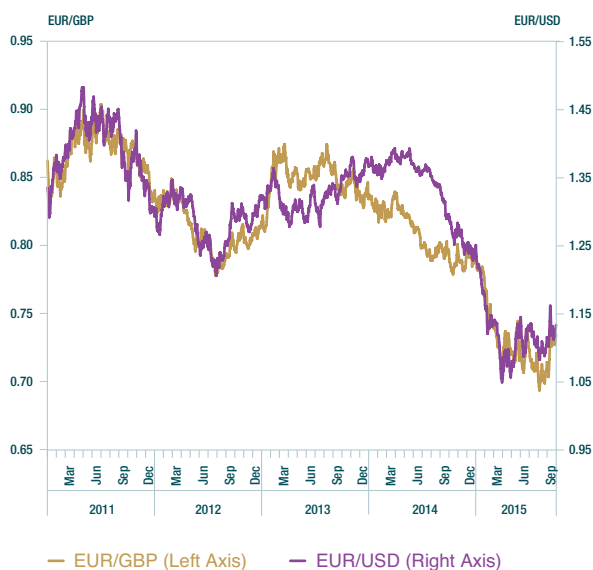
that the general government deficit-to-GDP ratio for the euro area will decline from 2.4 per cent in 2014 to 1.7 per cent in 2017. At the same time, the government debt-to-GDP ratio for the euro area is projected to decline gradually from a peak of 91.7 per cent of GDP in 2014 to below 90 per cent of GDP in 2017. The gradual decline in the debt-to-GDP ratio is driven by an improving primary budget balance, strengthening economic growth and low interest rates.

Financing conditions in the euro area remain supportive. Benchmark sovereign bond yields are slightly higher than earlier in the year though they declined in August against the background of the steep drop in the oil price and some increase in risk aversion among investors. Overall, credit conditions for companies and households have eased in the euro area in the second quarter. Loan growth to non-financial corporations and households are expected to remain subdued, reflecting the lagged relationship with the overall level of aggregate demand, credit risk, deleveraging, credit supply factors and the ongoing adjustment of financial and non-financial sector

Table 2: Latest forecasts of Euro Area growth in real GDP

	Date	2015	2016	2017
EU Commission	May 2015	1.5	1.9	–
ECB	September 2015	1.4	1.7	1.8
IMF	July 2015	1.5	1.7	–
OECD	June 2015	1.4	2.1	–

Sources: IMF WEO Update July 2015; OECD Economic Outlook 97 June 2015; European Commission, Spring Forecast 2015; ECB September 2015 MPE.

Chart 4: Euro Exchange Rates

Source: Thomson Reuters Datastream.

balance sheets. Banks expect broadly similar credit conditions in the third quarter.

The successful conclusion of the negotiations between the Greek Government and the institutions for a three-year European Stability Mechanism (ESM) loan/programme and the Eurogroup agreement on August 14 reduced the heightened uncertainty at the beginning of the quarter. The Euro's depreciation after the outcome of the Greek referendum was limited while its appreciation was more significant following the latter announcements. The current effective exchange rate is higher than projected earlier in the year but still much lower than on average in 2014. The weaker

euro reflects the Federal Reserve's and ECB's divergent monetary policy stances (Chart 4).

Outlook

Looking ahead, the moderate economic recovery is expected to continue, but the external risks to growth have increased. Compared with the June Broad Macroeconomic Projection Exercise (BMPE), the recent September ECB staff forecasts have a slightly weaker outlook for activity, largely reflecting a less favourable external environment. It is expected that growth will average close to 1.4 per cent this year, and it is expected to reach 1.7 per cent next year and 1.8 per cent in 2017 (Table 2).

Growth is likely to continue to be driven by domestic demand supported by labour market developments, the ECB monetary policy measures and their favourable impact on financial conditions, and the progress made with fiscal consolidation and structural reforms and the reduced pace of fiscal consolidation. Moreover, the decline in oil prices should provide support for households' real disposable income and corporate profitability. Private and public consumption is expected to broaden and a less variable contribution from investment is expected by the end of the year.

