Monetary policy before, during and after the crisis: Some key elements in real time

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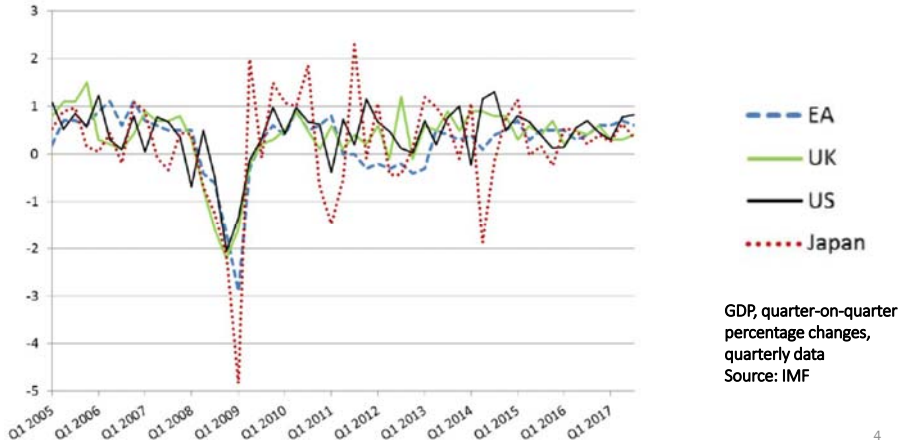
Monetary policy before, during and after the crisis: Some key elements in real time

I. Helicopter view
II. In the run-up: Deflation scare and housing boom
III. Crisis: Zero bound and quantitative easing
IV. In the aftermath: Lower-for-longer and lower R-Star

I. Helicopter view

Output growth: US, UK, € area, Japan

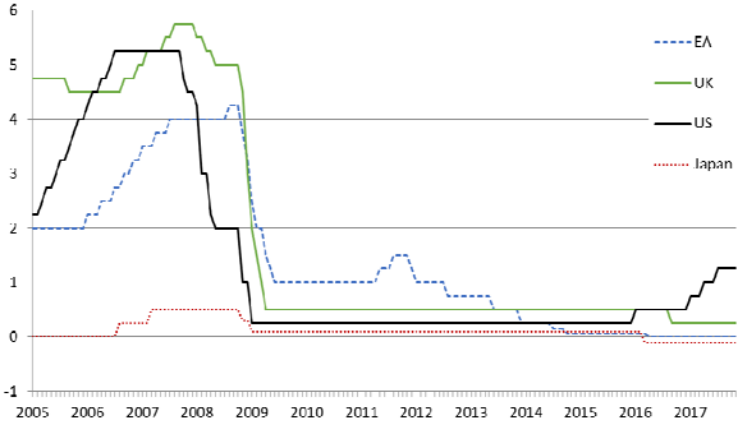


GDP, quarter-on-quarter percentage changes, quarterly data
Source: IMF

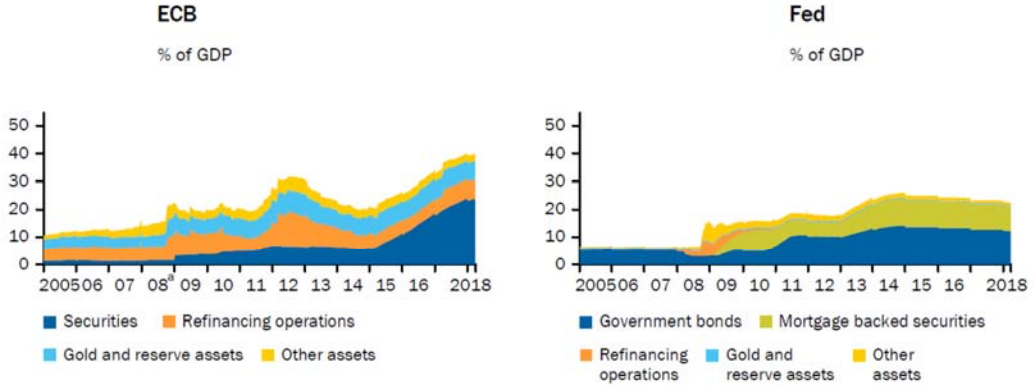
Consumer price inflation: US, UK, € area, Japan

