

Monetary policy of the Eurosystem

AMSE Policy Lecture, University of Marseille
October 16, 2018



0. Introduction

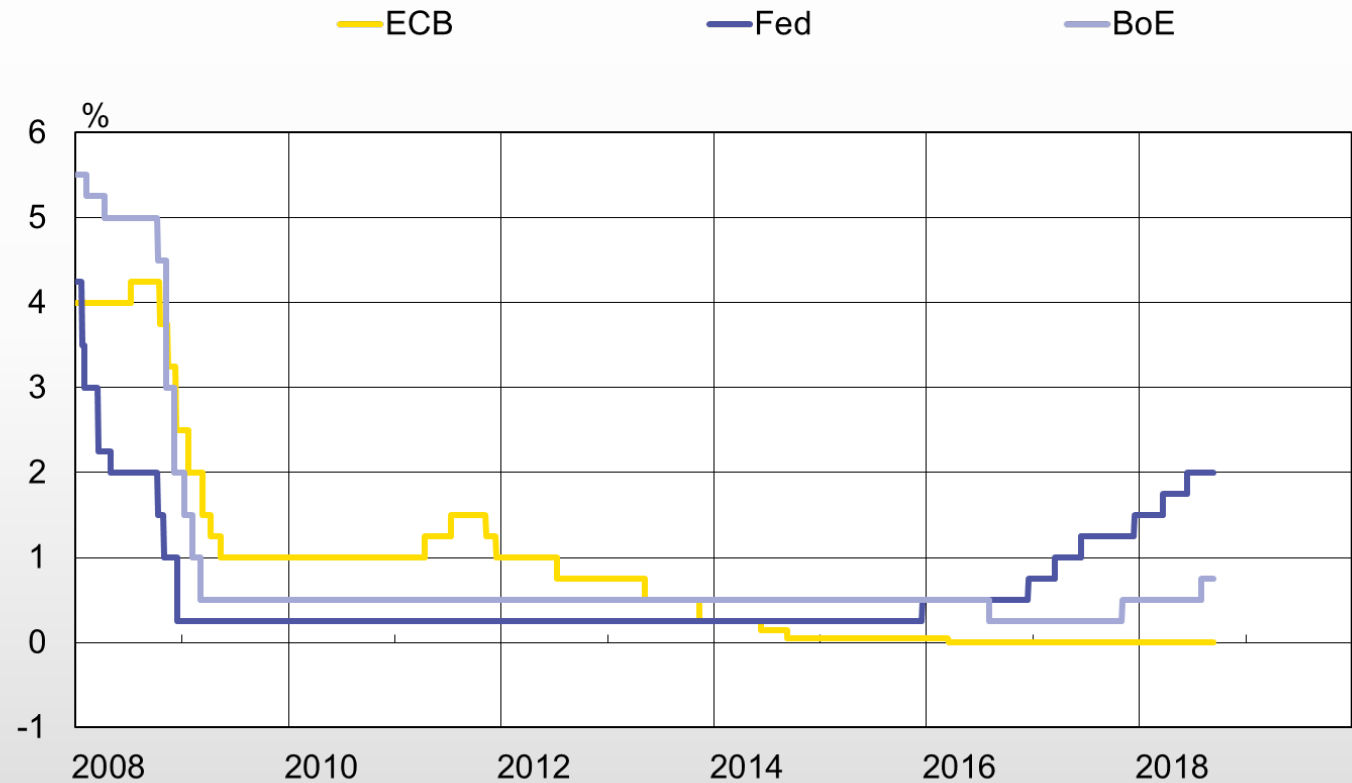
- **Eurosystem** is to the monetary authority of the eurozone.
 - **Eurozone** consists of countries that have adopted as their sole official currency.
 - Eurosystem consists of the **European Central Bank** and the **19 national central banks** of the Eurozone member countries.
- The basic tasks carried out by the Eurosystem are:
 - to define and implement the common monetary policy of the eurozone
 - to conduct foreign exchange operations
 - to hold and manage the official foreign reserves of the euro zone Member States, and
 - to promote the smooth operation of payment systems.
- Eurosystem is now about twenty years old as the ECB began to conduct common monetary policy in January 1st, 1999.



- The **Single Supervisory Mechanism (SSM)** grants the European Central Bank (ECB) a supervisory role to monitor the financial stability of banks.
 - ECB started the supervision activities in November 2014.
 - Eurozone states are required to participate, while participation is voluntary for non-eurozone EU member states.
- There is also the **Single Resolution Mechanism (SRM)** that started in 2016. SRM resides in EU Commission.
- SSM and SRM are two pillars of the **Banking Union**.

I will not discuss financial stability topics.

Central bank rates very low in all advanced economies



Sources: ECB, Fed, BoE.

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I. Overview of monetary policy:

Monetary policy has been exceptionally accommodative for a prolonged period

Eurosysteem non-standard monetary policy

- ***The Fixed Rate Full Allotment Liquidity Provision (2008-)***
- ***Three-Year LTROs (2011-2012)***
- ***Outright Monetary Transactions (2012)***
- ***Forward Guidance (2013-)***
- ***Targeted Long Term Refinancing Operations (2014-15 and 2016-17)***
- ***The expanded asset purchase programme (APP):***
 - ***Covered Bond Purchase Programme (2014-)***
 - ***Asset Backed Securities Purchase Programme (2014-)***
 - ***Public Sector Purchase Programme (2015-)***
 - ***Corporate Sector Purchase Programme (2016-)***

I.1 Liquidity operations

- **The Fixed Rate Full Allotment Liquidity Provision (2008-)**

- All counterparties pay the MRO rate of interest in the main refinancing operations and have their bids fully satisfied.
- The introduction of the fixed-rate full allotment liquidity provision limited significantly bank funding stress as global financial crisis resulted in freezing of the interbank market.

- ***Three-Year LTROs (2011-2012)***

- To support bank lending and money market activity, the ECB lengthened its liquidity-providing long-term refinancing operations up to 3 years in two operations (December 2011 and February 2012).

- **Research:** (I give only selected references from which one can find further ones. Details of references are in final slides.)

- the macroeconomic effects of ECB liquidity operations (2008-11)
E.g. see Gambacorta, L. B. Hofmann & G. Peersman JMCB (2014)

I.2 Outright Monetary Transactions (OMTs)

- President Draghi in July 2012: “Whatever it takes” to preserve the euro within the limits of mandate
 - Eurosystem’s outright transactions in secondary sovereign bond markets aim at safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy.
 - A necessary condition for OMTs is strict and effective conditionality attached to an appropriate European Financial Stability Facility/European Stability Mechanism (EFSF/ESM) programme.
 - The ECB has not yet made any purchases under the OMT.
- **Research:** Altavilla, C., D. Giannone & M. Lenza, IJCB (2016).

I.3 Expanded asset purchase programme (APP) started in January 2015

- Expanded asset purchase programme
 - Bonds issued by euro area governments, government agencies and European institutions as a new target for purchases.
 - Combined monthly asset purchases under the four programmes of EUR 60 billion from March 2015
 - (2014-) third covered bond purchase programme (CBPP3)
 - (2014-) asset-backed securities purchase programme (ABSPP)
 - (2015-) public sector purchase programme (PSPP)
 - (2016-) corporate sector purchase programme (CSPP)
- APP expanded to 80 billion in April 2016, corporate sector bonds added to list.
- Gradual tapering (smaller amounts purchased) in 2017-8.
- Forward guidance
 - About asset purchases, current statement: intended to be carried out until end of 2018.
 - About rates, current (Sept 2018) statement: ECB interest rates to remain at their present levels at least through the summer of 2019 and in any case for as long as necessary to ensure the continued sustained convergence of inflation to levels that are below, but close to, 2% over the medium term.

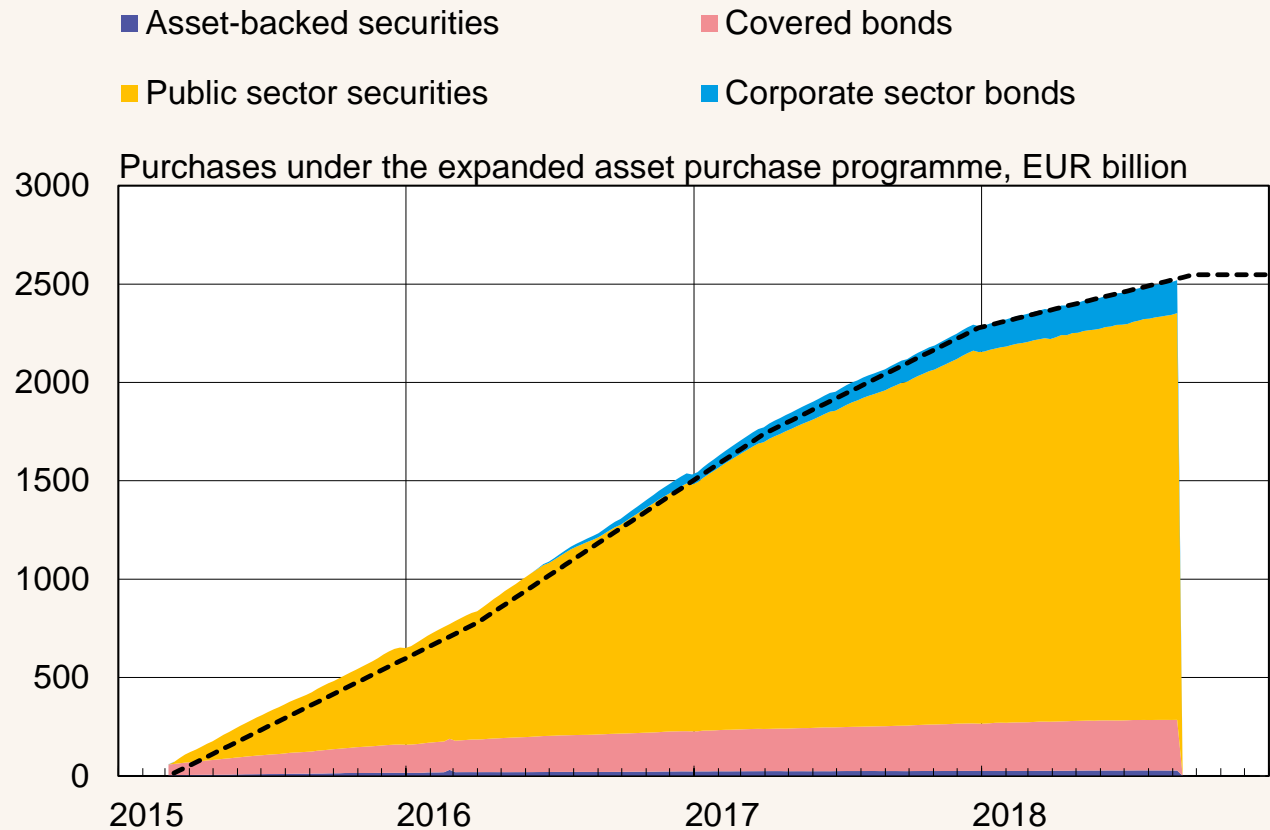
I.4 Further easing in March 2016 with a comprehensive monetary policy package