However, recent developments in emerging market economies, particularly China, have the potential to adversely affect global growth through dampened trade and confidence. Accordingly, euro area foreign demand is expected to pick up at a considerably weaker

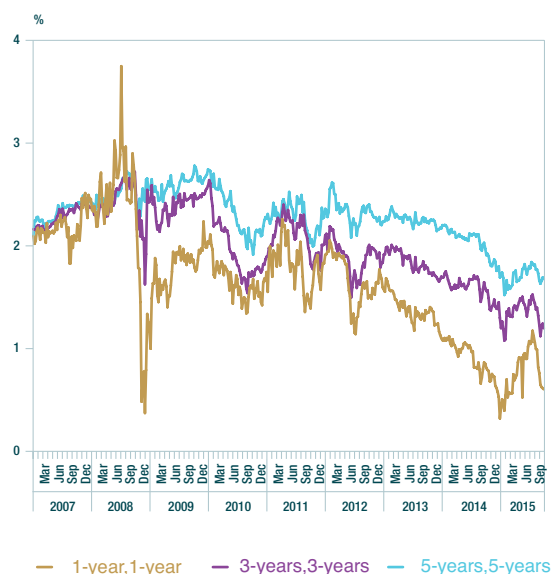
pace than envisaged earlier in the year. However, the past depreciation of the euro is still expected to exert a favourable influence on euro area export growth. In addition, the “normalisation” of monetary policy in the US has the potential to act as a downside factor. Finally, in view of remaining challenges relating to programme implementation, uncertainty regarding IMF involvement and the outcome of the Greek elections, policy uncertainty related to Greece, despite declining from extreme levels following the recent agreements, could persist for longer than expected.

Labour market conditions in the EA continue to show gradual improvement and continuing economic growth should allow for further improvements in labour market conditions from which private consumption will benefit. In terms of the outlook for employment, unemployment is projected by both the ECB and the EU Commission to fall to 10 per cent during 2017 reflecting the downward impact of rising employment, which is partly offset by a growing labour force.

HICP inflation is projected to remain low in the near term and to rise more strongly only towards the end of 2015, averaging 0.1 per cent for 2015 as a whole. Upward base effects, together with an assumed turnaround in oil prices in euro terms are expected to underpin an upward momentum from the Q4 onwards. The September ECB staff macroeconomic projections for the euro area were revised downwards when compared with the June Eurosystem broad macroeconomic projection exercise. The projected annual HICP inflation is 0.1 per cent in 2015, 1.1 per cent in 2016 and 1.7 per cent in 2017 downward from 0.3 per cent in 2015, 1.5 per cent in 2016 and 1.8 per cent in 2017.

Survey measures continue to show stable long-term inflation expectations. According to the third quarter Survey of Professional Forecasters (SPF), inflation expectations for 2015 have been revised up to 0.2 per cent from 0.1 per cent in Q2. Moreover, one-year ahead inflation expectations (2016) have been

Chart 5: Market's Future Inflation Expectations Based on Implied Forward Inflation Swap Rates



Source: Bloomberg, CBI calculations.

revised up by 0.1 percentage points to 1.3 per cent, while the two-year ahead remain stable at 1.6 per cent. It is important to note that, while these survey indicators were published in July and they do not include the recent turmoil in the financial markets in the emerging markets economies in their assessment.

Measures of market-based inflation compensations have weakened recently. After a steady recovery since the announcement and implementation of the expanded asset purchase programme (EAPP), longer-term market based inflation expectations have started to decline since July. The five-in-five year inflation swap rate is back to 1.67 per cent after reaching a peak of 1.84 in line with other measures of inflation compensation (Chart 5). In the past months, these measures have been volatile possibly reflecting the volatility in the oil prices and developments in emerging markets economies (Box A).

Box A: Recent Developments in Market-Based Inflation ExpectationsBy Laura Moretti¹

In August 2014, ECB President Draghi gave an important speech at Jackson Hole (Draghi, 2014a) where he singled out the 5-in-5 years swap inflation rate as the ECB preferred measure of medium-term inflation expectations. Moreover, he signaled the importance of monitoring market-based inflation expectations and the risk of them falling below the 2 per cent target.