Consumer prices, annual percentage changes, monthly data
Source: IMF

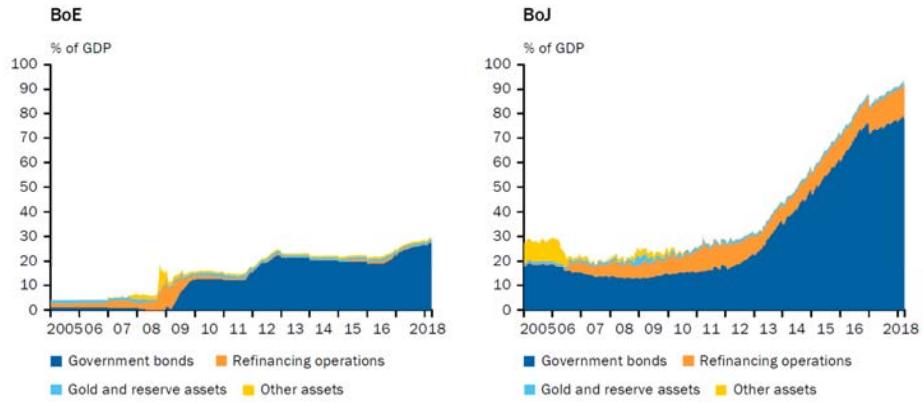
Central bank rates: US, UK, € area, Japan



Central bank balance sheets

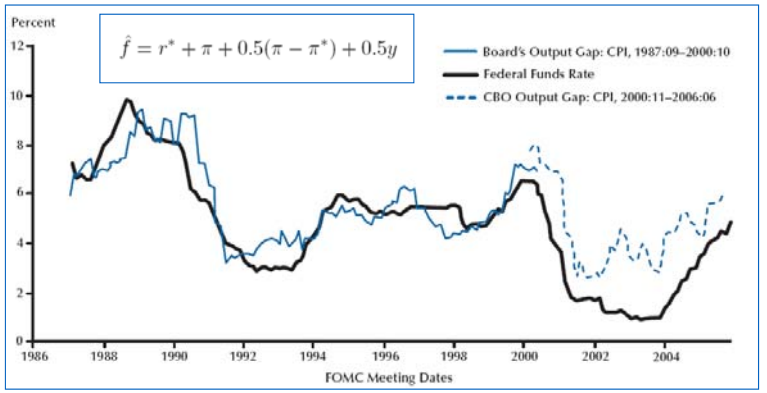


Central bank balance sheets



II. Prior to the crisis: Deflation scare and house price boom

William Poole on „Understanding the Fed“, 2006/7

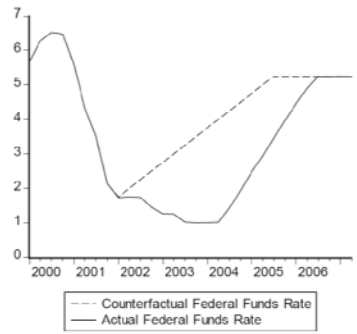


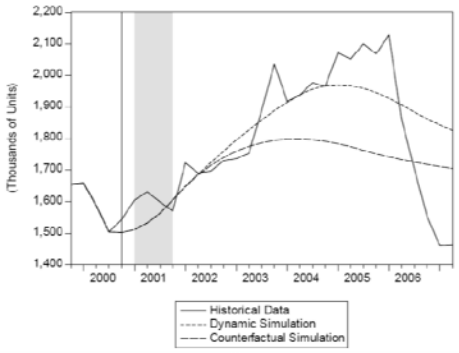
``The FOMC and certainly John Taylor himself, view the Taylor rule as a general guideline.

Departures from the rule make good sense when information beyond that incorporated in the rule is available.“

John Taylor (2007) on deviation and house price boom

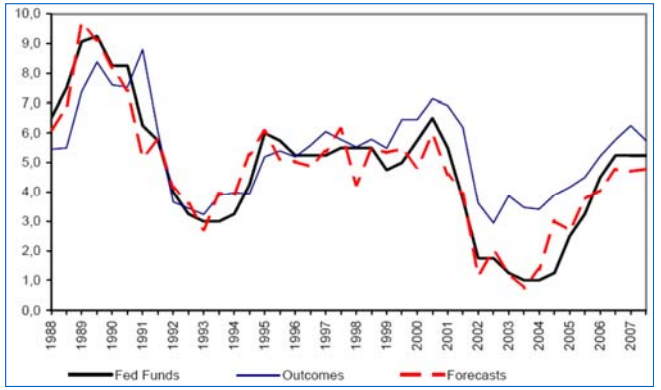
Rule vs actual policy & impact on housing starts regression