- ***Monetary policy rates were lowered***
 - Key interest rate to **0.0%**
 - Deposit facility rate to **-0.40%**
- ***Monthly purchase volumes in the expanded asset purchase programme (APP) were expanded to €80 bn as of 1 April 2016***
 - Investment-grade bonds issued by non-banking-sector corporations included
- ***A second series of targeted longer-term refinancing operations (TLTRO II) launched in June 2016.***
 - Enhances the transmission of monetary policy measures to the economy by encouraging banks to increase lending to the real economy.
 - Each operation will have a 4-year maturity, and the interest rate can be as low as the rate on the deposit facility.

- The expanded asset purchase programme (APP) includes all purchase programmes to address the risks of a too prolonged period of low inflation.
- It currently consists of
 - third covered bond purchase programme (CBPP3)
 - asset-backed securities purchase programme (ABSPP)
 - public sector purchase programme (PSPP)
 - corporate sector purchase programme (CSPP)
- Gradual tapering started in 2017 and APP is scheduled to stop in the end of 2018. (See figure)



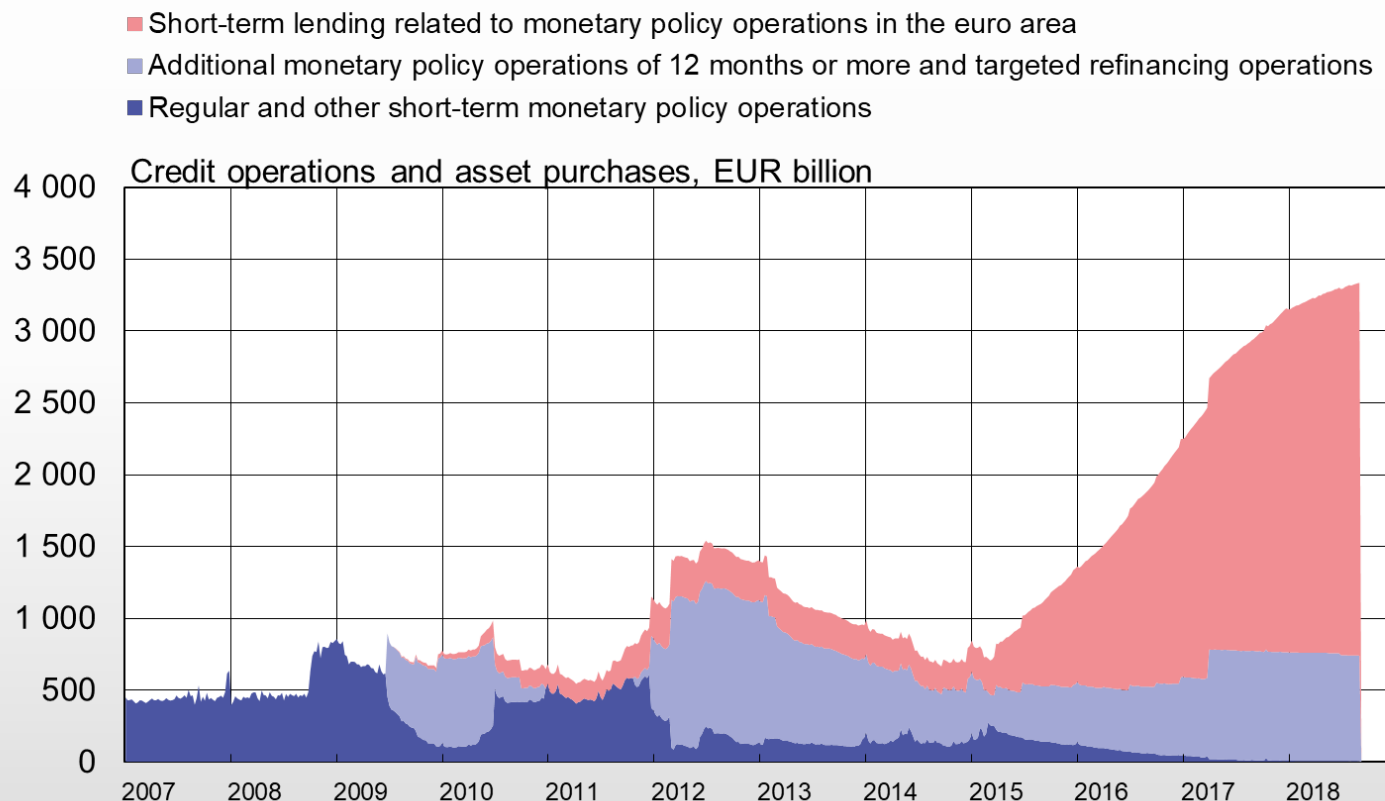
Monthly purchases reduced from EUR 30 to 15 billion in September 2018.
Purchases will stop at the end of 2018.



Sources: ECB and Macrobond.

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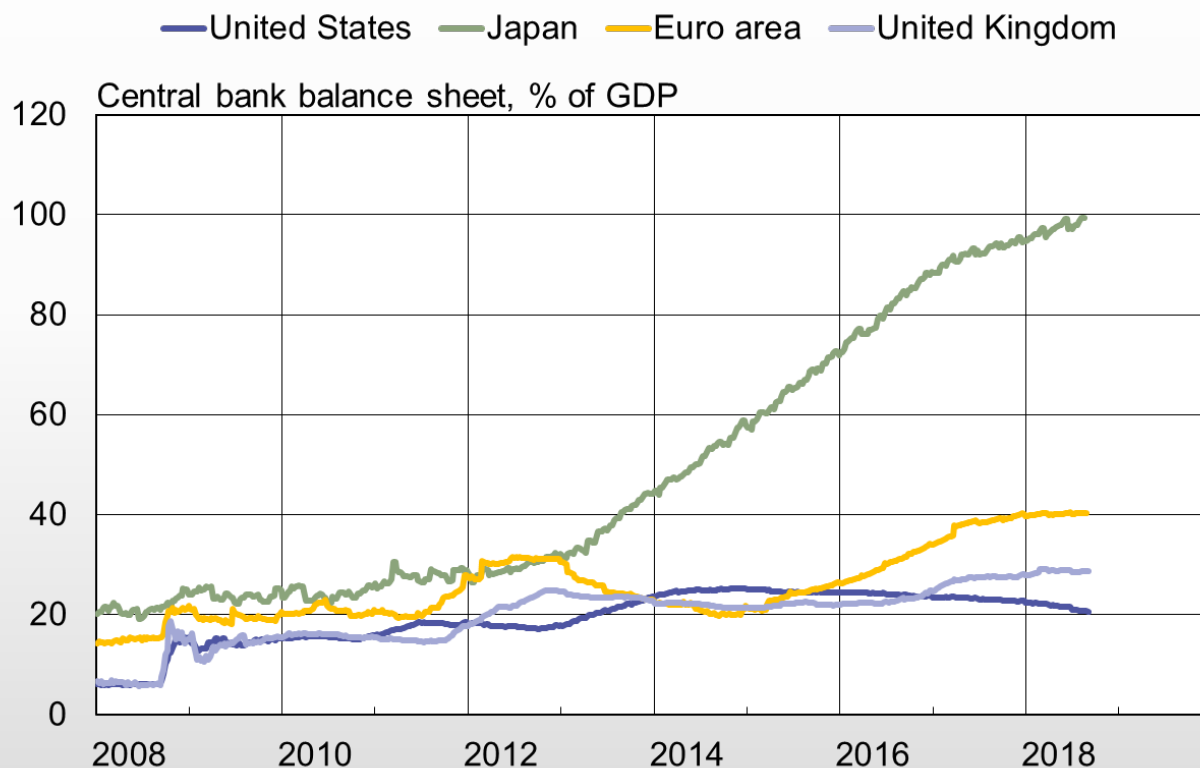
The expanded asset purchase programme initiated in January 2015 increases eurosystem balance sheet



Sources: ECB and Macrobond.

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The size of eurosystem balance sheet policies comparable to the Fed and the BoE



Source: National sources.