The ECB has a mandate to maintain price stability defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below, but close to 2 per cent over the medium term. Since the announcement of the expanded asset purchase programme (APP) in January 2015, the euro area long-term market-based measures of inflation expectations have been recovering from the trough of December 2014. After the concerns previously expressed on the possibility of dis-anchoring of inflation expectations (see for example Draghi, 2014b), this has been seen as an important sign of improvement.

In this Box, we review the recent developments in inflation expectations and we discuss whether the recent improvements have been driven by any particular factor. We focus our attention on the impact of short term fluctuations in the oil prices and on the evolution of the inflation risk premium.

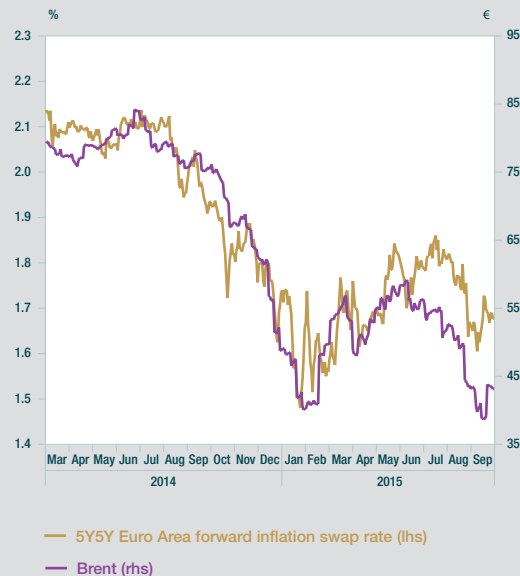
According to economic theory, long-term inflation expectations should not be affected by movements in the level of oil prices because they represent shocks that should be temporary in nature. However, it has been noticed that market-based inflation expectations have recently become more sensitive to fluctuation in oil prices. As reflected in Chart 1, they have been moving closely together in the past year. The fact that shocks, that are supposed to be short-lived, affect medium to long-term inflation expectations could raise some concerns and requires a careful monitoring on how expectations are formed.

In order to analyse whether the recent developments in oil prices have affected medium-term inflation expectations, we estimate a time-varying correlation by regressing the monthly changes in the 5-in-5 years inflation swaps, representing our measure of medium-term inflation expectations, on the monthly changes in real oil prices in euro, also controlling for short-term inflation expectations proxied by the 1-in-1 year inflation swap rate:

$$\Delta swap_{-5}_{-5t} = \alpha + \beta_1 \Delta oil_t + \beta_2 \Delta swap_{-1}_{-1t} + \varepsilon_t$$

A 24-month rolling window is used and the estimates are plotted within two standard deviations error bands.

Chart 2 shows that the 5-in-5 year swap rate has been significantly affected by changes in oil prices since mid-2014. However, there are signs of reversion of the effect in the past few months with the correlation reverting close to non-significance. It is important to note that, given the use of a 24-month rolling window, caution is required in attributing the recent movement only to the announcement and implementation of APP in the euro area.

Box A Chart 1: Recent Developments in Forward Inflation Swap Rates and Oil Prices

Source: Bloomberg, Datastream, CBI calculations.

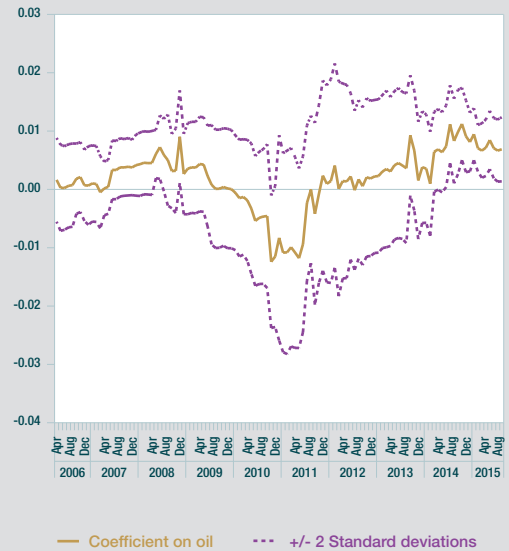
Box A: Recent Developments in Market-Based Inflation Expectations

By Laura Moretti

Our analysis suggests that medium-term inflation expectations may have become more sensitive to oil price movements since mid-2014, but there has been a reversion of this dynamics with a reduction in the correlation coefficients since January.