Orphanides and Wieland (2007/8) estimate 88-89

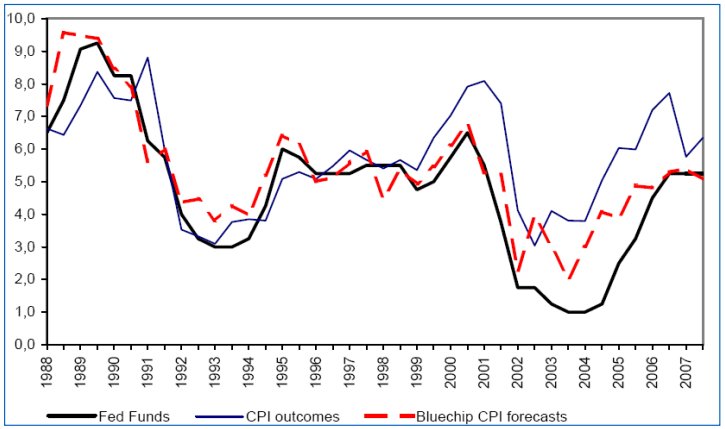
$$f_t = \rho f_{t-2} + (1-\rho)(a_0 + a_\pi \pi_{\tau|t} + a_u u_{\tau|t})$$



u : unemployment rate
$\tau = t + 3$: forecasts
$\tau = t - 1$: outcomes

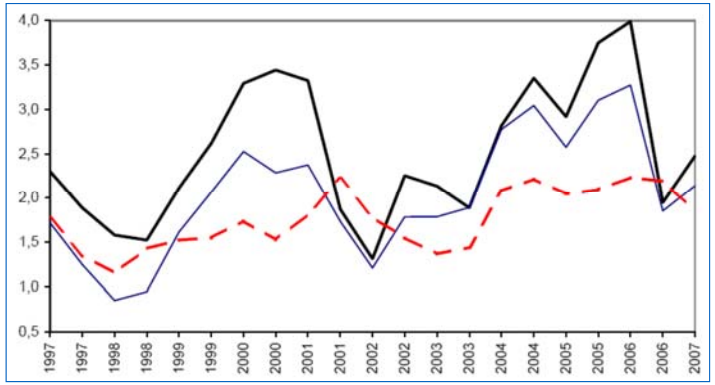
Fed anticipates low inflation!

But Fed switched away from CPI to PCE and and core PCE



With CPI deviation is back!

Explaining the deviation: Switch of inflation measures!

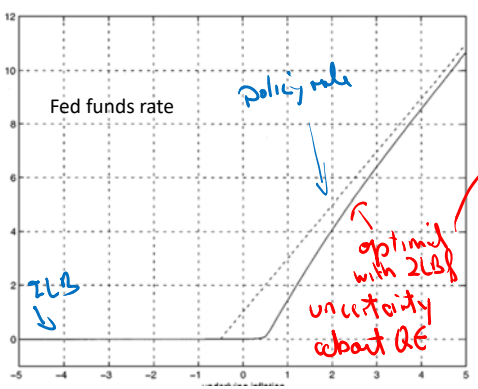


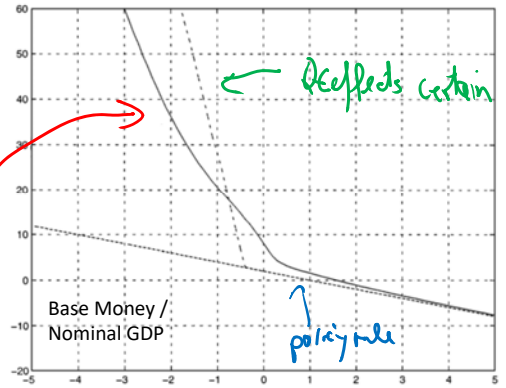
CPI
PCE
Core PCE

Ben Bernanke, Nov 21, 2002, Deflation: Making sure „it“ doesn‘t happen here

- the Fed should try to ***preserve a buffer zone*** for the inflation rate, that is, during normal times it should not try to push inflation down all the way to zero.
- when inflation is already low and the fundamentals of the economy suddenly deteriorate, the central bank should ***act more preemptively and more aggressively*** than usual in cutting rates (Orphanides and Wieland, 2000; Reifschneider and Williams, 2000; Ahearne et al., 2002).
- By moving decisively and early, the Fed may be able to prevent the economy from slipping into deflation, with the special problems that entails.

