



EUROPEAN CENTRAL BANK

EUROSYSTEM

F. Moss

Director General

DG International & European Relations

European Central Bank

Spillovers from Unconventional Monetary Policies- Some Lessons Learned

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African Central Banks

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Overview

- 1 The rise of globalisation
- 2 Monetary policy spillovers in context
- 3 Spillovers from unconventional monetary policies in systemic AEs

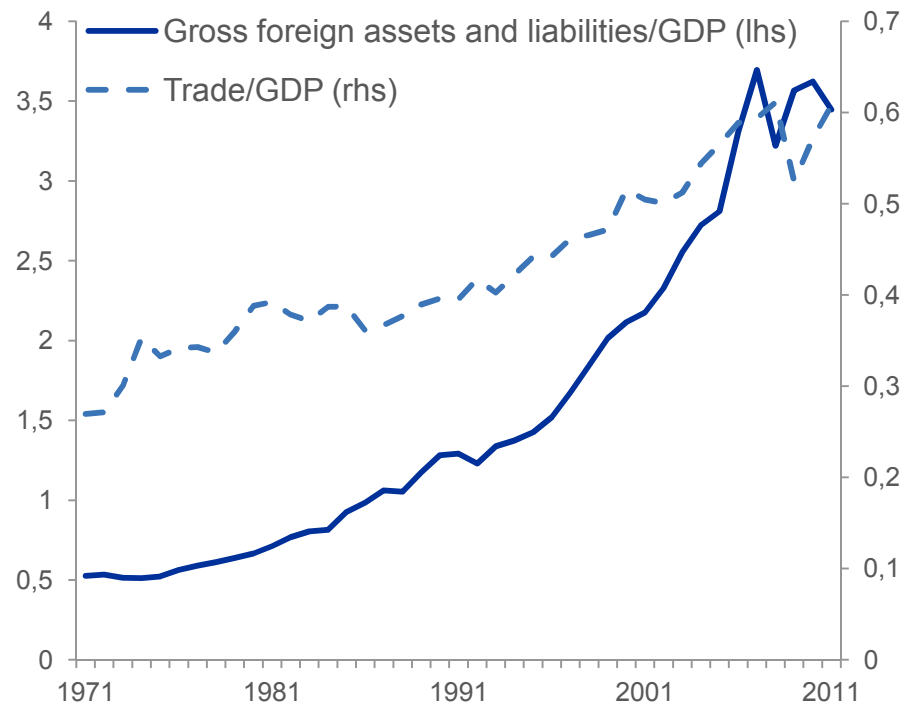
Overview

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The rise of globalisation

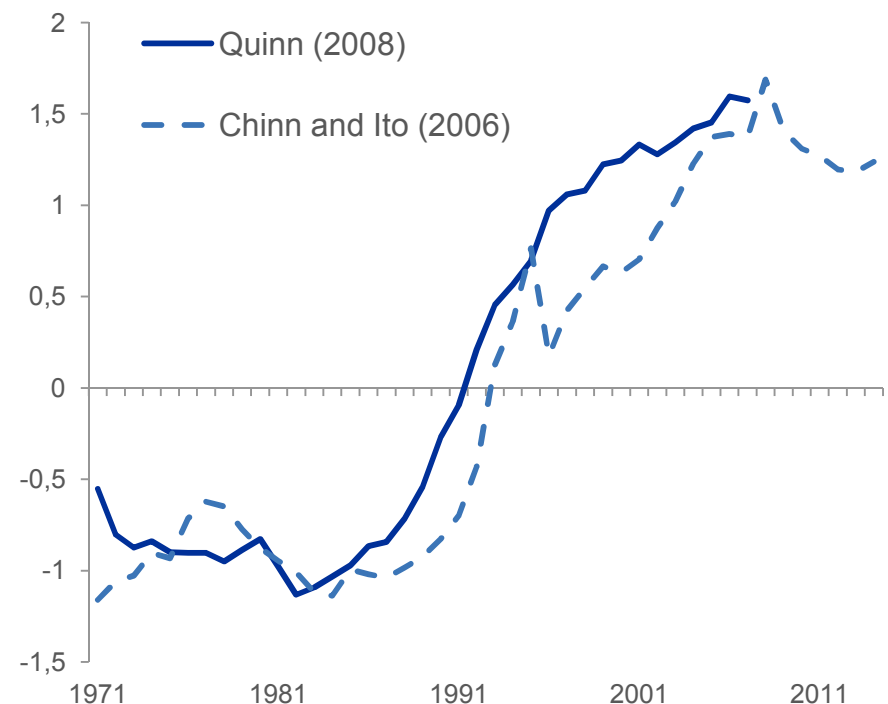
Financial and real integration

(external assets and liabilities and trade as % of GDP)



Sources: Lane and Milesi-Ferretti (2007), World Development Indicators.

De jure measures of capital account openness



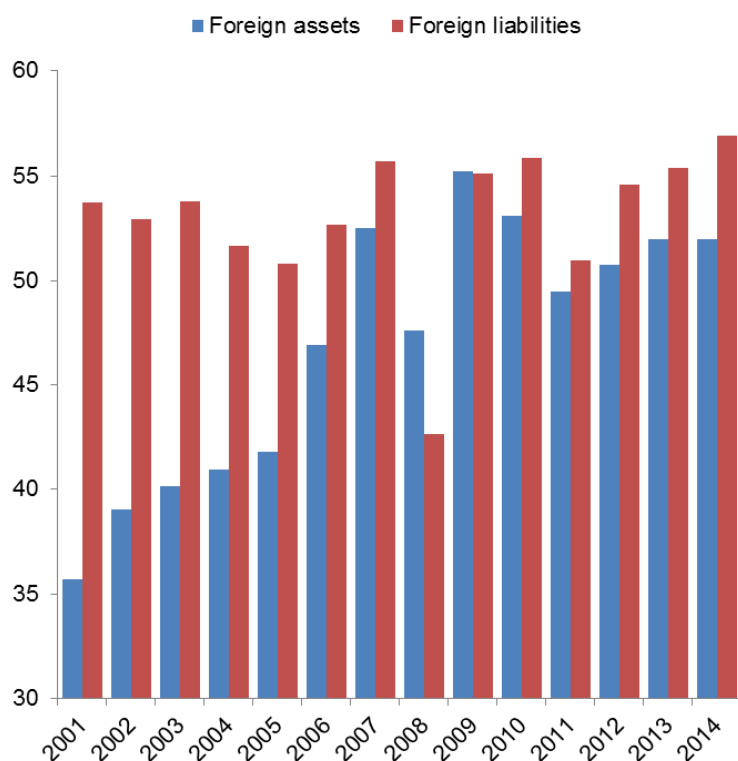
Sources: Quinn (2008), Chinn and Ito (2006).

Note: The chart shows unweighted averages across all countries. The variables are standardised.

EMEs and cross-border capital flows

EMEs international financial market integration

(external assets and liabilities as % of nominal GDP)

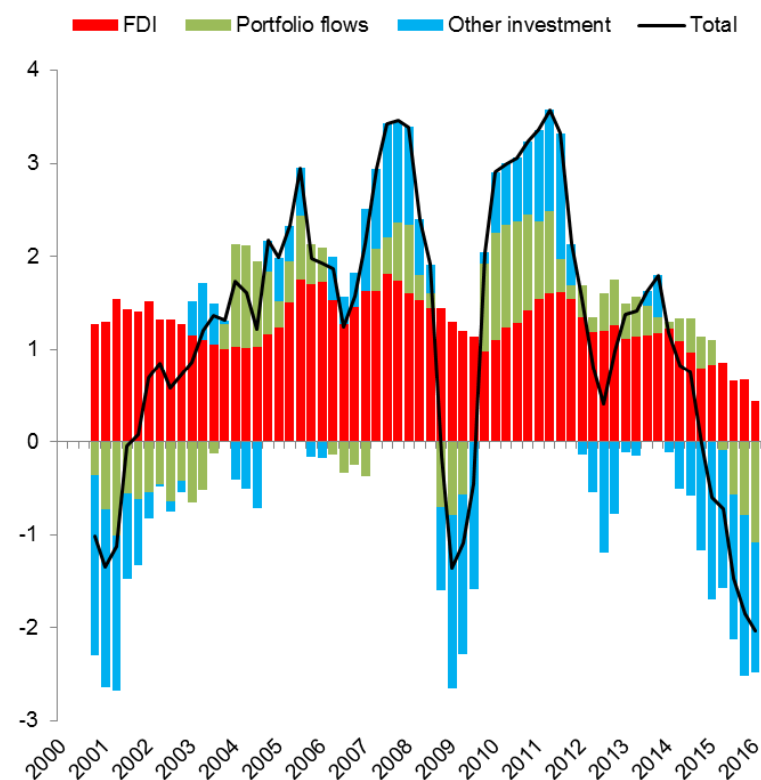


Sources: IMF, External Wealth of Nations Mark II database and ECB staff calculations.

Notes: The country sample of 15 major EMEs: Brazil, China, India, Indonesia, Korea, Malaysia, Mexico, Russia, South Africa, Thailand, Turkey, Chile, Argentina, Colombia and Philippines. Data for China pre-2004 from External Wealth of Nations database.