So far we have referred to inflation swap rates as a measure of inflation expectations. However, inflation swap rates are measures of inflation *compensation* because they not only reflect inflation expectations but also include various risk premia.² In particular, they incorporate an inflation risk premium – the compensation that holders of nominal securities demand for bearing inflation risk – and a liquidity premium driven by the transactions costs incurred by inflation broker-dealers when hedging the exposure to an inflation swap position with the purchase of a bond.

Box A Chart 2: Time-Varying Correlations Between 5-in-5 Year Inflation Swap Rates and Oil Prices (24-Months Rolling Windows)



Source: Bloomberg, Datastream, CBI calculations.

The Survey of Professional Forecasters (SPF) is used as the benchmark for ‘pure’ inflation expectations. Therefore, the difference between measures of market-based inflation compensation and survey-based inflation expectations can be attributed to liquidity and inflation risk premia. The quarterly ECB SPF collects forecasts for the euro area HICP inflation at 1, 2 and 5 years ahead from a panel of more than 70 professional forecasters located across the EU.³ In Chart 3, we compare the SPF 5-years ahead with the corresponding 1-in-4 year inflation swap rate in order to have the same time horizon. We observe that, while the 1-in-4 year inflation swap rate have sharply declined since 2014, survey measures of inflation expectations have remained more anchored. Our analysis of the liquidity premium based on the difference between agency (i.e. CADES and KfW) and sovereign bonds for France and Germany suggest that it has not changed in the past years. Therefore, the difference between the two measures appears to be driven mainly by changes in the inflation risk premium. This would suggest that the recent recovery in market-based inflation compensation is due to a reversal of the downward trend in the risk premium after the announcement of the expanded APP rather than to an increase in actual inflation expectations.

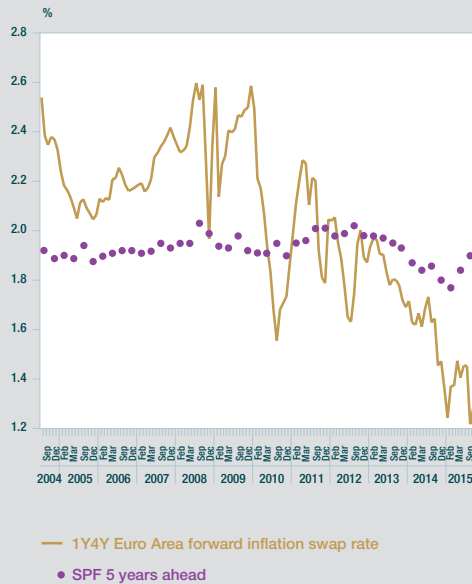
² See for example the discussion in Yellen (2014).

³ Respondents are also required to provide a quantitative assessment of uncertainty surrounding the reported point forecasts. This assessment of uncertainty is reflected in the reported probability distributions of future inflation outcomes falling within given ranges.

Box A: Recent Developments in Market-Based Inflation Expectations

By Laura Moretti

Preliminary evidence shows that, after the announcement and implementation of the APP, there are signs of improvements in market based inflation compensations, a reduction in the impact of short-lived shocks, such as oil prices, on medium-term inflation expectations and an improvement in the downward trend of the inflation risk premium.

Box A Chart 3: SPF 5 Years Ahead and 1-in-4 Years Inflation Swap Rates

Source: Bloomberg, ECB, CBI calculations.

References

Draghi, M. (2014a) *“Unemployment in the euro area”*, Speech by Mario Draghi, Annual Central Bank Symposium in Jackson Hole, 22 August 2014.

Draghi, M. (2014b) *“Monetary policy in the euro area”*, speech by Mario Draghi at the Frankfurt European Banking Congress, Frankfurt am Main, 21 November 2014.

Yellen, J. (2014) Transcript of Chair Yellen’s FOMC Press Conference, December 17.

Section 2: Euro Area Monetary Policy Developments

The stance of monetary policy in the euro area has been unchanged over the last quarter. Nonetheless, the Governing Council has indicated its willingness to ease monetary policy further, if necessary. In contrast, the debate in some other major economies continues to focus on timing rate increases, highlighting the increasing decoupling of monetary policy cycles in the euro area and elsewhere.