Optimal balance sheet expansion: Orphanides and Wieland (JJIE 2000)





III. Crisis: Zero bound and quantitative easing

Bernanke 2002 on curing deflation

Normally, money is injected into the economy through asset purchases of Fed … To stimulate aggregate spending when short-term interest rates have reached zero, the Fed must expand the scale of its asset purchases or, possibly, expand the menu of assets that it buys.

Alternatively, the Fed could find other ways of injecting money into the system--for example, by making low-interest-rate loans to banks ….

One important concern in practice is that calibrating the economic effects of nonstandard means of injecting money may be difficult, given our relative lack of experience with such policies. Thus, prevention of deflation remains preferable to having to cure it.

If we do fall into deflation, we can take comfort that the logic of the printing press example must assert itself, and sufficient injections of money will ultimately always reverse a deflation.

Bank of England, MPC, March 5, 2009

…The Bank of England's MPC today voted to reduce the official Bank Rate paid on commercial bank reserves by 0.5 percentage points to 0.5%, and to undertake a programme of asset purchases of £75 billion financed by the issuance of central bank reserves.

The MPC announced that, in addition to setting Bank Rate at 0.5%, it would start to inject money directly into the economy in order to meet the inflation target.

This means that the instrument of monetary policy shifts towards the quantity of money provided rather than its price (Bank Rate). But the objective of policy is unchanged – to meet the inflation target of 2 per cent on the CPI measure of consumer prices.

Influencing the quantity of money directly is essentially a different means of reaching the same end.

Jean-Claude Trichet November 2010

Across central banks, there has been no standardisation of non-standard measures: … We have seen enhanced credit support, credit easing, quantitative easing, interventions in foreign exchange and securities markets, and the provision of liquidity in foreign currency – to name but a few of the measures taken. (…)

There are two distinct views on non-standard measures.

Some view them as the continuation of standard policy by other means. Once nominal interest rates cannot be lowered further, central banks use other tools to determine the monetary policy stance – that is, to contribute in the desired way to economic, financial and monetary developments in pursuit of price stability. [2]

Footnotes: [2]For a discussion of this perspective, see: A. Orphanides and V. Wieland (2000), "Efficient monetary policy design near price stability", Journal of the Japanese and International Economies 14.

Jean-Claude Trichet November 2010

Figuratively speaking, this can be compared to – once the end of the road has been reached – engaging the four-wheel drive. Central banks expand their balance sheets and inject liquidity so as to influence the structure of yields and returns and thereby stimulate aggregate demand. This approach would be broadly in line with the theoretical analyses and prescriptions of Friedman, Tobin or Patinkin.

The logic of this approach is essentially sequential: first the standard measures, then the non-standard measures. If this sequential logic were also to be applied to the exit, it would essentially mean unwinding non-standard measures first and subsequently raising interest rates.

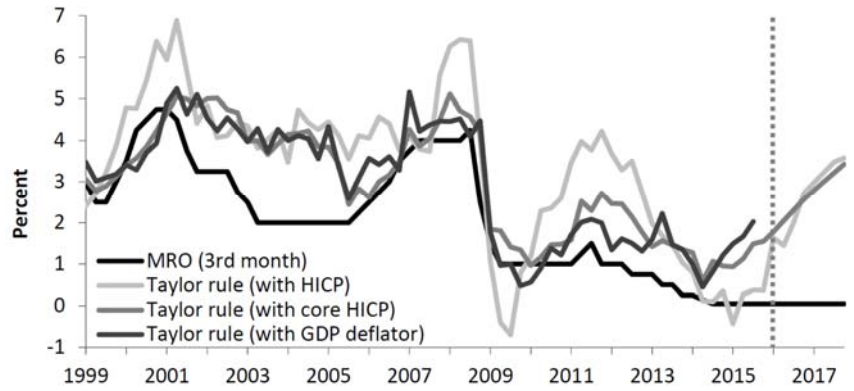
Jean-Claude Trichet November 2010

At the ECB, we have a different view of our non-standard measures. We set our key interest rates at levels we consider appropriate to maintain price stability, (…) But on several occasions, (this) monetary policy stance established in this way faced obstacles in being transmitted to the euro area economy. During the financial crisis, market functioning was impaired. In response, we acted to overcome some severe malfunctioning that was hampering the channels of transmission of our policy. (…)