Net capital inflows to EMEs

(four-quarter moving averages; percentages of nominal GDP)



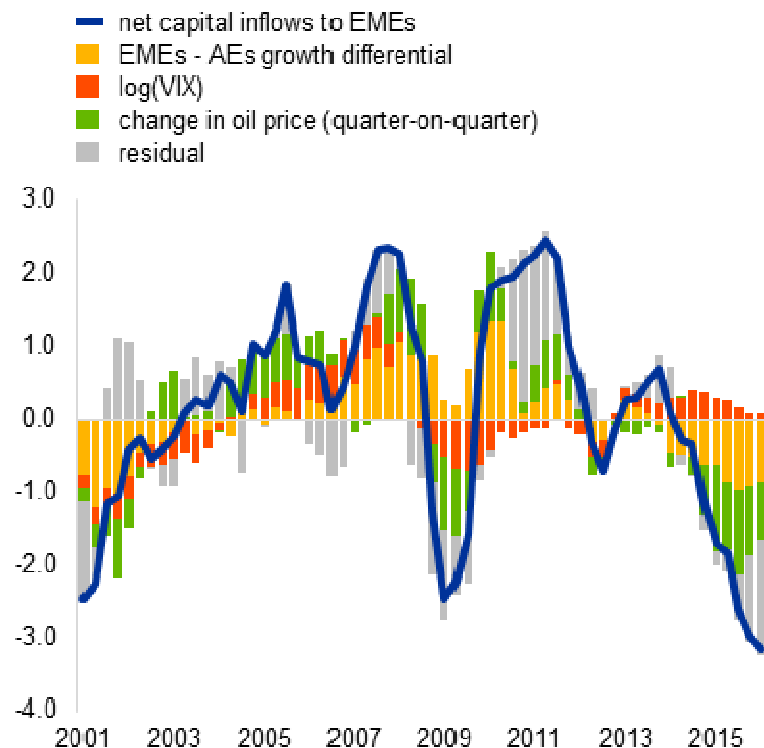
Sources: Haver Analytics, IMF and ECB calculations.

Notes: Latest observation: 2016Q1. Net capital inflows defined as the sum of net foreign direct investment (FDI), net portfolio flows and net other investment. Aggregated using GDP purchasing power parity (PPP) weights. Country sample as on the left-hand chart plus Taiwan.

Determinants of capital flows to EMEs

Model-based contributions to aggregate net capital inflows to EMEs

(demeaned; four-quarter moving averages; percentages of nominal GDP)

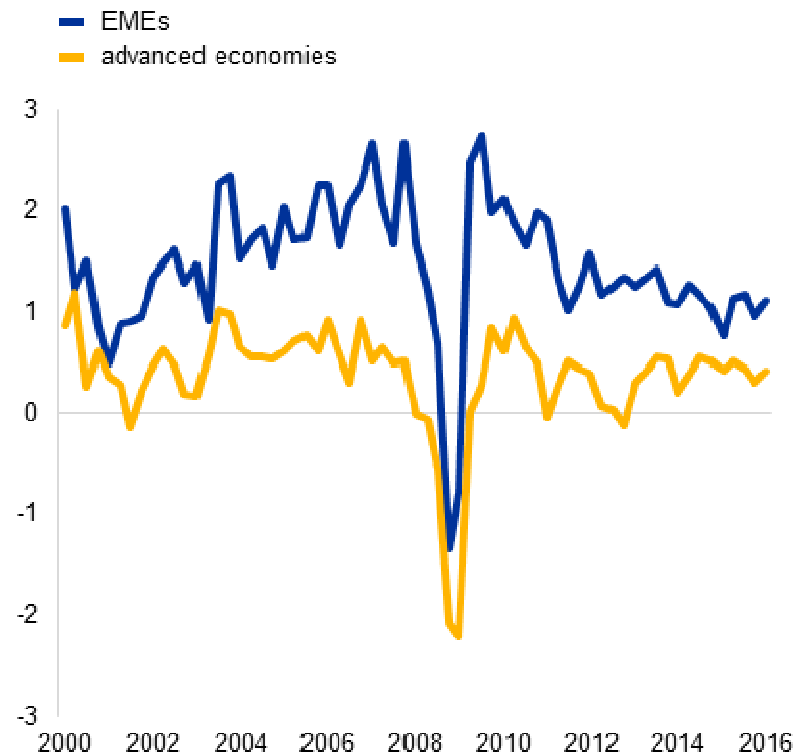


Sources: Datastream, Haver Analytics, IMF and ECB calculations.

Notes: Results from a regression of aggregate net capital inflows to EMEs on EMEs/advanced economies growth differential (lagged), logarithm of VIX and quarterly changes in oil prices. Sample period 2000Q1-2016Q1. Aggregate of EMEs comprising Argentina, Brazil, Chile, China, Colombia, India, Indonesia, Malaysia, Mexico, Russia, South Africa, South Korea, Taiwan, Thailand, Turkey and Venezuela.

Real GDP growth in EMEs and advanced economies

(quarter-on-quarter percentage changes)



Sources: Haver Analytics, IMF and ECB calculations.

Notes: Latest observation 2016Q1. Aggregated using GDP PPP weights. Advanced economies include Australia, Canada, Denmark, the euro area, Japan, Norway, Sweden, Switzerland, the United Kingdom and the United States. EMEs: see a footnote to the left-hand chart.

Economic effects of globalisation

- Benefits from real (trade) integration are more straightforward than those of financial integration
- Financial integration may harbour positive effects
- ...but it also exposes economies to risks
- ... that need to be managed wisely

Overview

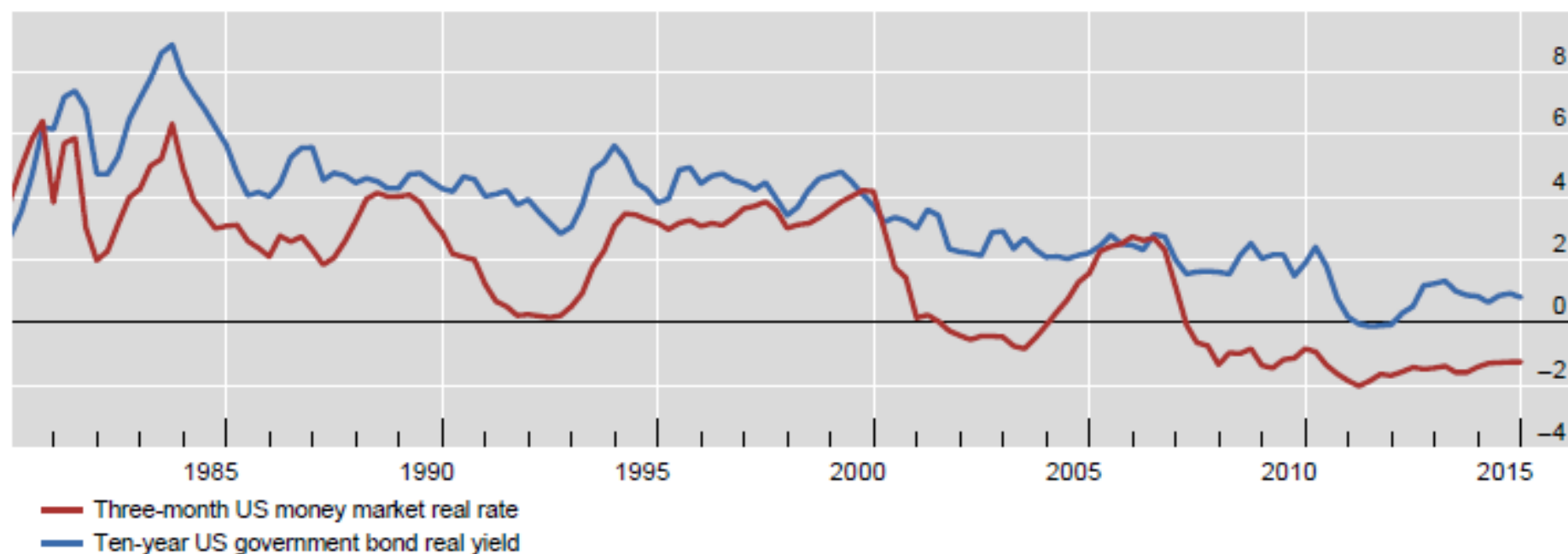
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Monetary policy spillovers in context

- A useful distinction needs to be drawn between announcement effects and longer-lasting effects of monetary policy actions
- Monetary policy easing affects the rest of the world (RoW) through the **trade channel**
 - When home currency depreciates, home import prices rise: “expenditure switching” (contractionary for RoW)
 - The monetary policy stimulus also raises home demand for foreign goods: “expenditure boosting” (expansionary for RoW)
- But **financial spillover channels** matter too in the case of internationally used currencies
- Sign and magnitude of overall spillovers *a priori* ambiguous, but expansionary expenditure boosting and financial channels typically dominate contractionary expenditure switching channels

Rising importance of unconventional monetary policies

- Central banks in systemic advanced economies are committed to keeping inflation stable
- Downward trend in interest rates since 1980s implies challenges given central banks' focus on a policy rate as primary instrument
- Increased recourse to unconventional monetary policy measures is a natural consequence in this context



Source: Juselius et al. (2016) BIS Working Paper No 569.