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Effectiveness of APP

- Two aspects, impact on
 - (i) financial system (banks, rates etc.),
 - (ii) real economy (GDP, inflation, other countries etc.).
- A lot of debate: P. Praet (ECB), October 2016: Our measures are estimated to contribute to
 - (i) increasing real euro area GDP growth by more than one and a half percentage points cumulatively between 2015 and 2018.
 - (ii) impact on the annual inflation rate, on average, over 2016 and 2018 of about half a percentage point.

Research (about ECB policies)

- Demertzis M. & G.B. Wolff (2016)
- Wiedelak T. & A.G. Pascual (2016)
- Gambetti L. & A. Musso (2017)

I.5 ECB's forward guidance I

- Since July 2013 the ECB Governing Council has been providing forward guidance on the future path of the ECB's policy rates (conditional on the outlook for price stability)
 - “The Governing Council expects the key ECB interest rates to remain at present or lower levels for an extended period of time.”
 - “This expectation is based on the overall subdued outlook for inflation extending into the medium-term, given the broad-based weakness of the economy and subdued monetary dynamics.”
- Forward guidance attached to the APP
 - January 2015: “Purchases are intended to be carried out until end-September 2016 and will in any case be conducted until we see a sustained adjustment in the path of inflation consistent with our inflation aim.”
 - December 2015: “The Governing Council decided to reinvest the principal payments on the securities purchased under the APP as they mature, for as long as necessary.”

ECB's forward guidance II

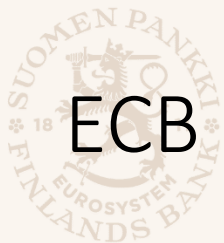
- *Forward guidance in March 2016, comprehensive monetary policy package*
 - *Purchases are intended to run until at least the end of March 2017, or beyond, if necessary, until inflation is on a sustained path towards a level below, but close to, 2%.*
 - *In view of the current outlook for price stability, the Governing Council expects the key ECB interest rates to remain at present or lower levels for an extended period of time, and well past the horizon of the asset purchases.*
- *Current statements (Sept 2018) :*
 - About asset purchases: to be carried out until the end of 2018.
 - About rates: ECB interest rates to remain at their present levels at least through the summer of 2019 and in any case for as long as necessary to ensure the continued sustained convergence of inflation to levels that are below, but close to, 2% over the medium term.

Research: studies show some effectiveness but a lot of controversy about magnitude
“forward guidance puzzle”: Del Negro et al (2015), Haberis et al (2017)

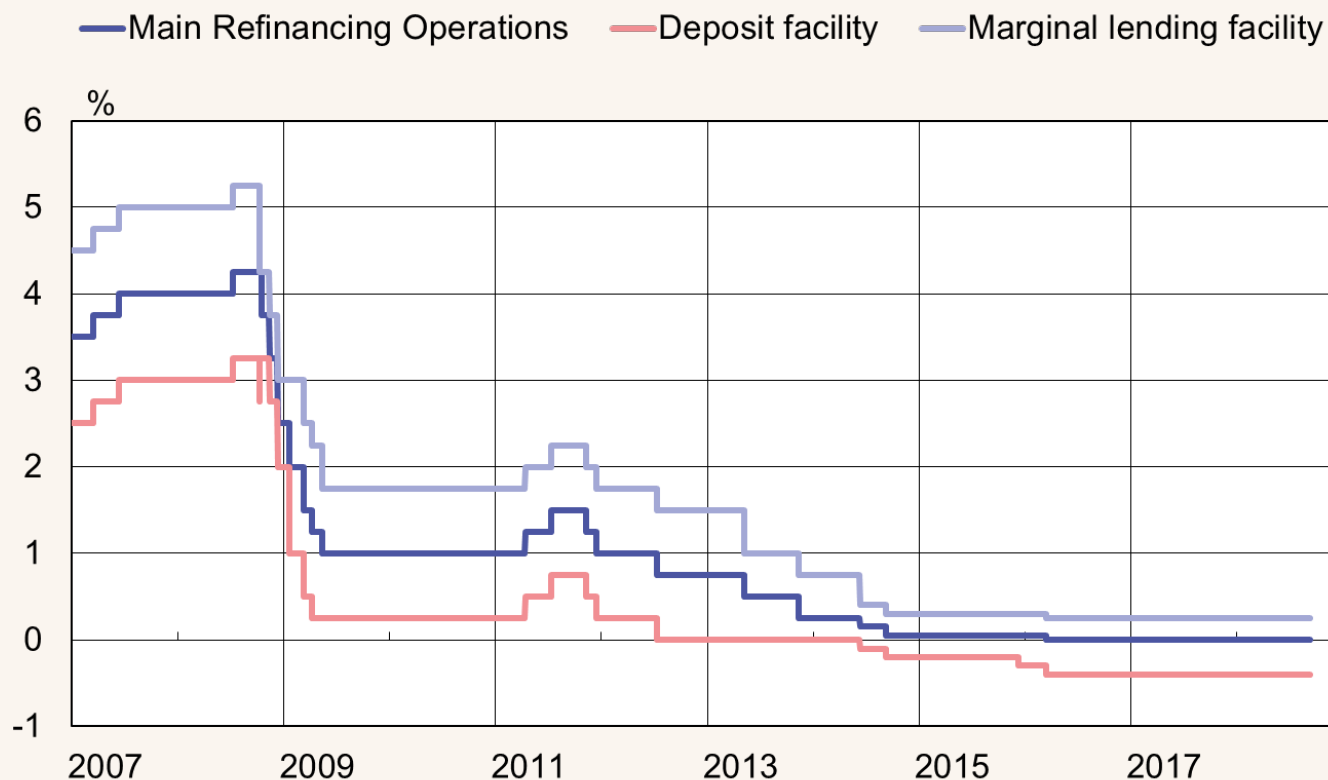
I.6 Negative deposit rates

- The Governing Council of the ECB introduced negative deposit rate in June 2014,
 - with three further reductions in September 2014, December 2015 and March 2016.
 - In March the deposit rate was lowered to -0,4 %.
- The main objectives of this measure are twofold:
 - to further lower money market rates and the longer end of the yield curve via expectations effects
 - to increase the velocity of circulation of excess reserves in the interbank market towards banks that need liquidity to sustain or expand their credit portfolios

Research: Heider et al. (2018)

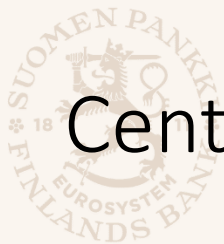


ECB policy rates in negative territory

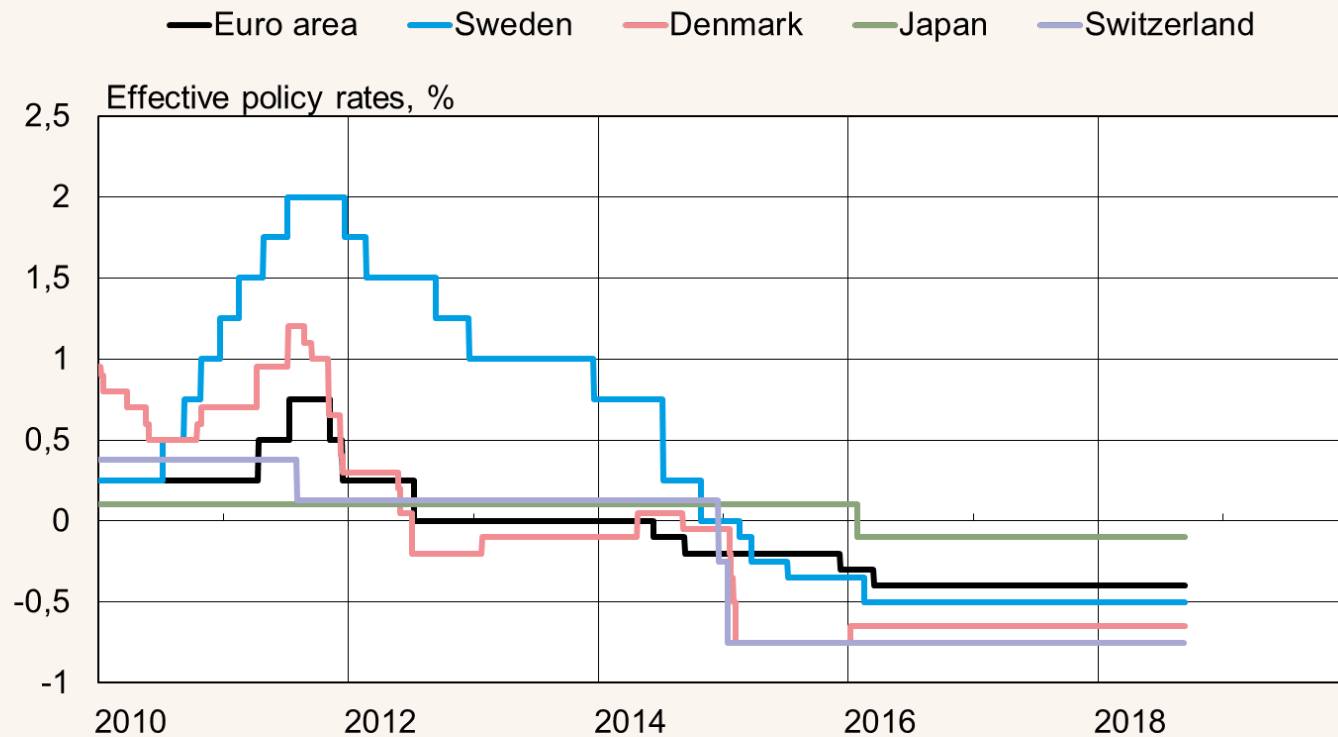


Source: ECB.