Despite the unchanged monetary stance, purchases under the euro area expanded

asset purchase programme (APP) have continued in line with the announced level. At the same time, the decline in oil prices and inflation, led the ECB to clarify that it would loosen monetary policy further if necessary. In advance of the September 3 meeting of the Governing Council, Executive Board Member Peter Praet noted that the expanded APP had enough flexibility in terms of size, composition and length to ensure that the Governing Council can achieve a sustainable path for inflation towards 2 per cent.¹ Likewise, at the press conference following the Governing Council meeting, President Draghi clearly stated that the expanded APP purchases are

¹ See: <http://www.bloomberg.com/news/articles/2015-08-26/ecb-ready-to-expand-qe-if-needed-on-inflation-risks-praet-says>

'intended to run until the end of September 2016, or beyond, if necessary'.²

In terms of the effect of purchases under the programme, the IMF Article IV Consultation on Euro Area policies included their early assessment of Quantitative Easing. In this, they note that the expanded APP had a positive effect on financial conditions and inflation expectations, but that real economy effects have taken between three and 16 quarters to become evident elsewhere. The IMF highlights a number of channels through which QE has had impacts, including the exchange rate and inflation expectations. The IMF also assesses that the expanded APP signalled a willingness to keep monetary policy sufficiently accommodative for as long as necessary to maintain price stability.

Monetary policy across countries often appears to be synchronised, primarily because global price level shocks — such as that experienced during the global financial crisis or as a result of oil price movements — cause inflation across countries to move in similar ways. However, differing domestic economic conditions will result in monetary policy diverging across countries. This is a phenomenon visible at present: while the market-implied path for the policy rate in the euro area indicates that rates will remain below 0.5 per cent until at least the end of 2018, those for the US and UK imply that both the Federal Funds Rate and the UK Bank Rate will gradually increase towards 2 per cent by the end of 2018.

Indeed, at its July meeting, the Federal Open Market Committee (FOMC) indicated that only "some" further labour market improvement was needed. Since communications earlier in the year indicated that the FOMC would be patient before normalising monetary policy, the July statement gave rise to expectations that the target window for the Federal Funds Rate may soon have been increased for the first time in nine years.

However, the July meeting of the FOMC predated the August moves by the People's Bank of China (PBoC) to devalue the Yuan, which alongside the subsequent Yuan devaluation and further developments in stock and commodity markets, led market participants to believe that a September move by the FOMC was increasingly unlikely (See Box B for a discussion of developments in China in the last quarter). Indeed, during August futures markets and U.S. Treasury yields have implied that there was a growing expectation of a delay in the rate increase. This view was confirmed when the FOMC left rates unchanged at the September meeting.³

In the UK, the timing of rate increases is also a much-debated issue. Indeed, Governor Mark Carney discussed global monetary policy cycles in a recent speech, arguing that 'the prospect of sustained momentum in the UK economy and the gradual firming of underlying inflationary pressures will likely put the decision as to when to start the process of gradual monetary policy normalisation into sharper relief around the turn of this year'.⁴ The Bank of England's Monetary Policy Committee believes that inflation expectations remain well-anchored based on both market and survey-based measures. Spare capacity in the British economy has continued to decrease in recent months, and is now judged by the Bank of England to be approximately 0.5 per cent of GDP. Furthermore, unemployment was 5.6 per cent in the second quarter, falling by 2 percentage points since 2013. Acting counter to this is the appreciation of the currency and its effect on import prices. Nonetheless, it is expected that the reduction in slack in the labour market should encourage wage growth and result in domestic cost pressures, eventually warranting an increase in the Bank Rate.