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Spillovers from unconventional monetary policy

- Relevant metric for assessing the global effects of monetary policies in systemic AEs are the *net* spillovers
- Given the size of the euro area and its importance for neighbouring economies' trade, stabilising the euro area economy entails positive spillovers
- A key question therefore is whether ECB monetary policy has been effective in achieving its domestic mandate

A typology of unconventional monetary policy

- **Measures aimed at addressing the impairment of the monetary policy transmission channels**
Measures aimed at overcoming the “zero” lower bound constraint

Interest rate policy measures

Forward guidance on the future policy rate path

Negative interest rates

Balance sheet measures

Credit easing measures (liquidity provision)

Large Scale Asset Purchase Programme

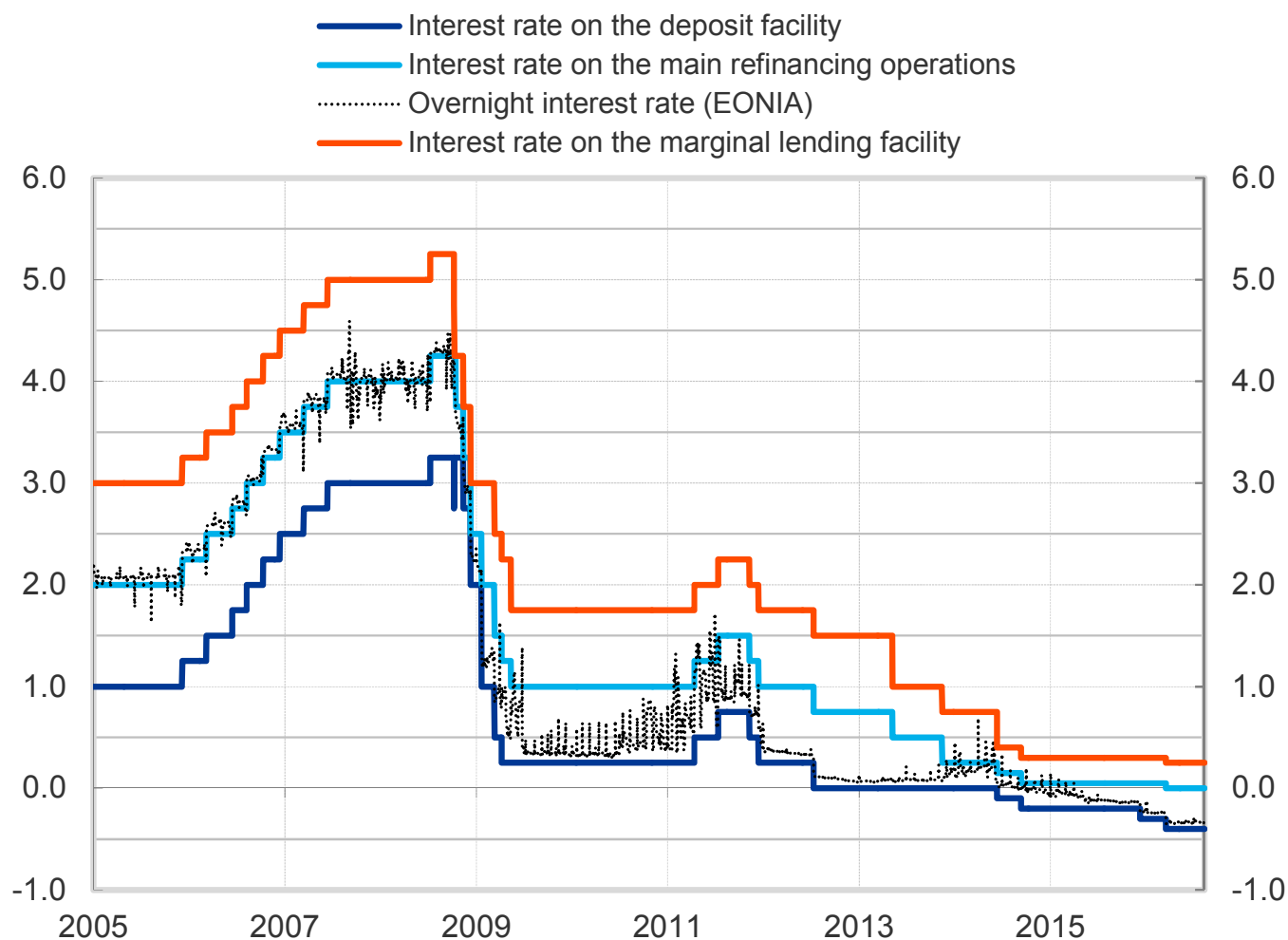
The ECB's monetary policy measures since mid-2014

| | | Jun. 2014 | Sep. 2014 | Jan. 2015 | Dec. 2015 | Mar. 2016 |
|-----------------------|-------------------------|---|--|---|--|--|
| Negative policy rates | | MRO: 0.15%; MLF: 0.40%; DRF: -0.10% | MRO: 0.05%; MLF: 0.30%; DRF: -0.20% | | MRO: 0.05%; MLF: 0.30%; DRF: -0.30% | MRO: 0.00%; MLF: 0.25%; DRF: -0.40% |
| TLTRO I & II | | Fixed rate (MRO) Max. maturity: Sep. 2018 Uptake depends on net lending Mandatory early repayment | | | | Fixed rate At MRO or below if lending > benchmark (<i>min.</i> <i>DFR</i>) No mandatory early repayment |
| APP | Private asset purchases | | Broad portfolio of simple & transparent ABS and CBs | | APP recalibration | Purchase of inv.- grade NFC bonds ... with high pass- through to real economy |
| | Public asset purchases | | | Purchases of EA sovereign bonds €60bn of monthly purchases “until end-September 2016 and in any case until we see a sustained adjustment in the path of inflation which is consistent with our aim of achieving inflation rates below, but close to, 2% over the medium term.” | <ul style="list-style-type: none"> Adjusted date-based leg (to Mar. 2017) Reinvestment of principal payments | <ul style="list-style-type: none"> APP recalibration €80bn monthly purchases Higher issue share limit for certain issuers |

A further (limited) use of conventional monetary policy

Interest rates: ECB policy rates and EONIA

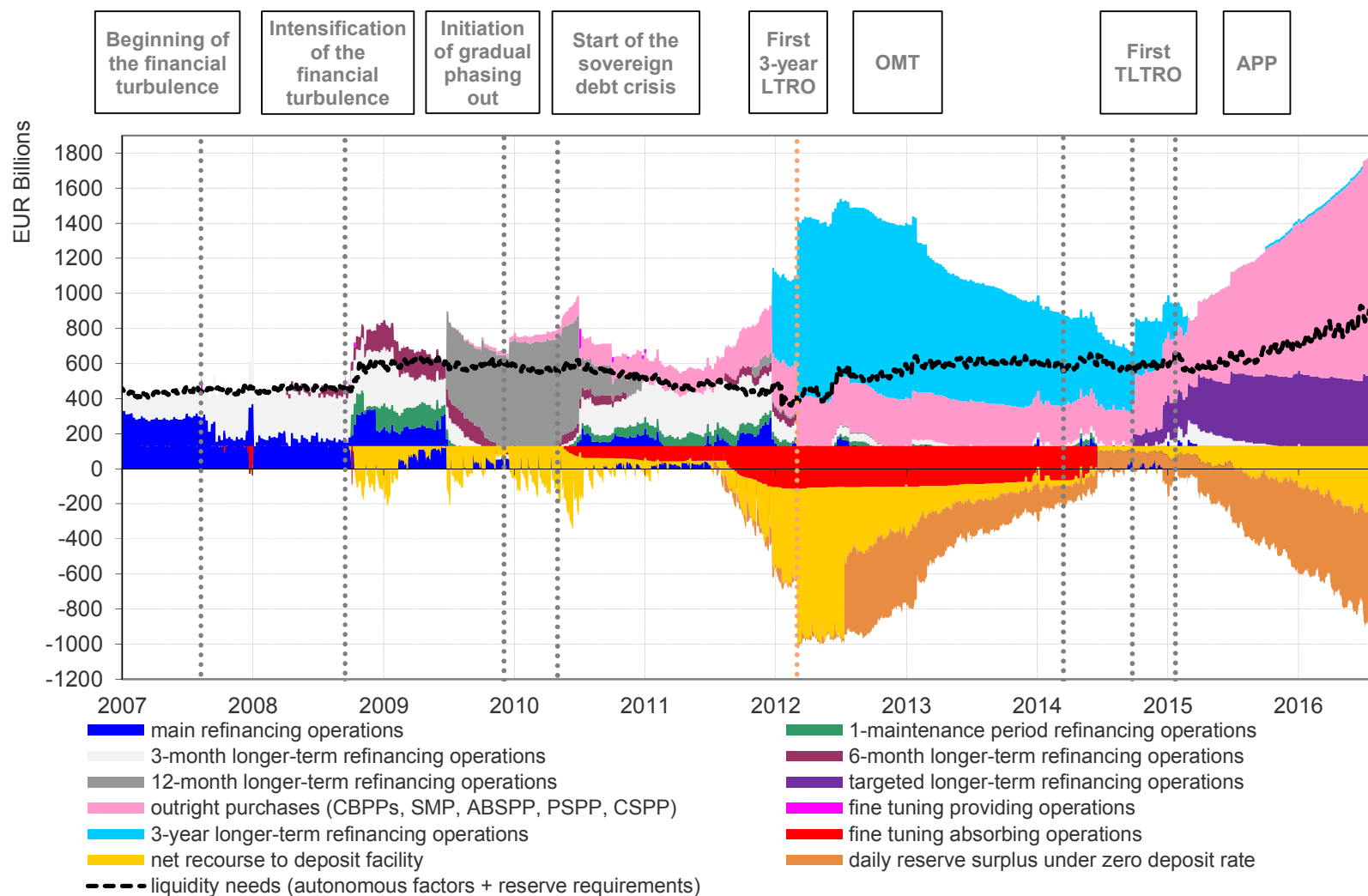
(percentages per annum)



Sources: ECB, Bloomberg.
Last observation: 10 August 2016.