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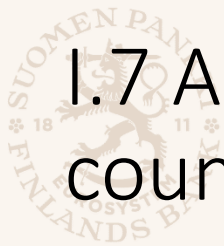
Central banks have lowered their policy rates



Source: Macrobond.

Effective policy rates: Euro area: deposit rate; United States: fed funds rate; United Kingdom: O/N interbank rate; Japan: deposit rate; Sweden: repo rate; Denmark: certificates of deposit rate; Hungary: deposit rate; Switzerland: 3-month libor target.

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I.7 APPs in monetary policy in other countries, summary

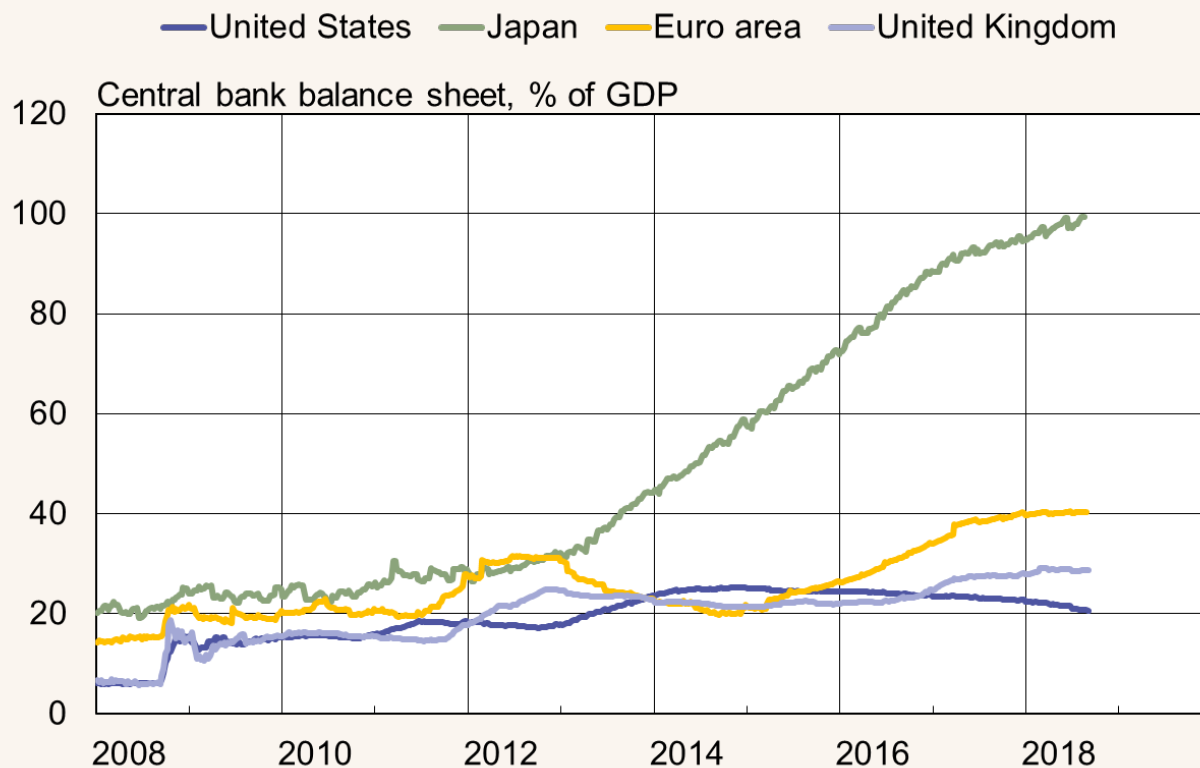
- Before 2007:
 - (This case is not often counted.) In 1930s US Fed belatedly introduced similar policies with excess reserves above 6% in 1940.
 - Bank of Japan introduced quantitative easing in 2001 and had rates close to zero since 1999.
- After 2007:
 - US QE1 – QE3:
 - 2008 – 2010 summer amounts were 2.1 trillion USD and kept at approx. this level;
 - Nov 2010 – June 2011, purchased amount 600 billion USD.
 - Sept 2012: open-ended program, first 40 billion USD per month, then 85 billion since December 2012. Tapering announced (in Sept 2013) but held back to January 2014. Purchases were halted in October 2014 with accumulated 4.5 trillion USD.



- UK: in March 2009 BoE purchased gilts from financial institutions and high-quality company debt. Additional decisions in November 2009, October 2011, February 2012 and July 2012 total £375 billion.
 - August 2016 additional £70 billion bought to address Brexit concerns.
- Also Switzerland and Sweden introduced APPs.
- Since 2010 Japan has introduced several rounds of APP's.
 - The balance sheet of BoJ has become very large (see figure).



The size of eurosystem balance sheet policies comparable to the Fed and the BoE



Source: National sources.

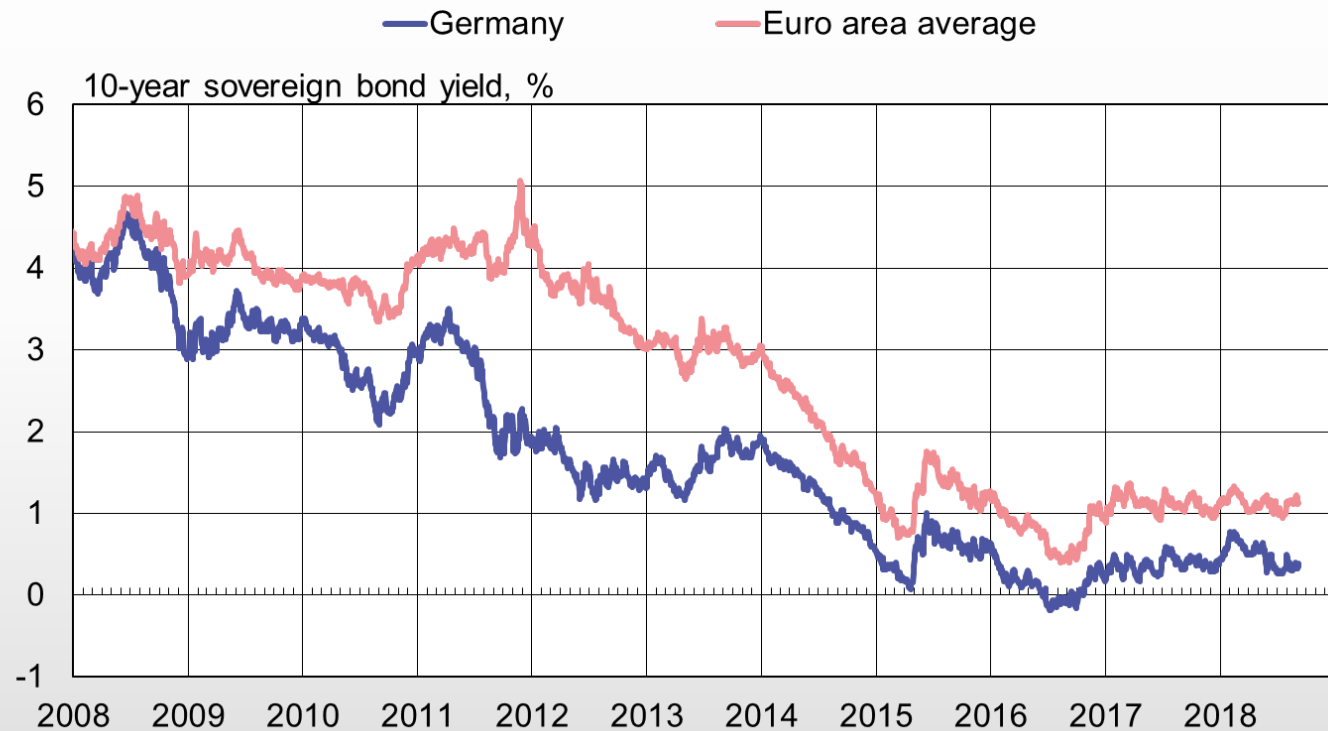
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II. Monetary policy transmission in the euro area

Monetary policy transmission in the euro area I

- Easing cycle of monetary policy from June 2014 to March 2016 with tapering starting in 2017.
- To **depress long-term interest rates, ease financial conditions for non-financial corporations and households and boost asset prices** in the euro area.
- More accommodative policy than in other economic regions **weakens the euro exchange rate** against other currencies.
- Overall, the accommodative monetary policy **boosts demand and pushes up inflation in the euro area**.
- The ECB's monetary measures have been geared at **easing overall financial conditions** while at the same time **restoring specific market segments and the bank lending channel**.