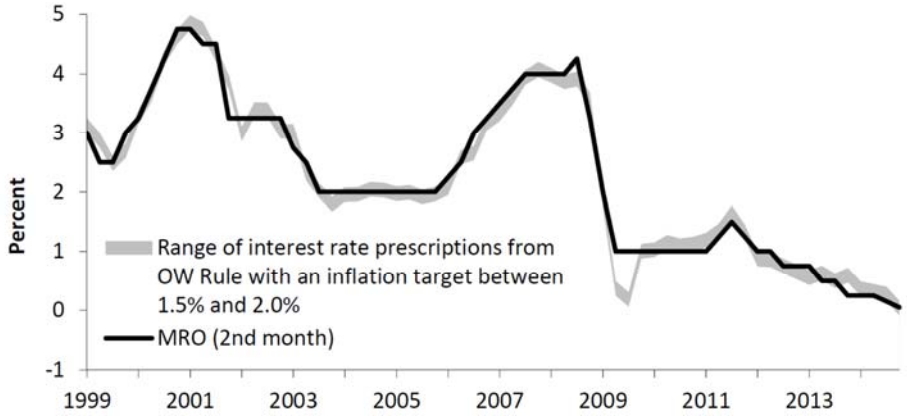
Staying with the image of the road, (…) we sought to remove the major roadblocks in front of us, so that our policy stance could be transmitted to the economy in the intended way. The logic (…) is therefore parallel and supportive: (…) (it) has (…) clear implications for the exit: (…) we can determine standard and non-standard measures largely independently.

IV. In the aftermath: Lower-for-longer and lower R-Star

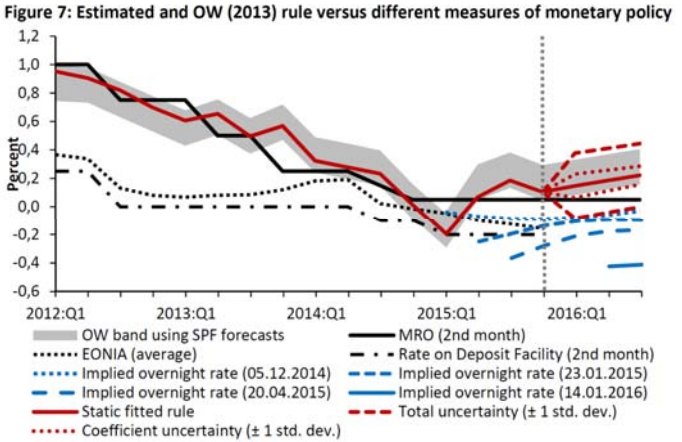
Taylor rule in real time for Euro area



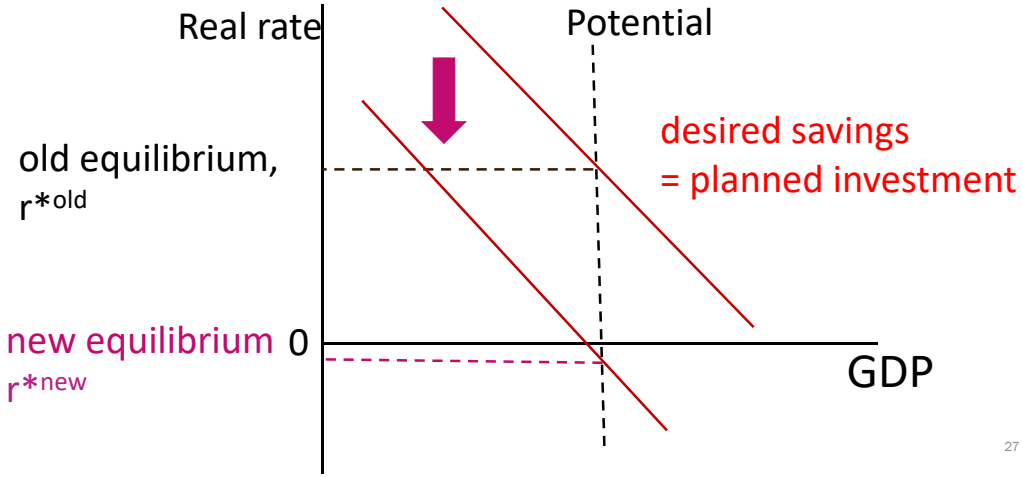
Difference rule estimated for euro area: OW 2013, Bletzinger und Wieland 2017