A balance sheet expansion with different drivers

Evolution of the Eurosystem's balance sheet

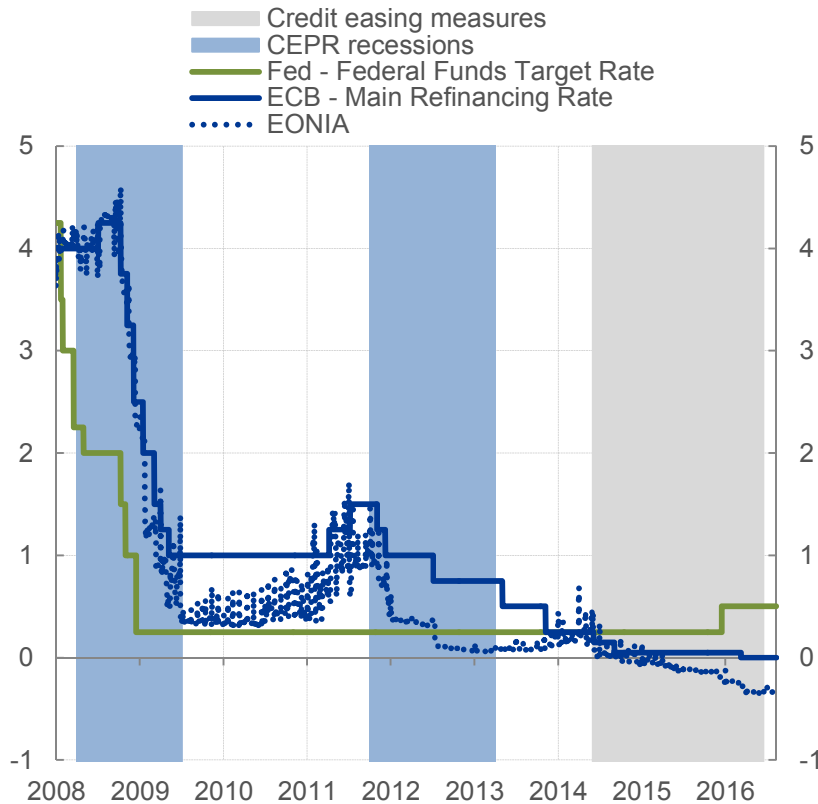


Source: ECB

Latest observation: 10 August 2016.

Monetary policy divergences across systemic AEs

ECB and FED key interest rates and EONIA (percent)

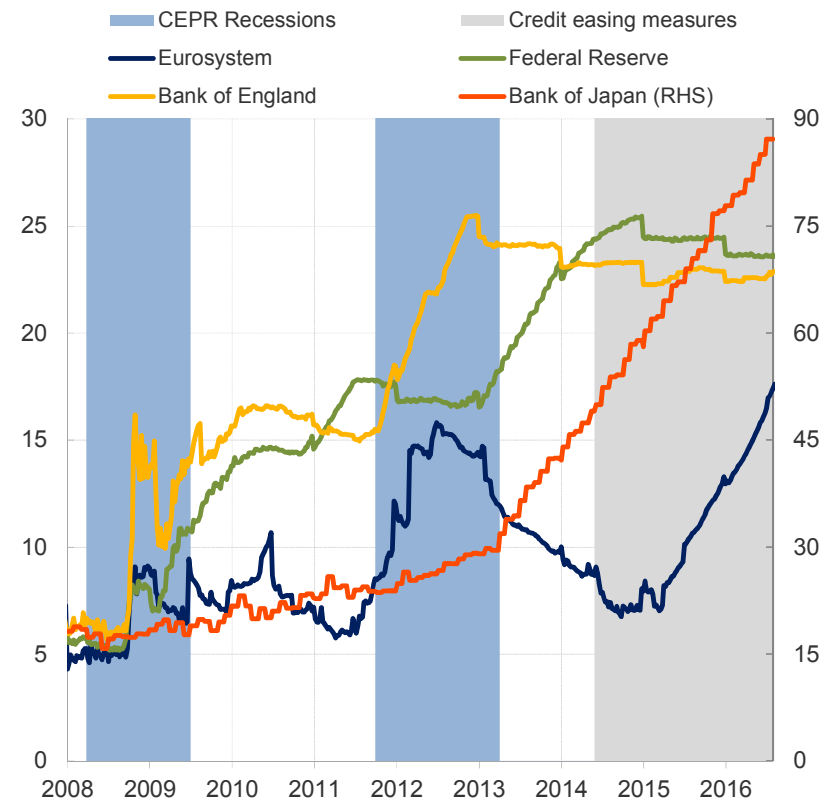


Source: ECB, Federal Reserve.

Notes: Main Refinancing Rate (ECB), Federal Funds Target Rate (Fed), EONIA (ECB).

Latest observation: 10 August 2016.

Monetary Policy Instruments (percent of GDP)



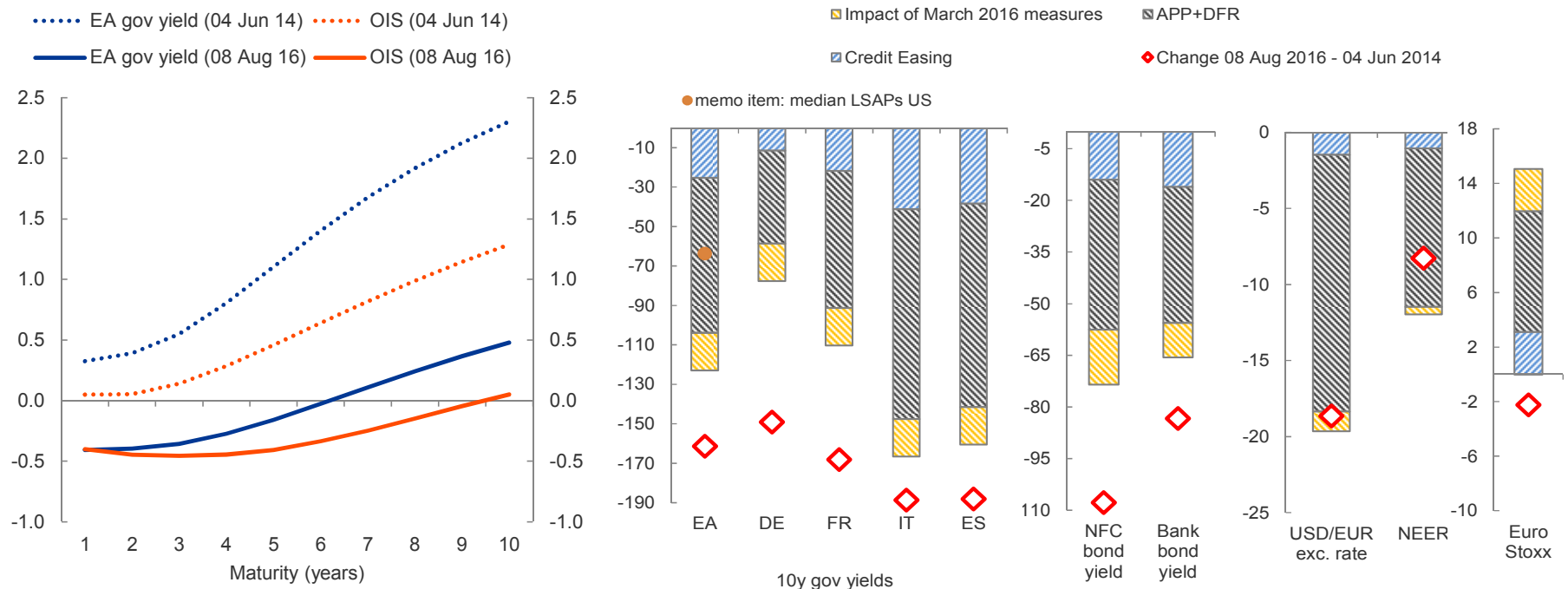
Source: ECB, Federal Reserve, Bank of England, Bank of Japan, Eurostat, BIS.

Latest observation: 29 July 2016.

Effectiveness of the ECB's policy measures since mid-2014 (1)

Broad-based easing across markets via portfolio rebalancing and signalling effects

Term structure, yields and financial prices since 4 June 2014 (exchange rates and Eurostoxx in percent; else in basis points)



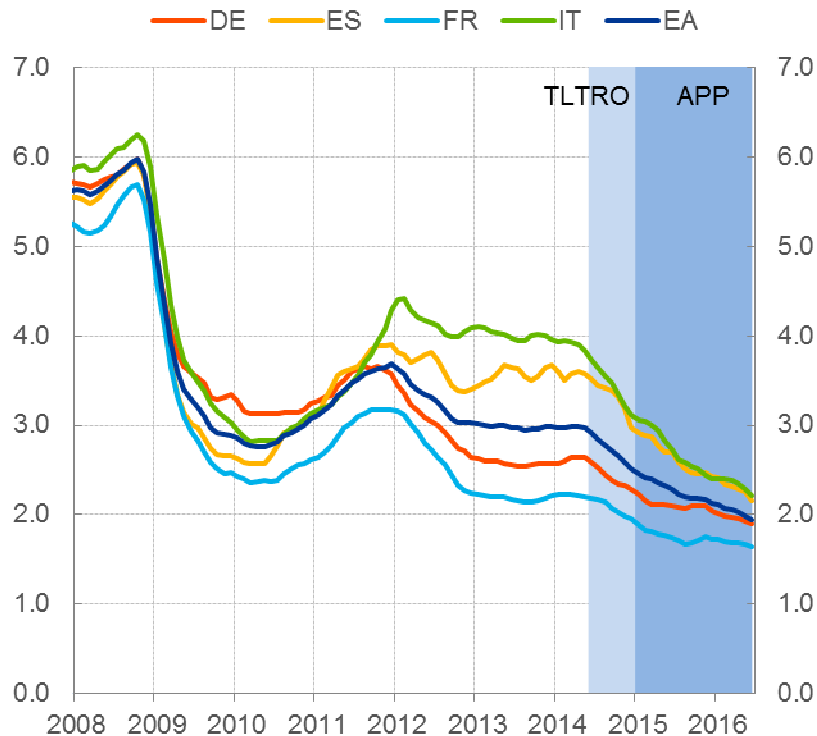
Sources: Bloomberg, ECB, ECB calculations. Notes: The impact of credit easing is estimated on the basis of an event-study methodology which focuses on the announcement effects of the June-September package; see the EB article "The transmission of the ECB's recent non-standard monetary policy measures" (Issue 7 / 2015). The impact of the DFR cut rests on the announcement effects of the September 2014 DFR cut. APP encompasses the effects of both January 2015 and December 2015 measures. The January 2015 APP impact is estimated on the basis of two event-studies exercises by considering a broad set of events that, starting from September 2014, have affected market expectations about the programme; see Altavilla, Carboni, and Motto (2015) "Asset purchase programmes and financial markets: lessons from the euro area" ECB WP No 1864, and De Santis (2015) mimeo. The quantification of the impact of the December 2015 policy package on asset prices rests on a broad-based assessment comprising event studies and model-based counterfactual exercises. The impact of the March 2016 measures is assessed via model-based counterfactual exercises. Latest observation: 8 August 2016.