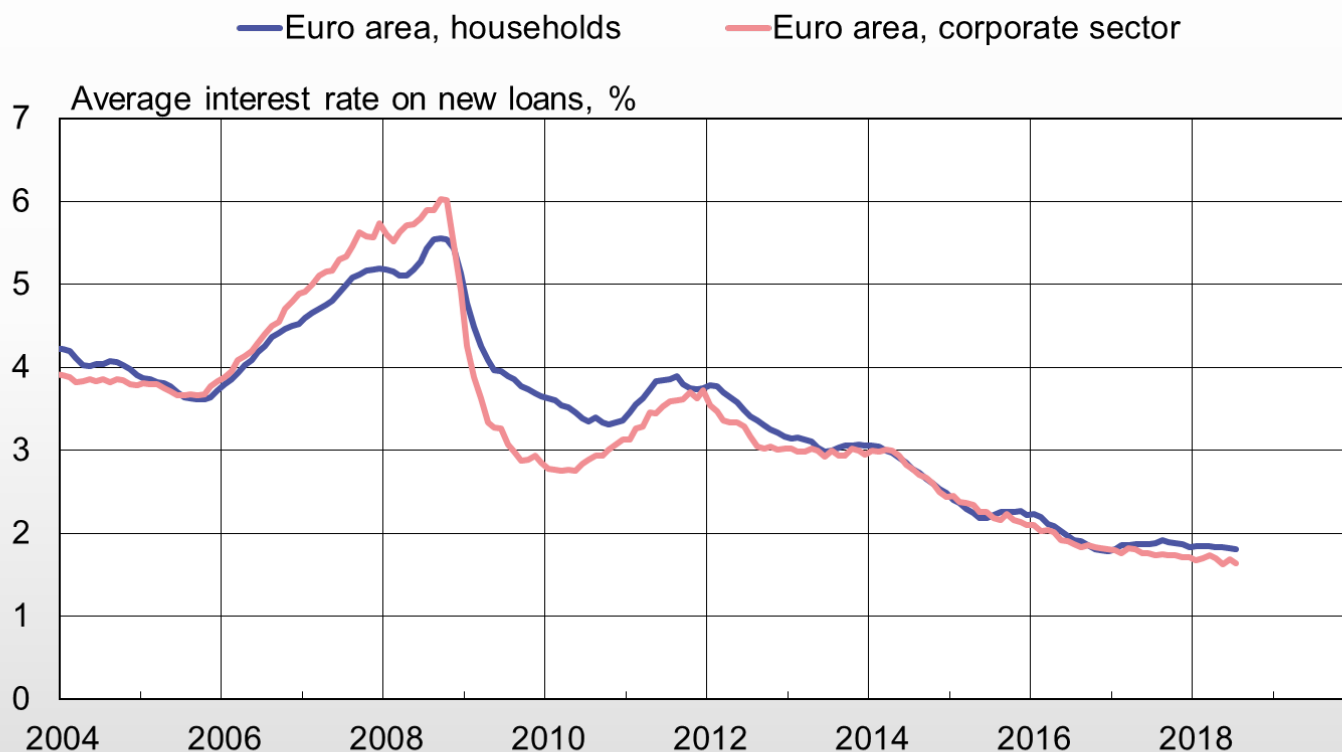
Euro area sovereign bond yields at historically low levels



Source: Macrobond.

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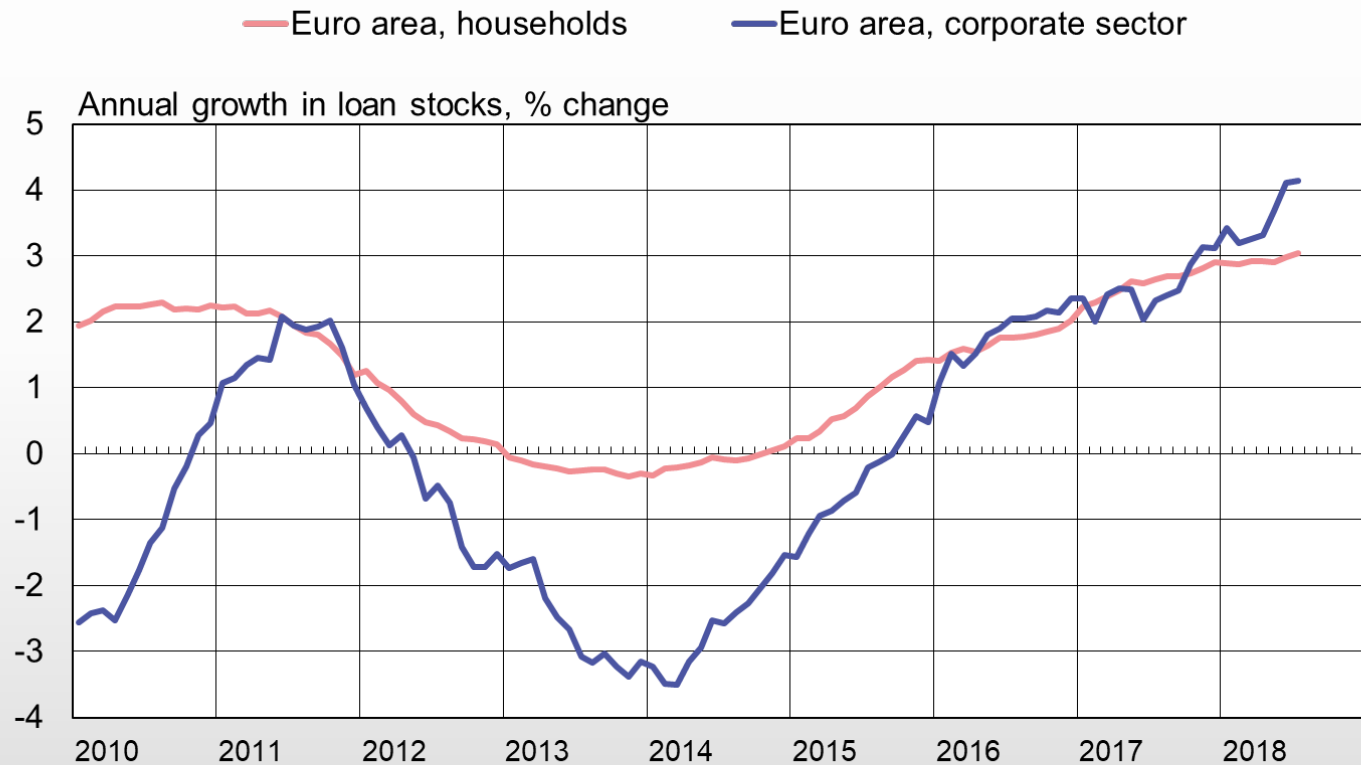
Accommodative policy reflected in Euro area interest rates



Source: ECB.

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...as well as in credit volumes

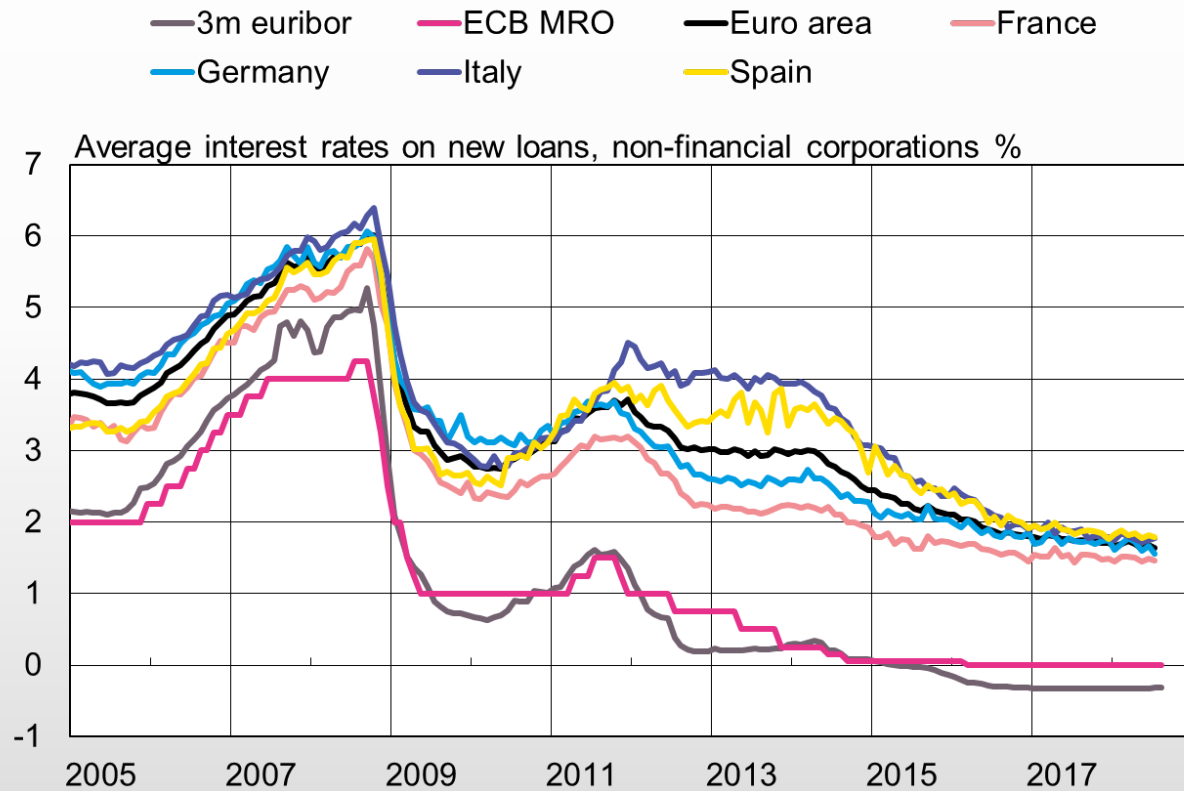


Loan stocks adjusted for balance sheet transfers and securitisation.

Source: ECB.