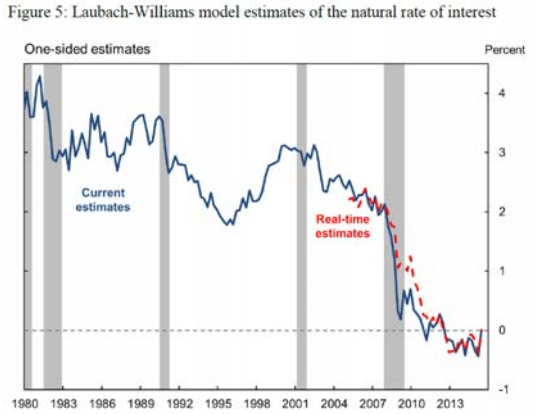
Lower for longer in the euro area



Lower R-Star



Medium-term equilibrium rates estimated by Laubach-Williams



Source: Thomas Laubach and John C. Williams (2015)

Mittelfristiges Gleichgewicht (Yellen sprach von "headwinds")

Major influence on policy

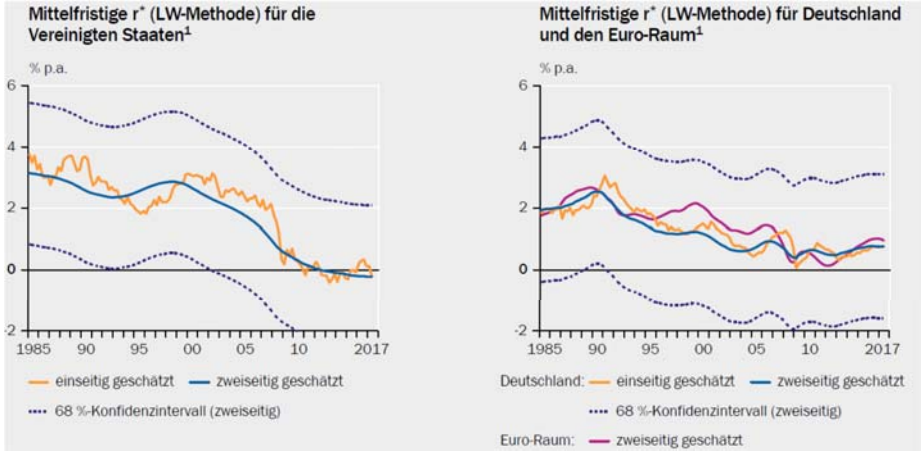
L. Summers: 2014, BE, *„The LW methodology demonstrates a very substantial and continuing decline in the (equilibrium) real rate of interest."*

P. Krugman: 2015, NYT, *„the low natural rate is as solid a result as anything in real time can be"* referring to LW.

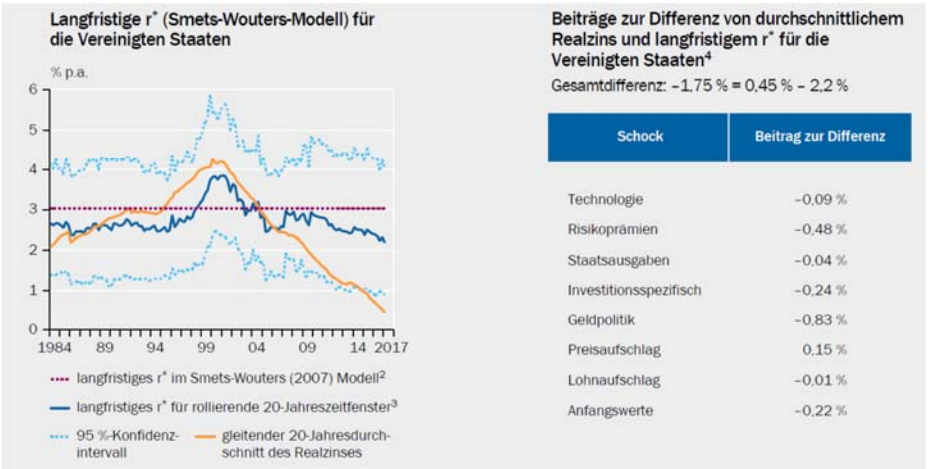
J. Yellen, 2015, *„Under assumptions that I consider more realistic under present circumstances, the Taylor rule calls for the federal funds rate to be close to zero."*