Effectiveness of the ECB's policy measures since mid-2014 (2)

High pass-through via the bank lending channel

Bank lending rates on loans for non-financial corporations

(percentages per annum; three-month moving averages)

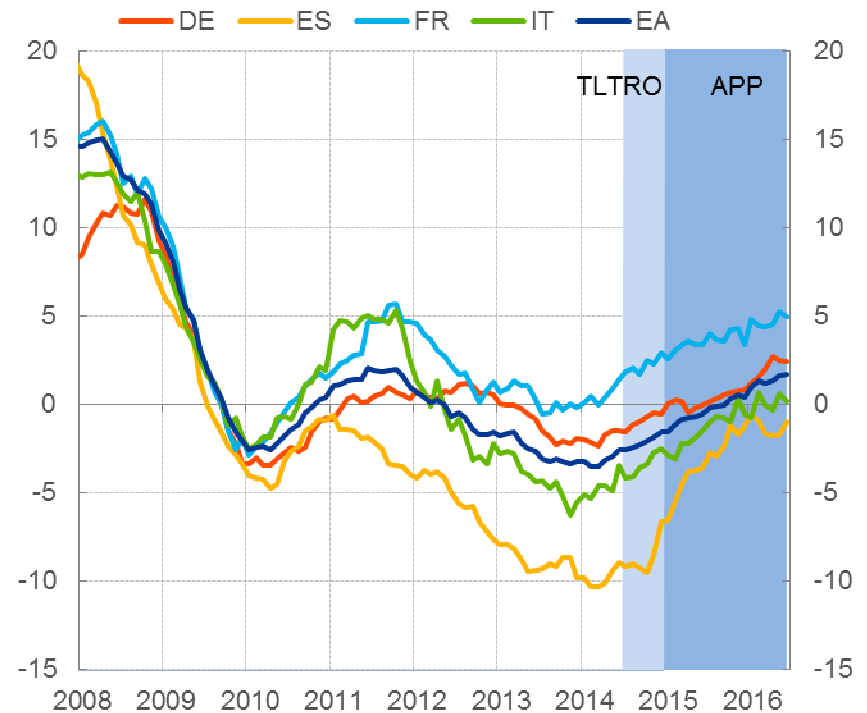


Source: ECB.

Notes: The indicator for the total cost of lending is calculated by aggregating short- and long-term rates using a 24-month moving average of new business volumes. Latest observation: June 2016.

MFI loans to non-financial corporations in selected euro area countries

(annual percentage changes)



Source: ECB.

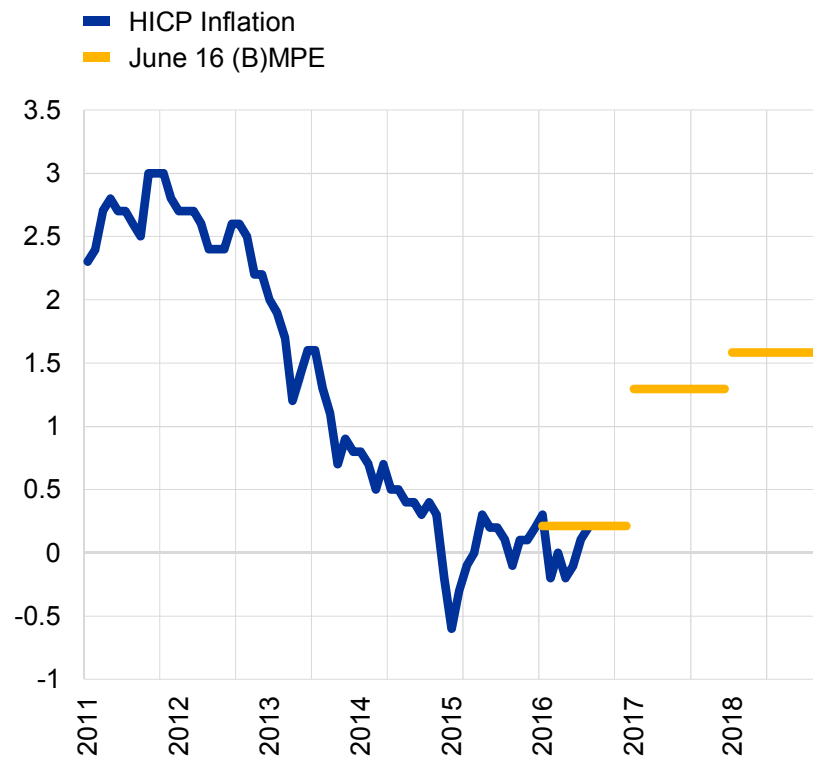
Notes: Adjusted loans (i.e. adjusted for sales, securitisation and cash pooling activities).

Latest observation: June 2016.

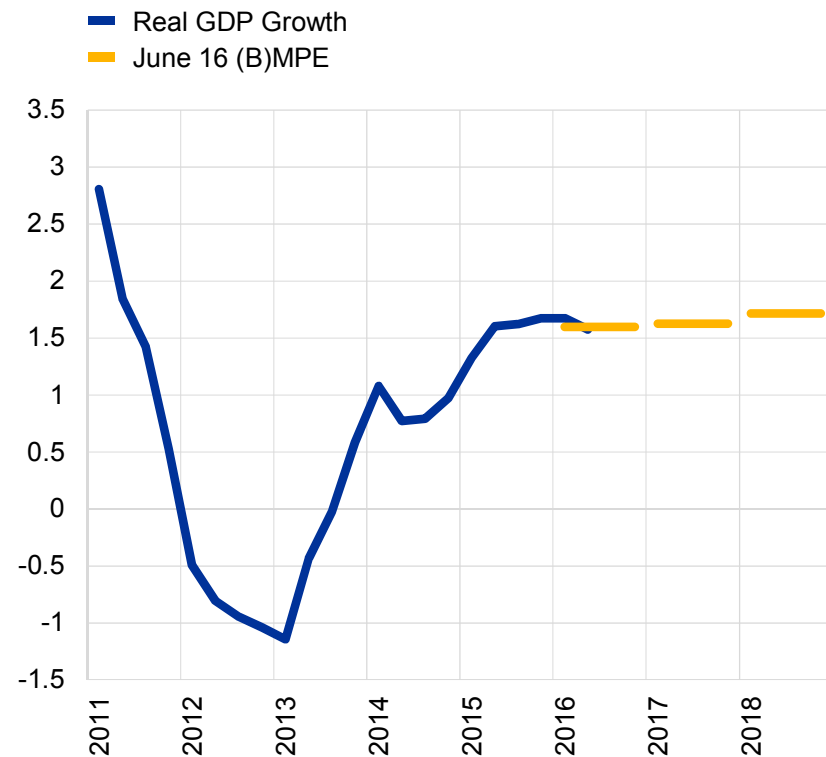
Effectiveness of the ECB's policy measures since mid-2014 (3)

The macroeconomic impact has been significant

HICP Inflation, inflation projections
(year-on-year percent change)



GDP growth, growth projections
(year-on-year percent change)



Source: ECB computations.

Latest observation: July 2016 (flash) for HICP inflation and Q2 2016 (flash) for real GDP growth.

Net external spillovers of the ECB's UMP positive

- Stabilisation of the domestic economy benefits the euro area's trading partners directly
- Positive net spillovers from a global perspective do not imply there will not be challenging scenarios in some instances
- Some economies might be subject to domestic and cross-border financial imbalances that could unwind disorderly
- The aim must be to reap the positive monetary policy spillovers while mitigating adverse spillovers
 - Need for clear and transparent communication by systemic advanced economies central banks regarding the future path of monetary policy
 - Adoption of policies which reduce vulnerabilities in spillover-recipient economies
 - Multilateral elements: IMF surveillance, regional financing arrangements, capital flow management policies

Can EMEs/LDCs positively influence the net spillovers?