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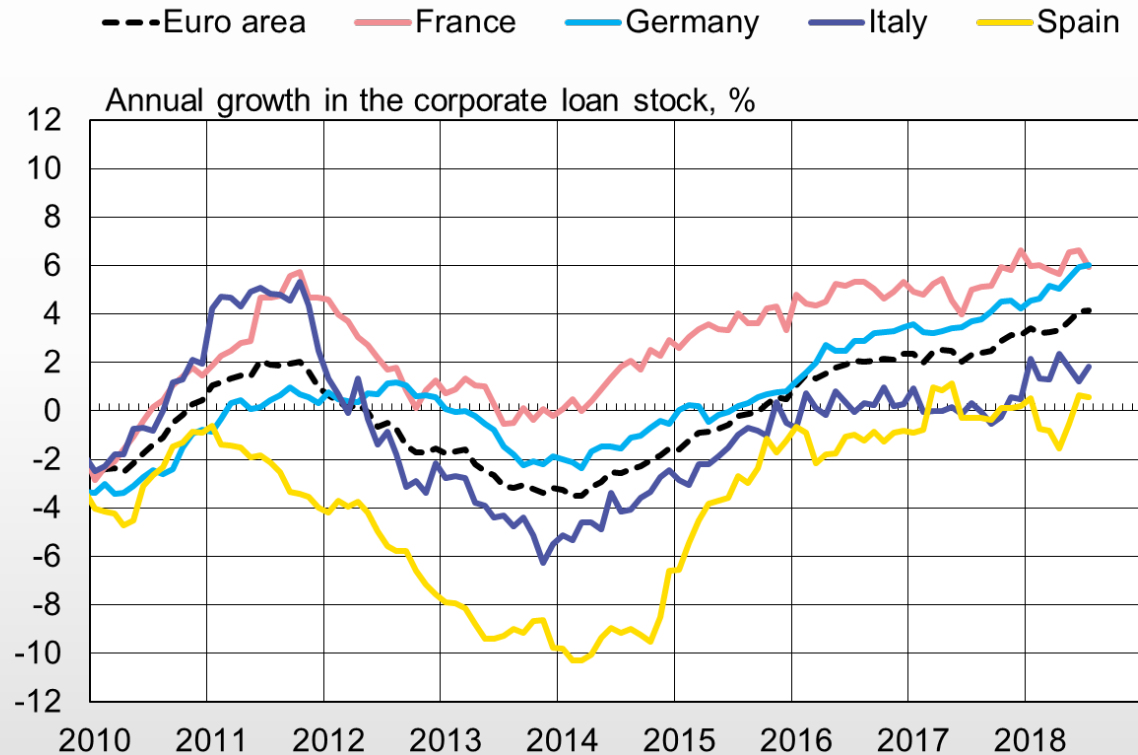
Interest rates on non-financial corporations bank loans have decreased..



Source: ECB.

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...and loan stocks are growing



Sources: ECB and Macrobond.

Loan stocks adjusted for balance sheet transfers and securitisation.

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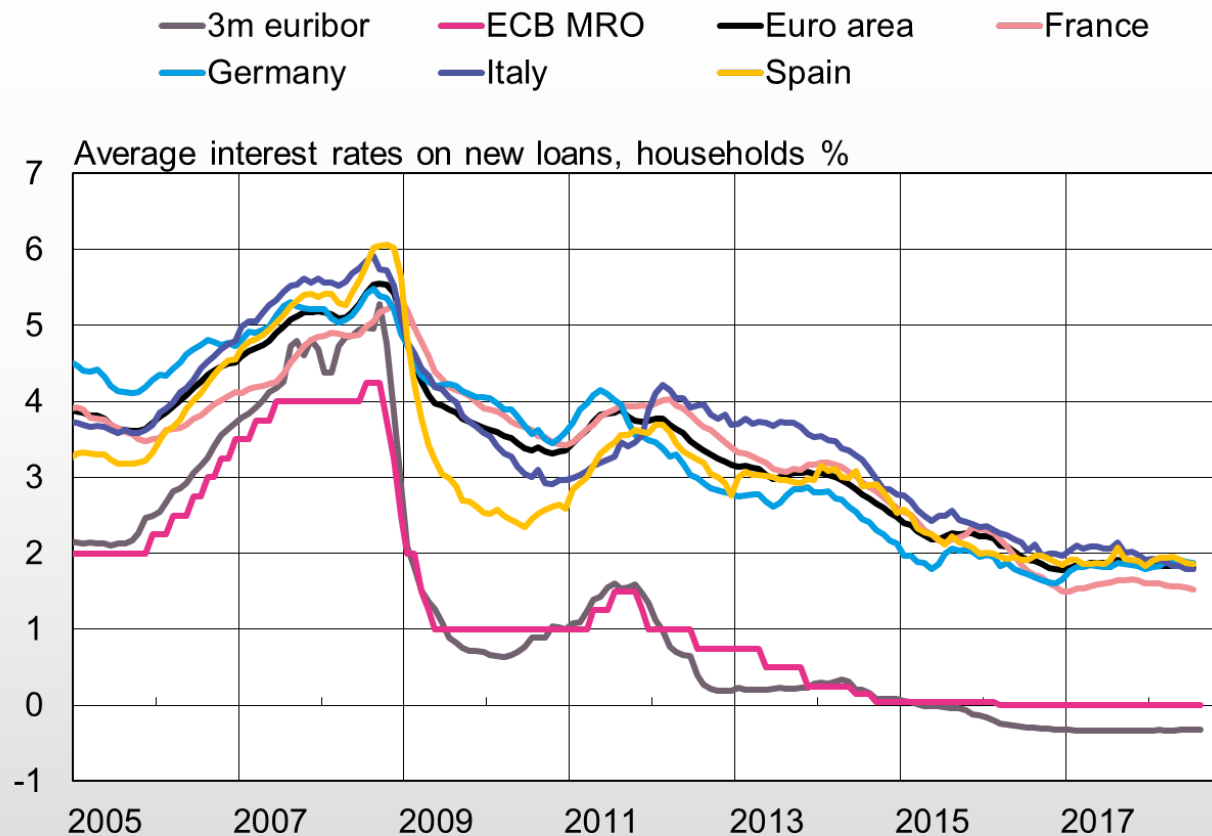
Corporate bond yields have declined



Source: Macrobond.

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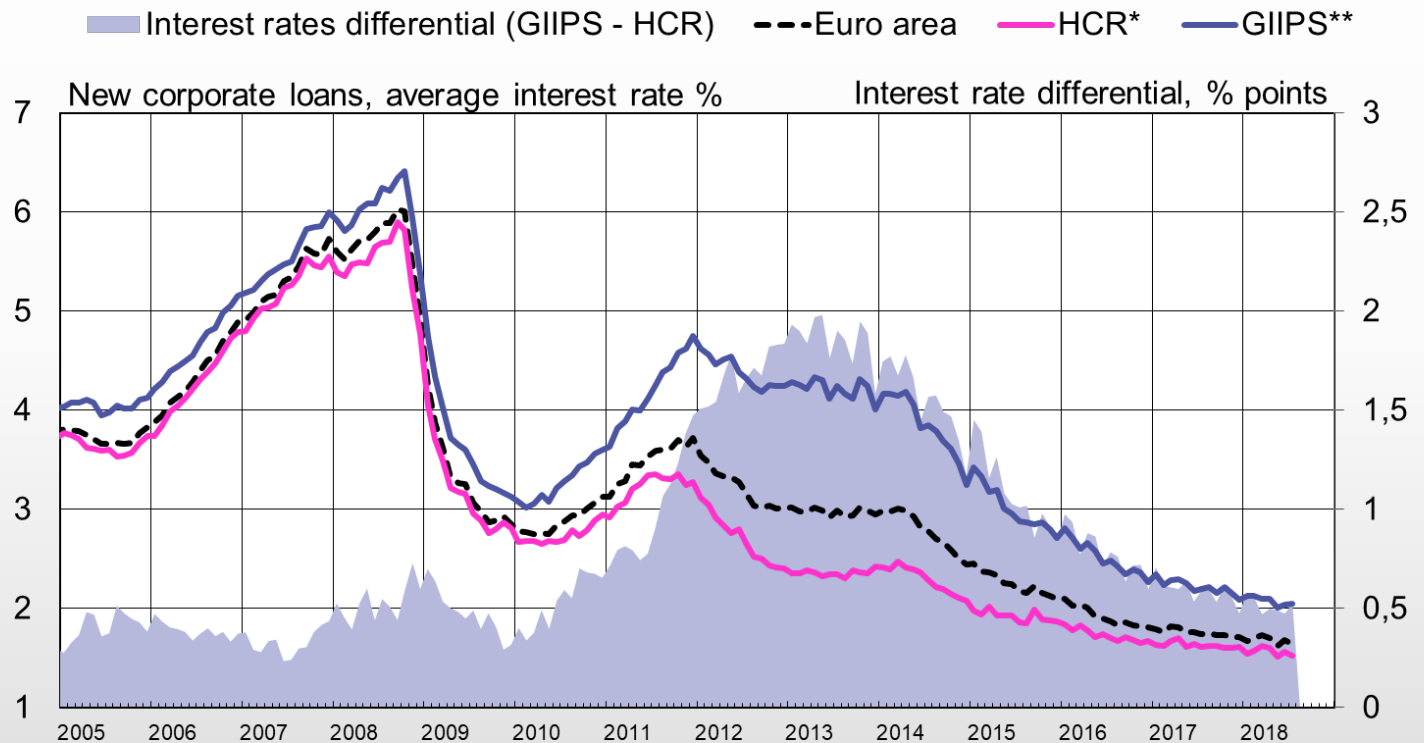
Interest rates on household bank loans have declined as well



Source: ECB.

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Interest rates continue to converge



*HCR: (countries with high credit ratings) Austria, Belgium, the Netherlands, Germany, Finland.

**GIIPS: Greece, Ireland, Italy, Portugal, Spain.

Source: ECB.