² See: <https://www.ecb.europa.eu/press/pressconf/2015/html/is150903.en.html>

³ See for instance: <http://www.wsj.com/articles/feds-dudley-says-new-york-economy-is-a-bright-spot-1440597601>

⁴ See: <http://www.bankofengland.co.uk/publications/Documents/speeches/2015/speech837.pdf>

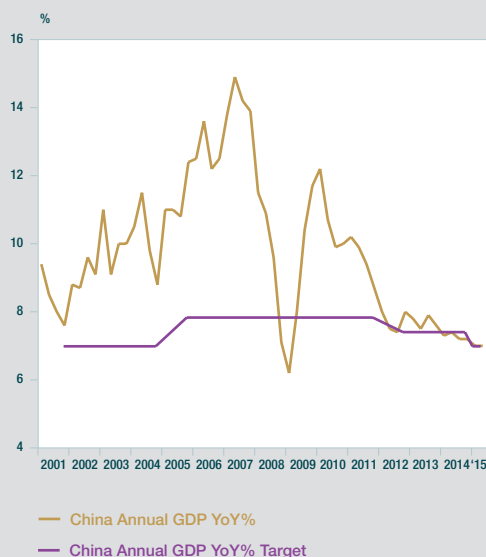
Box B: Turmoil in Chinese Equity Markets and Global Implications*By Patrick Haran and Neil Lawton¹***Overview**

Chinese equity markets lost almost 40 per cent from mid-June 2015 to end-August 2015, and have turned negative for the year.² This sell-off in equities is believed to have been exacerbated by the rapid growth in equity prices in the preceding months, as well as concerns about growth prospects for the Chinese economy. Following some stabilisation across markets in July and early-August, investor concern regarding China's outlook returned in the wake of a currency devaluation by the People's Bank of China (PBoC) in August. This phase led to a period of significant volatility in equity and commodity prices as investors speculated about the motivation for the devaluation.

This box briefly outlines the developments in the Chinese economy that acted as a background to the financial market volatility, provides detail on the sell-off and the policy responses designed to deal with it, and discusses the global impact of the sell-off and any potential further slowdown of the Chinese economy.

Chinese Growth Weakening

Growth in the Chinese economy has been slowing since Q1 2010 (Box B Chart 1). At that time, growth had reached a post-financial crisis peak of 12.2 per cent. By the third quarter of 2012, China's growth rate had reduced to 7.4 per cent, and has remained below 8 per cent ever since. Against this background, the PBoC loosened monetary policy on five occasions between November 2014 and May 2015 (Box B Chart 2). At the same time, despite the weakness in economic activity, Chinese equities had rallied by more than 130 per cent from end-August 2014 to mid-June 2015. However, market commentators have noted that the rapid appreciation of the Chinese equity markets may not have been underpinned by economic fundamentals. Furthermore, as strong credit growth continued despite slowing economic activity, the leverage position of the economy began to look less healthy.

Box B Chart 1: China Annual GDP Growth Rate vs. Government Target Rate

Source: Bloomberg.

More recent Chinese data raised concerns that the economy is slowing sharply. During the first two quarters of this year growth was 7 per cent. The manufacturing PMI for July indicated negative growth; while August's manufacturing PMI was the lowest reading for China in 6 and a half years. This continued trend of falling growth rates has led to uncertainty in markets regarding the ability of the Chinese authorities to successfully deal with the slowing domestic economy.

¹ Financial Markets Division² Figure based on China's benchmark equity index; the Shanghai Composite

Box B: Turmoil in Chinese Equity Markets and Global Implications

By Patrick Haran and Neil Lawton

Box B Chart 2: Shanghai Composite since November 2014 and PBOC Decision Timeline



PBOC Decisions	
1.	Benchmark Lending Rate Cut by 40bps to 5.6%
2.	Required Reserve Ratio (RRR) Cut: 50bps to 19.5%
3.	Benchmark Lending Rate Cut by 25bps to 5.35%
4.	Benchmark Lending Rate Cut by 25bps to 5.10%
5.	RRR Cut: 100bps to 18.5%
6.	Benchmark Lending Rate Cut by 25bps to 4.85%
7.	Benchmark Lending Rate Cut by 25bps to 4.6%, RRR Cut: 50bps to 18%

— Shanghai Composite Index

Source: Bloomberg.

Chinese Equity Market Sell-Off and Official Responses

Against this background, Chinese equity markets lost almost 40 per cent from mid-June 2015 to end-August 2015, and have turned negative for the year. The sharpness of the recent declines were reportedly exacerbated by the unwinding of large quantities of retail leveraged positions in the market, which had helped drive equity prices higher earlier in the year.