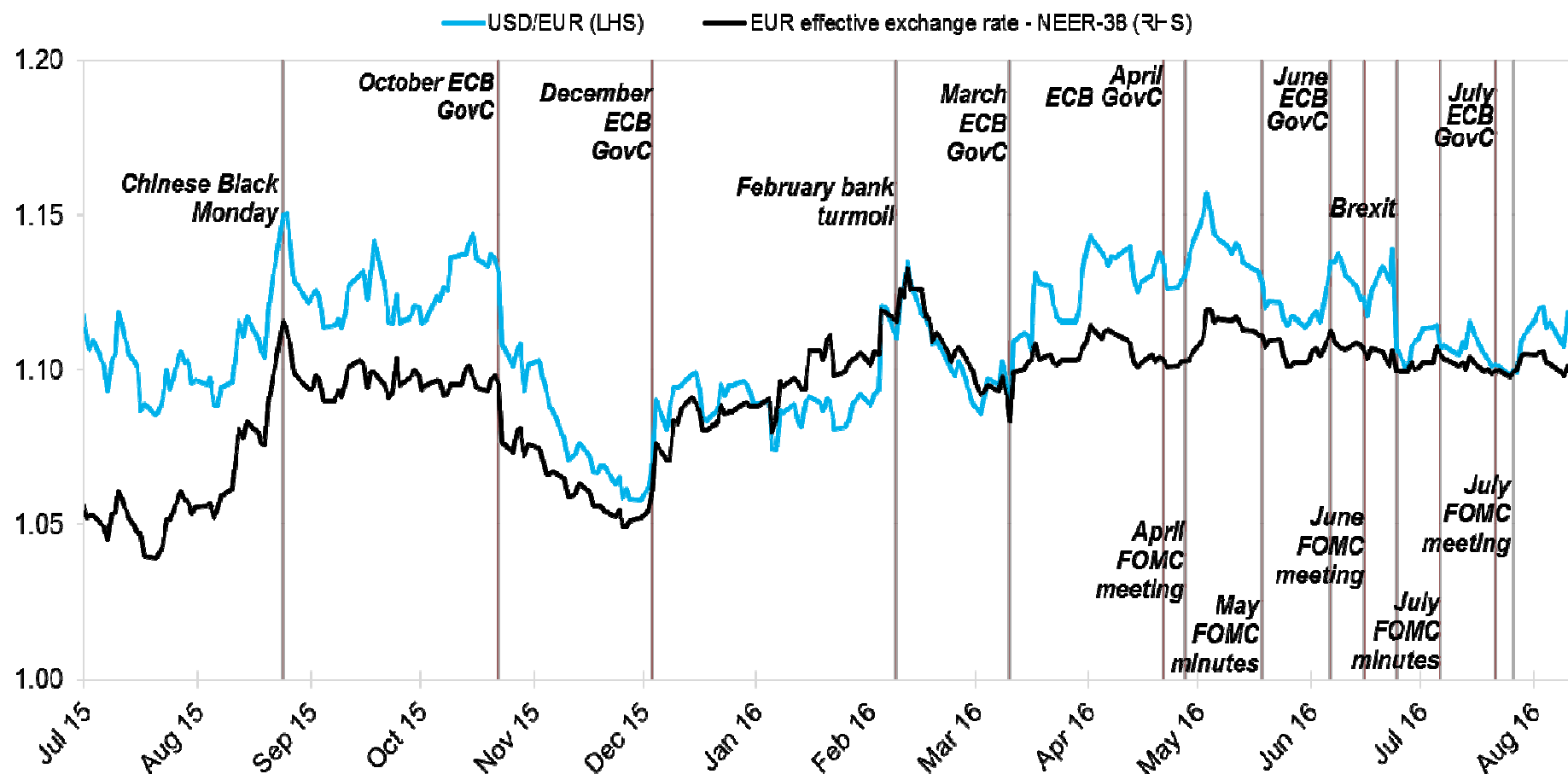
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Reserve slides

Evolution of euro exchange rate since July 2015

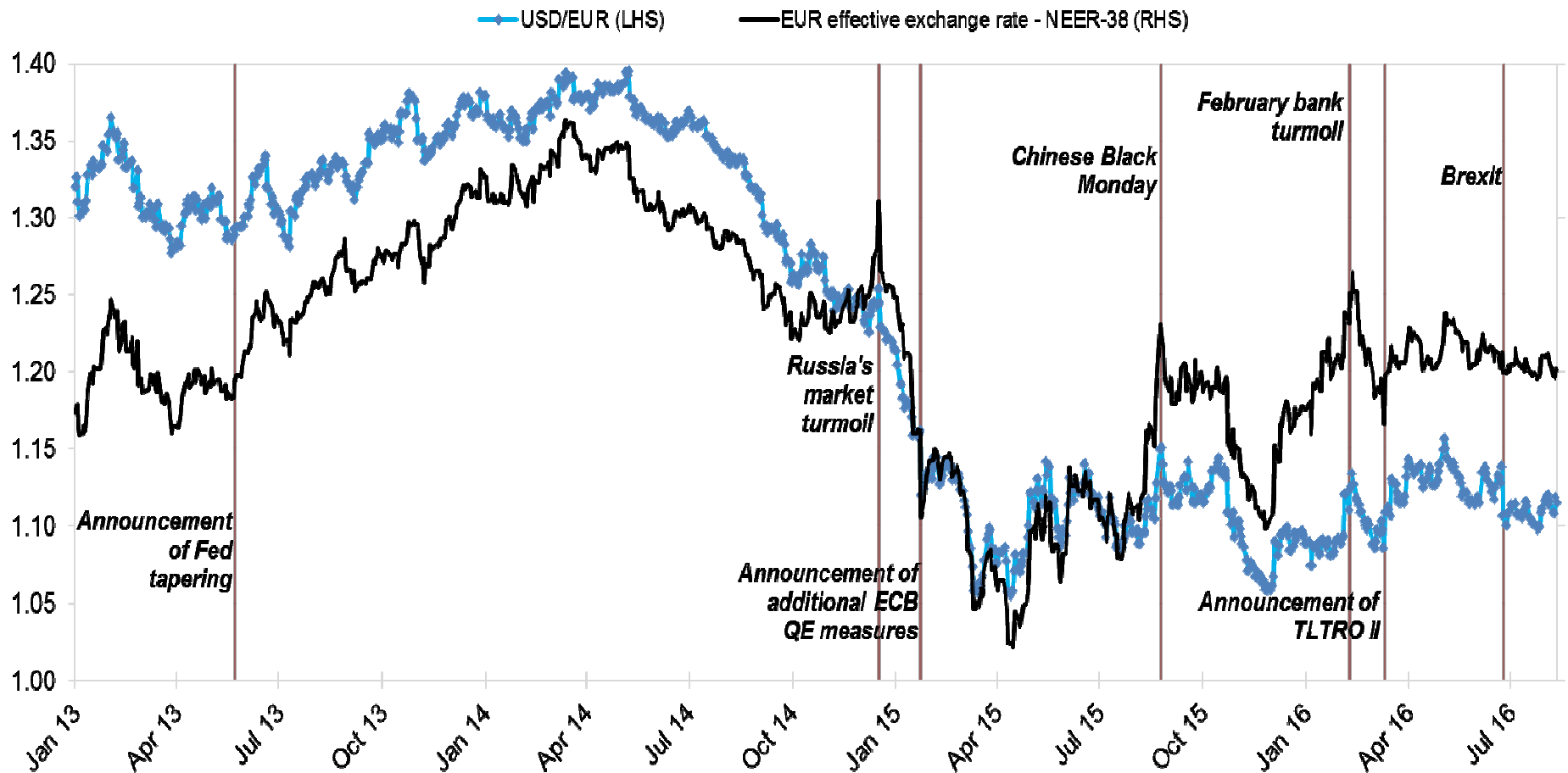
Euro nominal effective exchange rate and USD/EUR
(index 1Q99 = 100 (rhs); USD/EUR exchange rate (lhs))



Sources: ECB.
Latest observation: 11/08/2016.

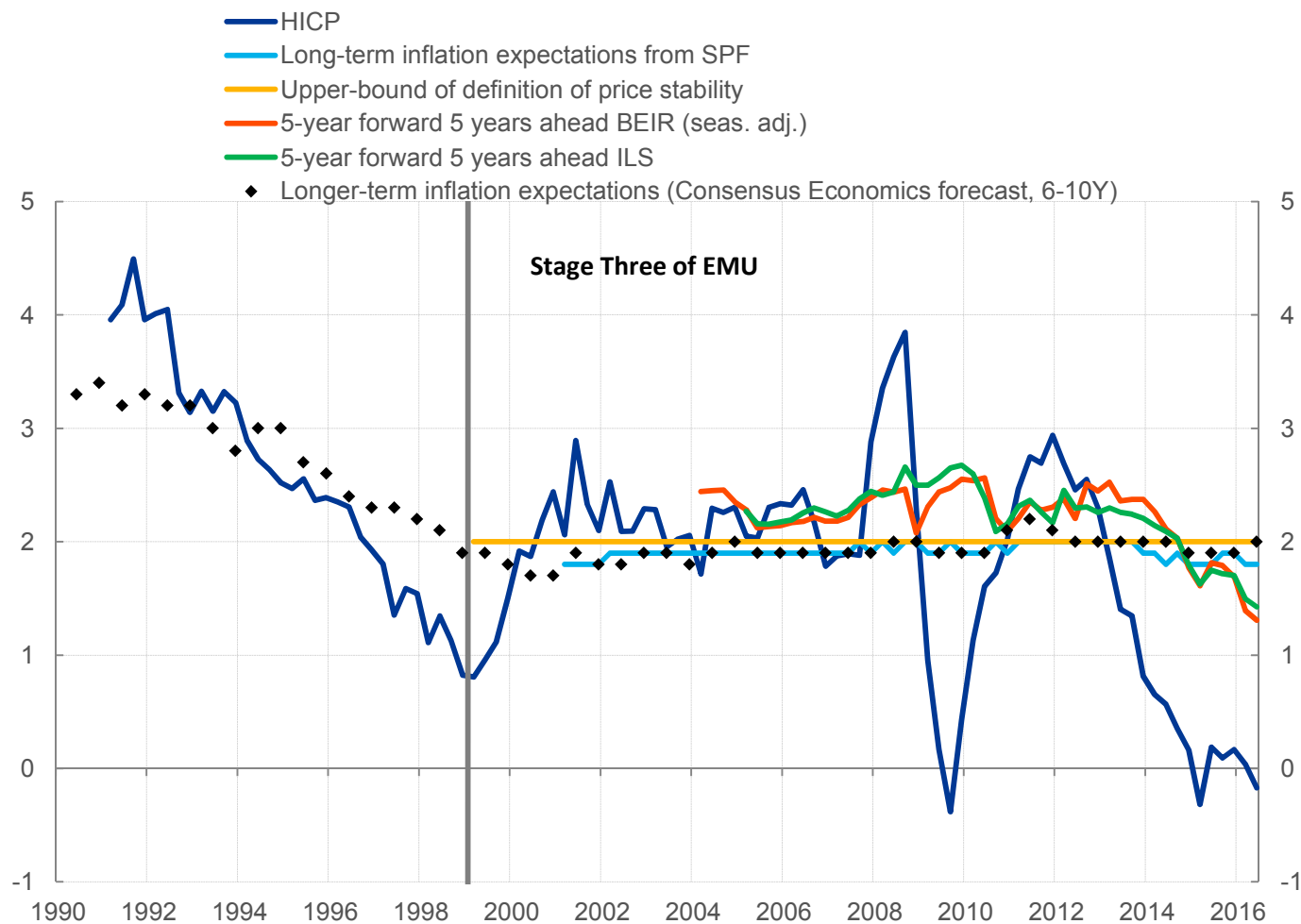
Evolution of euro exchange rate since January 2013