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The aim of the euro area's exceptionally accommodative monetary policy is to keep inflation expectations anchored

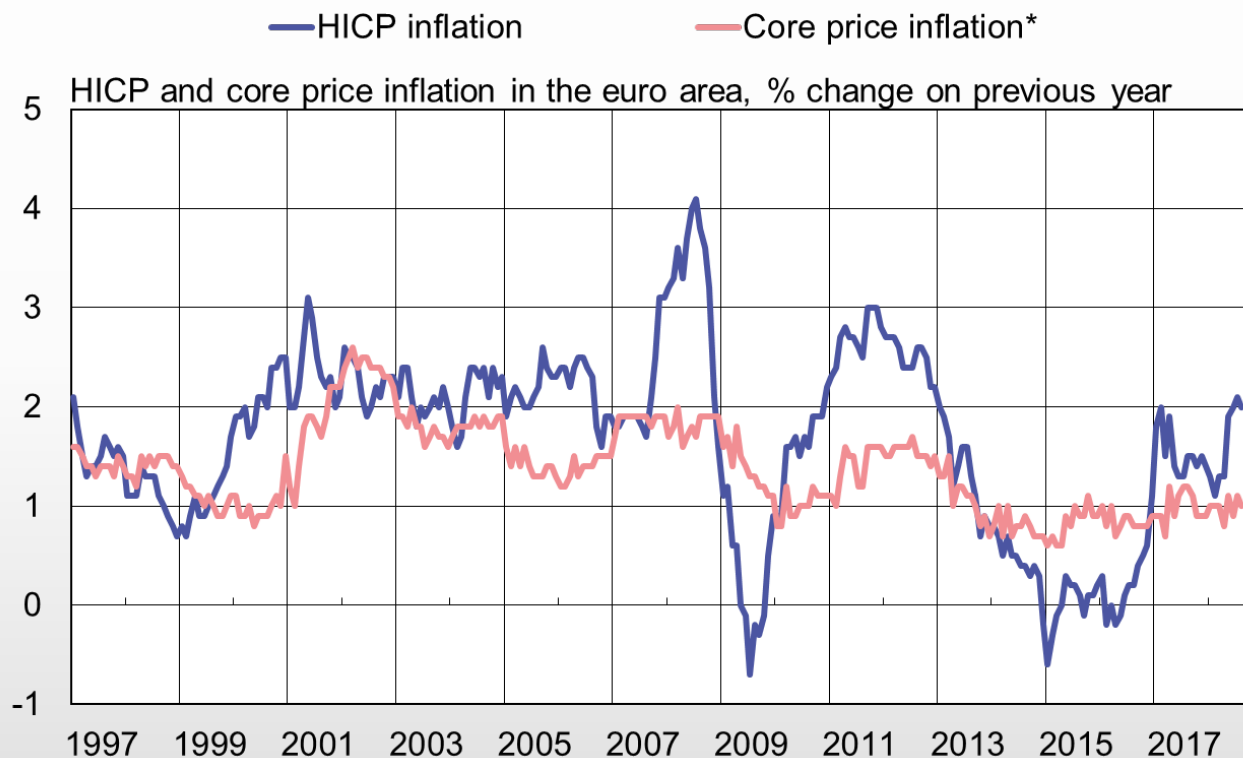


Sources: Bloomberg, ECB, Philadelphia Fed and Macrobond.

Market expectations are based on 5-year and 10-year inflation-linked swap rates. The SPF survey horizon extends five years ahead.

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Consumer price inflation still subdued



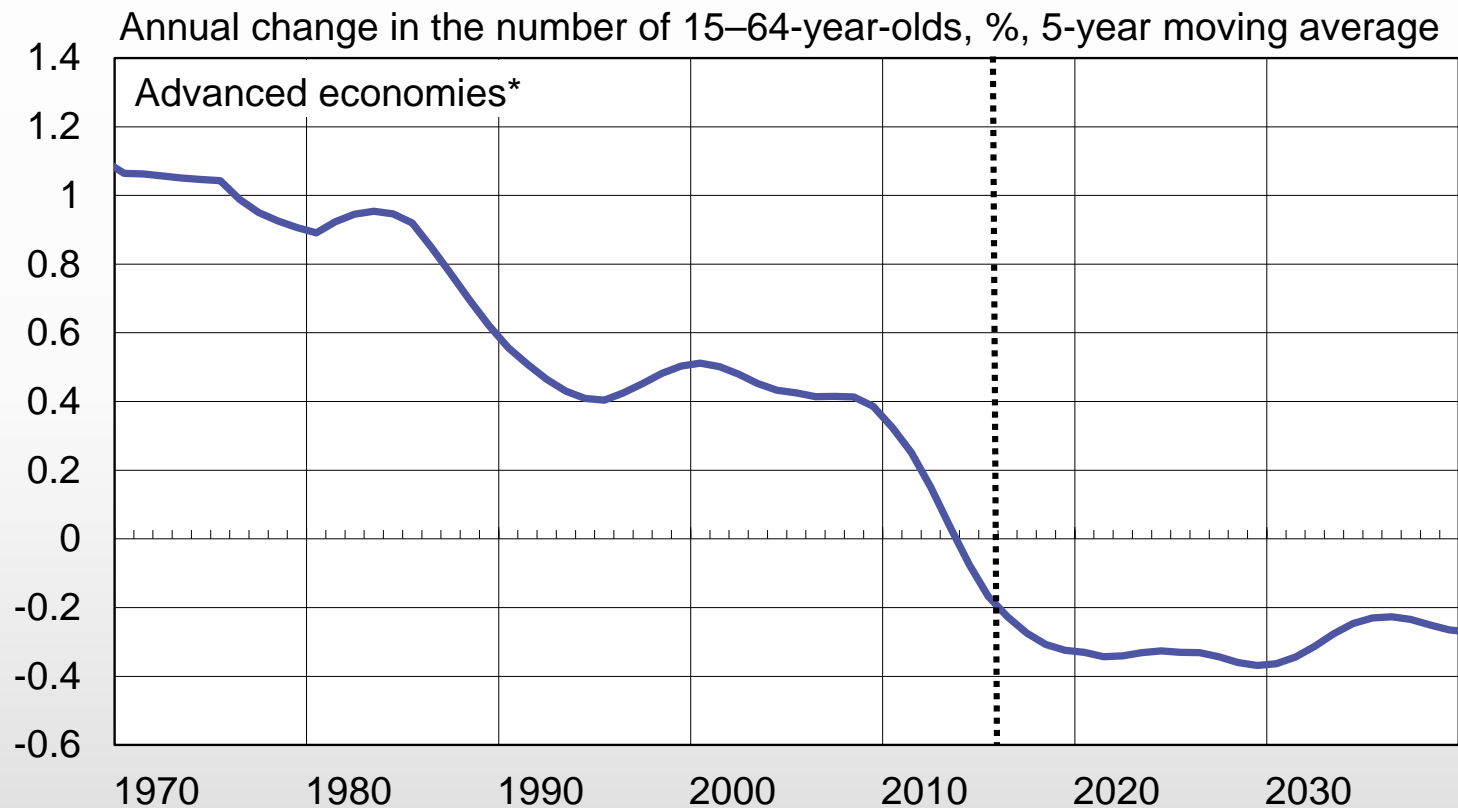
* HICP excl. energy, food, alcohol and tobacco.

Source: Eurostat.

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III. A global concern: low real interest rates and monetary policy

Growth in working-age population has slowed in advanced economies

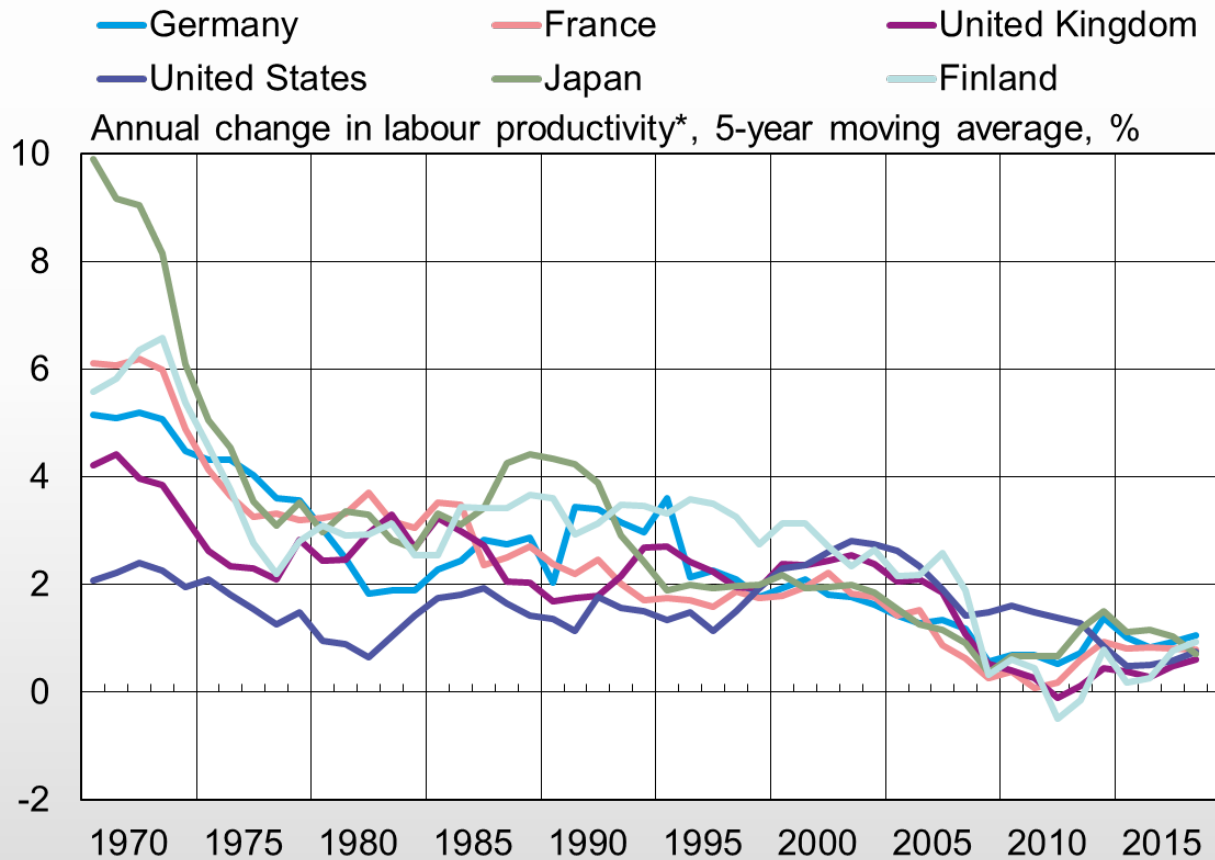


*) Europe, North America, Australia, New Zealand and Japan.