Through June and July, the Chinese authorities announced exceptional measures to halt declines in equity markets and contain the sell-off. In June, the PBoC cut its benchmark one-year interest rate by 25 basis points. Furthermore, China Securities Finance Corp., a publicly funded intermediary, received state support to intervene and stabilise the market through the purchase of equities. In July, China’s Securities Regulatory Commission prohibited shareholders from selling more than 5 per cent of the capital of a listed company for 6 months, while also postponing IPOs for the same period. Authorities also announced that more than 40 per cent of companies listed in China were authorised to suspend trading of their stocks.

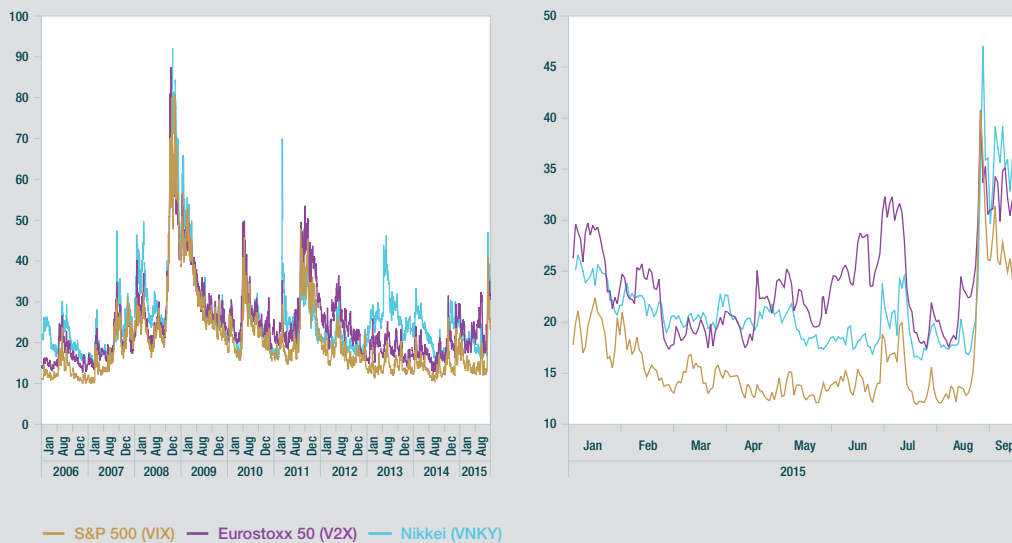
Following these measures, equity markets initially rebounded and stabilised for a time, before the Shanghai Composite index declined 25.5 per cent over a two week period beginning 11 August. Two factors drove this: soft Chinese economic data and the unexpected devaluation of the Chinese renminbi on 11 and 12 August. The PBoC later sought to clarify that the devaluation was a one-off technical adjustment and not the start of a prolonged fall in the Renminbi. However, at the time the devaluation caused major uncertainty in financial markets as investors speculated that the intervention was a further effort to boost a potentially deteriorating domestic economic outlook. The PBoC cut rates on 26 August, this time also reducing the required reserve ratio.

Box B: Turmoil in Chinese Equity Markets and Global Implications*By Patrick Haran and Neil Lawton***Wider impact**

These sharp declines in Chinese equity markets, coupled with increasing speculation as to the timing of a US Federal Reserve rate hike, had a negative contagion effect through global equity markets over this period. Volatility in European and US markets increased to multi-year highs, while volatility also increased in Japan's major index, although it is important to note that this occurred at a time of expected seasonally low liquidity in markets (Box B Chart 3).

A number of countries with strong economic ties to the Chinese economy saw significant depreciations of their respective currencies following the negative sentiment towards China, and the concurrent decline in commodity prices, on which many emerging economies rely heavily. Emerging market economies and some developed economies, such as Australia, continue to be most impacted by developments in the Chinese economy.

However, the size of the Chinese economy means that a slowdown there will be felt across advanced economies also, with implications for the euro area: Following the ECB Governing Council meeting in September, in his press conference ECB President Mario Draghi stated that "we expect the economic recovery to continue, albeit at a somewhat weaker pace than earlier expected, reflecting in particular the slowdown in emerging market economies". Looking forward, market participants and policy makers alike will be carefully monitoring any further evidence of an economic slowdown in China.

Box B Chart 3: US, European and Japanese Equity Market Volatility Indices

Source: Bloomberg.