Euro nominal effective exchange rate and USD/EUR
(index 1Q99 = 100 (rhs); USD/EUR exchange rate (lhs))



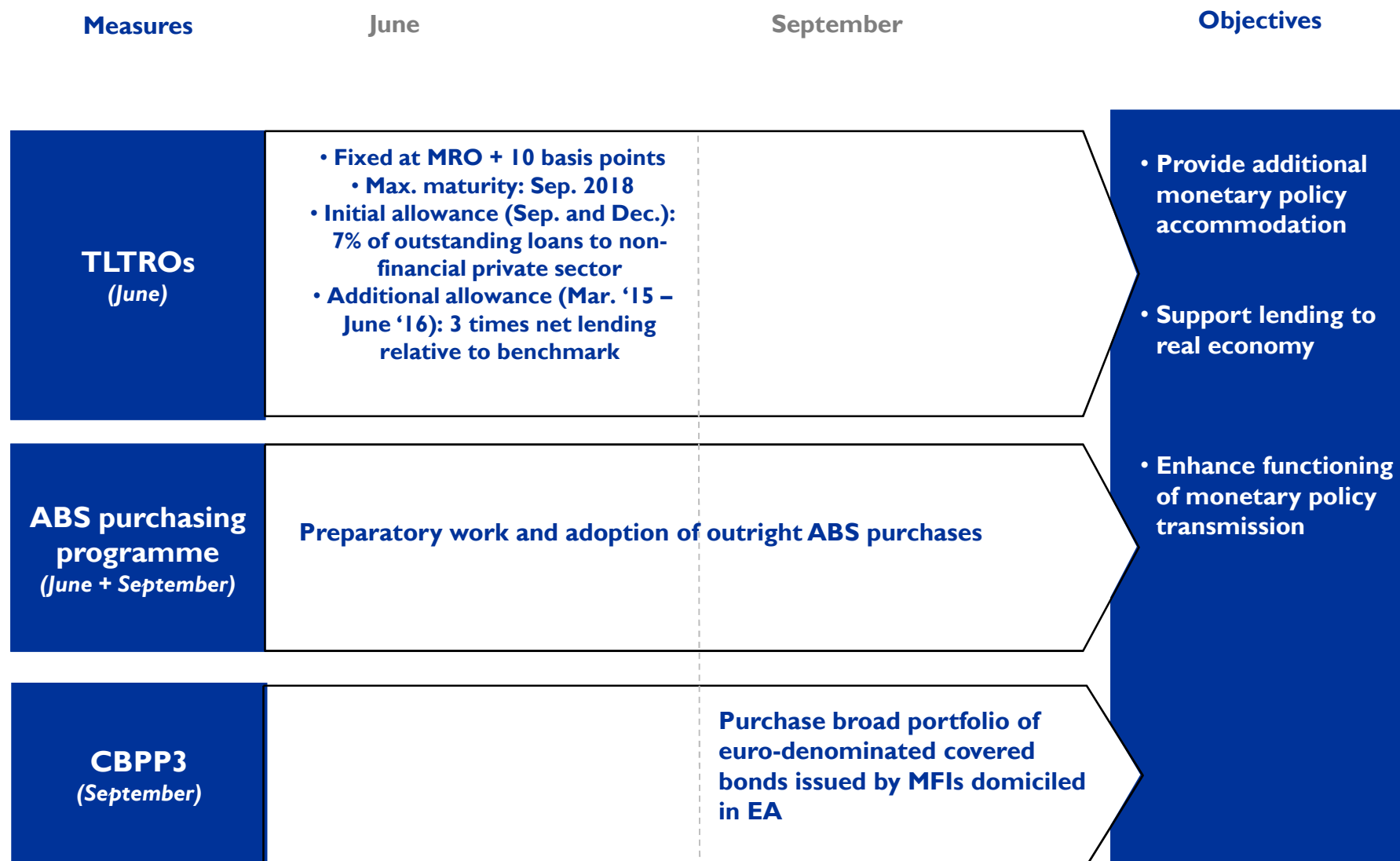
Sources: ECB.
Latest observation: 11/08/2016.

Developments in HICP inflation and inflation expectations



Sources: ECB, Eurostat and Consensus Economics Forecast. Note: Last observations for the HICP (quarterly values) refer to May 2016. The latest Consensus Economics Forecast and SPF survey refer to Q2 2016. Longer-term inflation expectations from Consensus Economics Forecasts refer to a horizon of six to ten years, while those from the Survey of Professional Forecasters refer to five years ahead. Consensus inflation expectations are constructed as a weighted average of the five largest euro area countries which together account for more than 80% of euro area GDP.

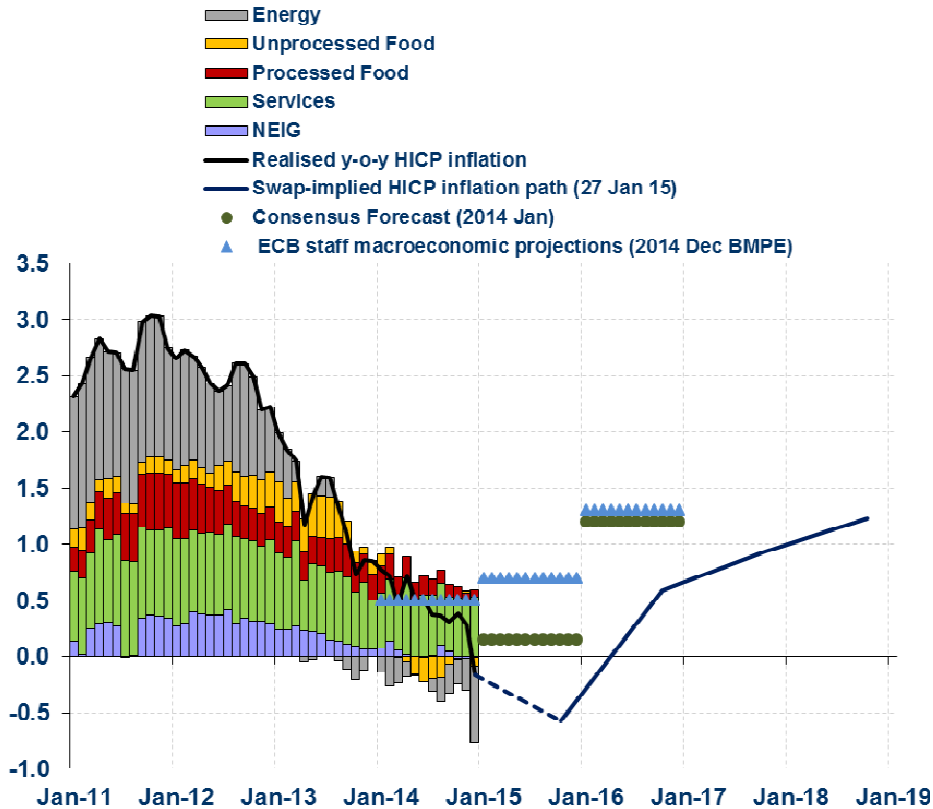
Policy package of 2014



Inflation and macro landscape at the end of 2014...