Source: UN.

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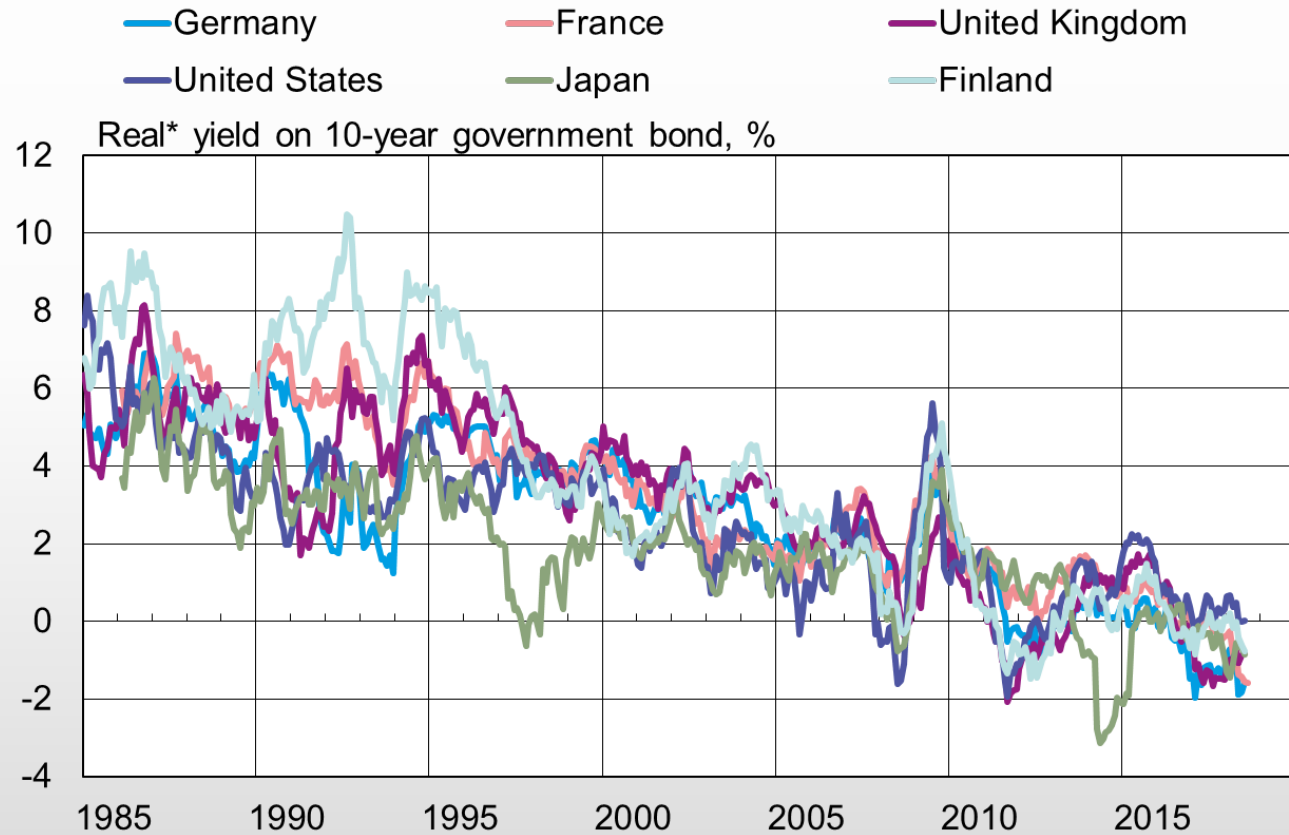
Growth in labour productivity has slowed in advanced economies



*) Output per hour worked.
Source: Conference Board.

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Long-term real interest rates have declined worldwide



*) Difference between nominal interest rate and actual 12-month inflation rate.
Sources: Macrobond and OECD.

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Natural rate of interest has decreased

- Natural rate of interest = the real interest rate that prevails when the output of the economy is at its potential level and price developments are stable
- The natural rate of interest has decreased in advanced economies as the expected growth of potential output has declined
 - Space for normal monetary policy has diminished
- If monetary policy is to support the economy, the policy rate must be below the natural rate of interest and, if monetary tightening is desired, the policy rate must be above the natural rate of interest.

Research: Houston, Laubach & Williams, FRBSF Wp. 2016-11

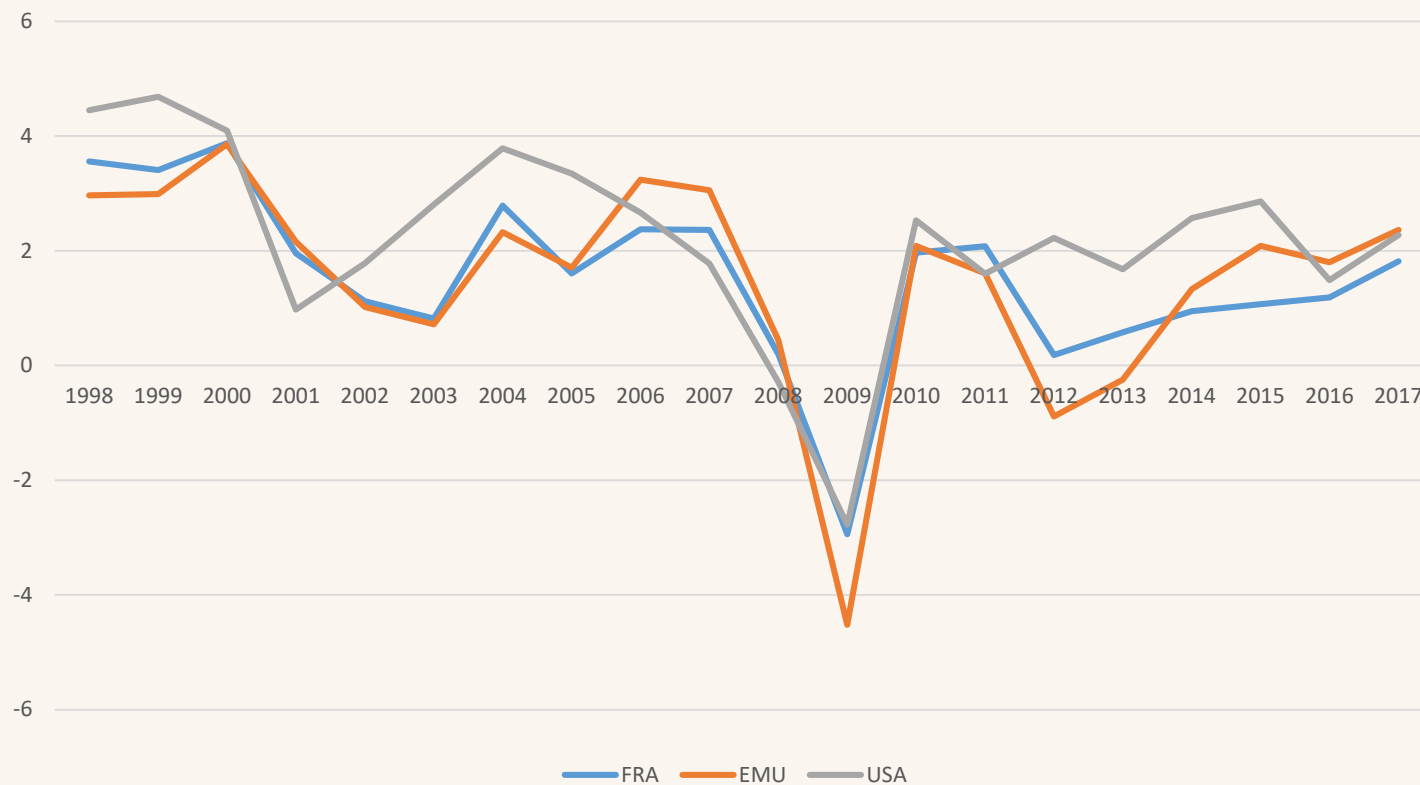


The growth challenge remains

- GDP growth after the 2008-9 Great Recession has been slower than before.
- Is the western world going to get back to the old trend? (Figure)



GDP growth rates



Thank you!

Supplement: Research on FED and Forward Guidance

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- Chen, H., V. Cúrdia & A. Ferrero (2012), The Macroeconomic Effects of Large-Scale Asset Purchase Programs
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