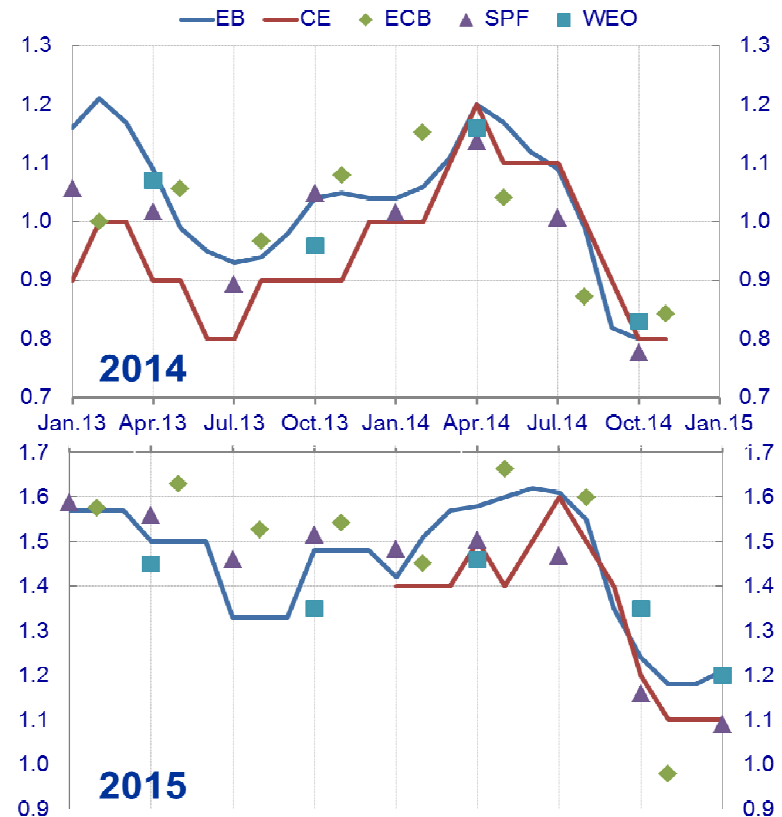
Risks of too prolonged a period of low inflation

Euro area HICP path
(percentages per annum)



Sources: Thomson Reuters, Eurostat, ECB calculations, Consensus Economics. Last observation: 27 January 2014, December 2014 for HICP.

Vintages of euro area real GDP growth forecasts for 2014 and 2015
(annual % growth)



Sources: World Economic Outlook (IMF), Eurozone Barometer (EB), Consensus Economics (CE), Survey of Professional Forecasters (SPF) and ESCB and ECB staff projections (ECB).

Note: X-axis refers to the date when respective forecast were finalised.

Policy package of 2015

Measures

Objectives

Expanded asset purchase programme (APP) (January)

- Monthly purchases: public/private sector securities: €60 billion.
- Euro-denominated investment-grade securities issued by euro area governments and agencies and European institutions in secondary market.
- Securities issued by euro area governments and agencies based on shares in the ECB's capital key
- Intended to be carried out until end-September 2016, or beyond, if necessary, and will in any case be conducted until we see a sustained adjustment in the path of inflation which is consistent with our aim of achieving inflation rates below, but close to, 2% over the medium-term

- Provide additional monetary policy accommodation
- Support lending to real economy
- Enhance functioning of monetary policy transmission

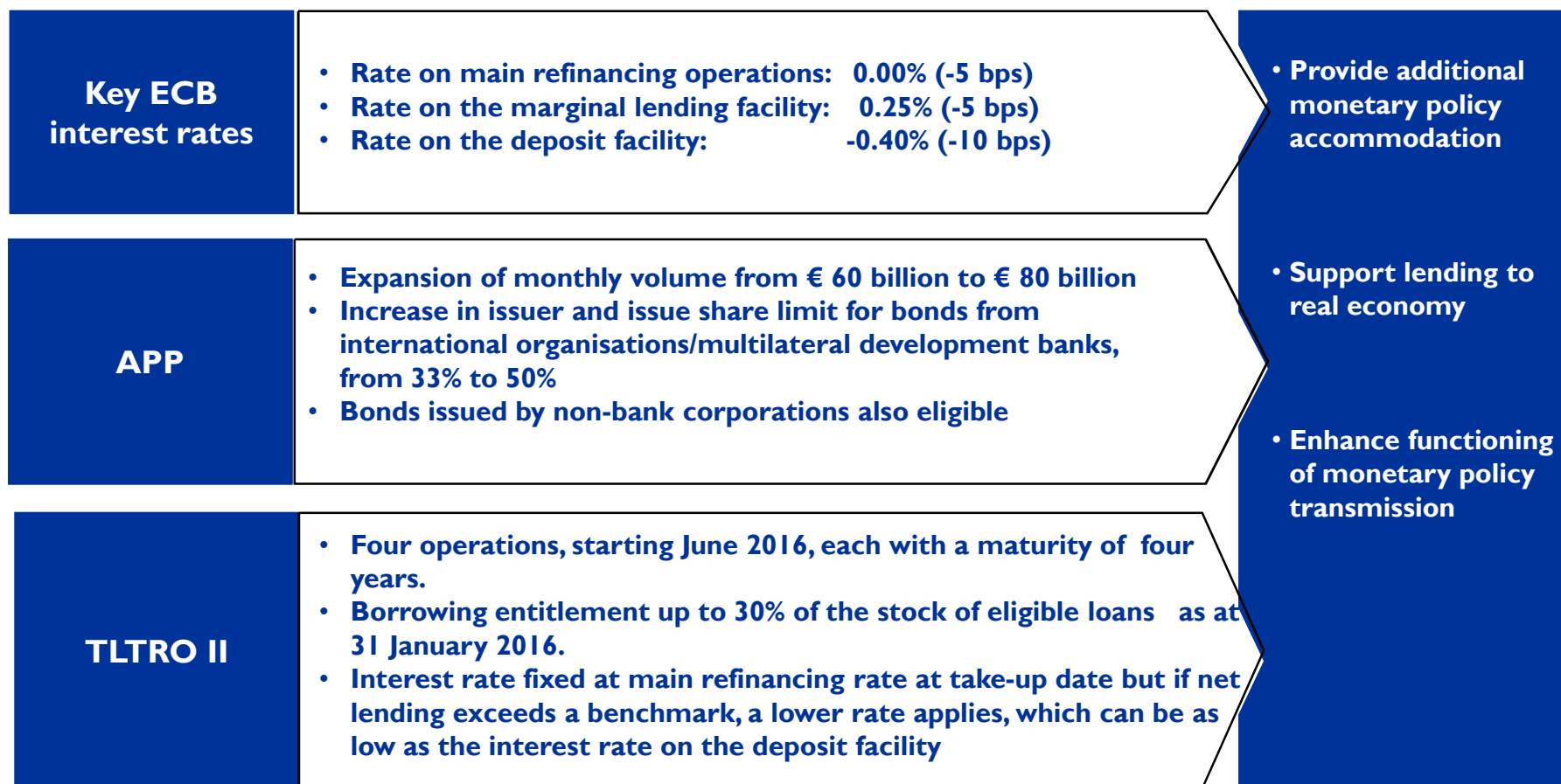
Extension of APP (December)

- Monthly purchases intended until March 2017.
- Reinvestment of principal payments.
- Include euro-denominated marketable debt instruments issued by regional and local governments located in the euro area.

Policy package of March 2016

Measures

Objectives



Expanded Asset Purchase Programme: operational modalities

2y-30y maturity spectrum

- Ensure large purchasable universe

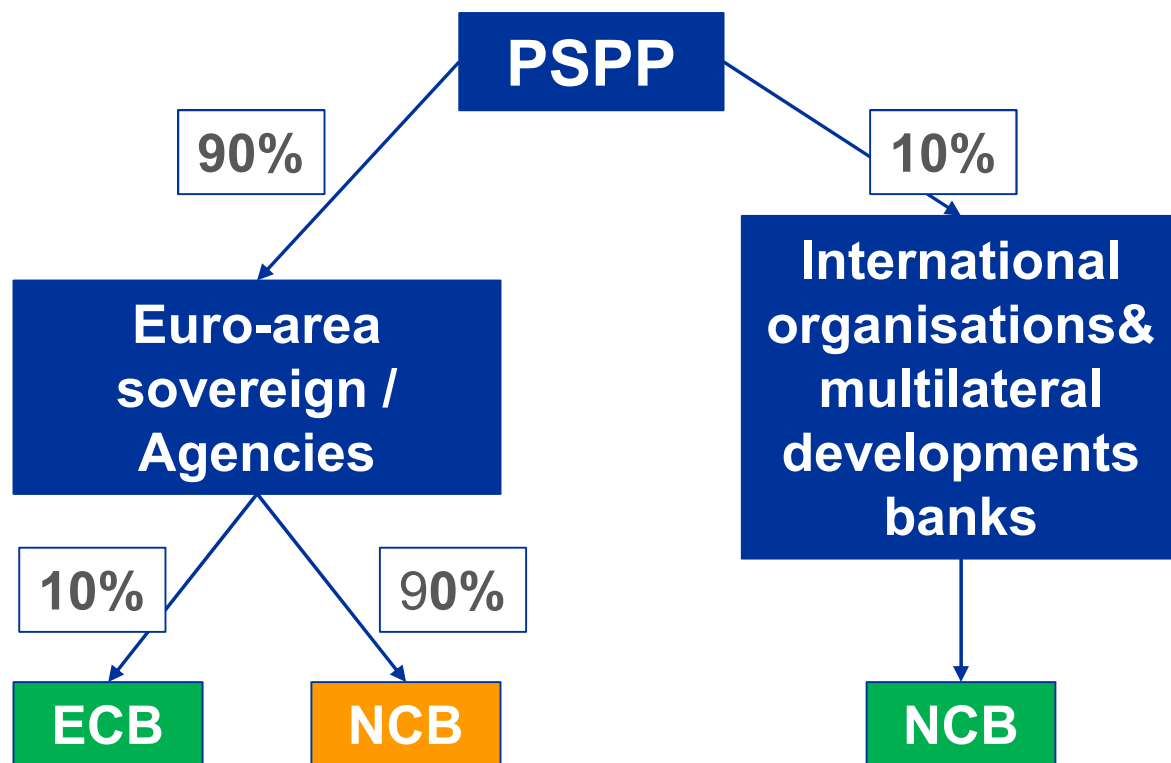
Purchase split

- 90% government(-guaranteed) and 10% supranational
- Broadly reflects relative market shares
- Cross-country allocation according to capital key

Safeguards

- Issue/issuer share limits
- Blackout period
- Risk-sharing modalities

PSPP implementation by ECB and NCBs (as of April 2016)



Loss-sharing



Non loss-sharing



Proportion of purchases