M. Draghi, V. Constancio, 2016/17.

Yet extremely imprecise, decline not significant



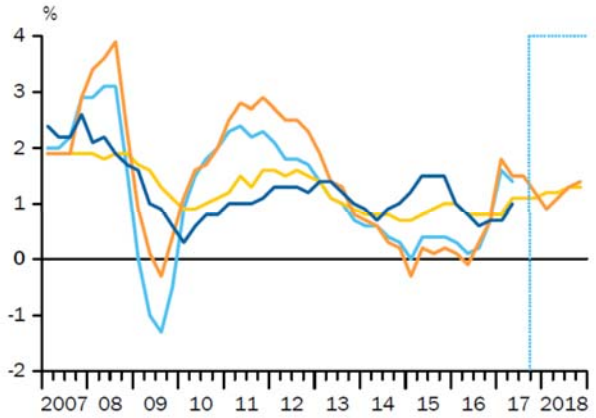
Long-term equilibrium declined much less, average real rate low due to easy monetary policy and high risk aversion



ECB: How to exit

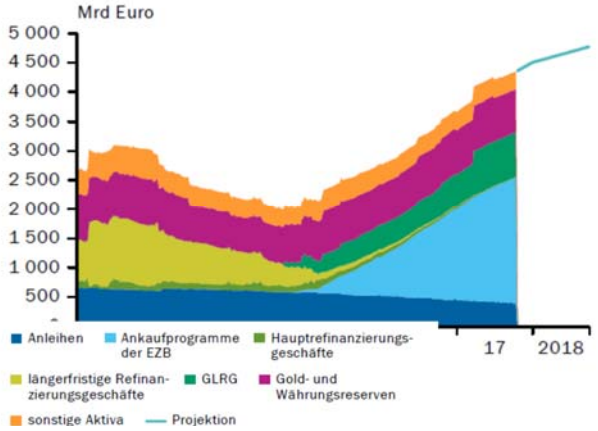
SVR proposal for normalization strategy.

Stabile Inflation im Euro-Raum



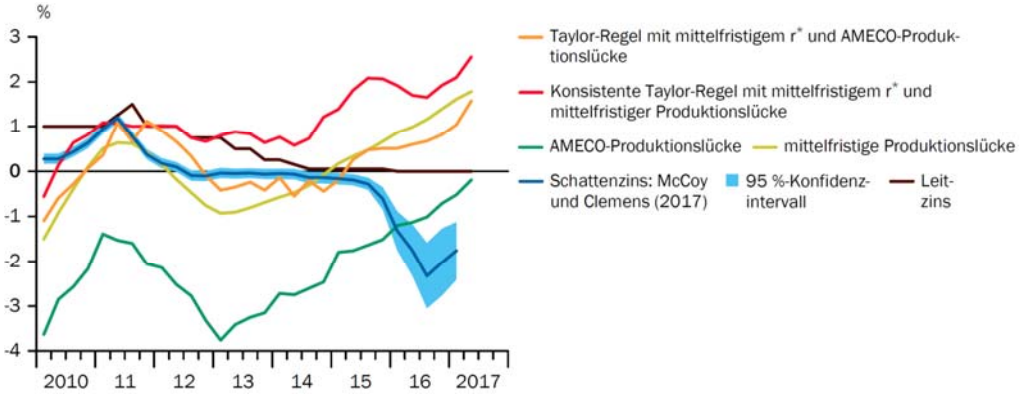
BIP-Deflator
Konsum-Deflator
HVPI
Kern-HVPI

EZB setzt Bilanzausweitung fort: Geldpolitische Wende erforderlich

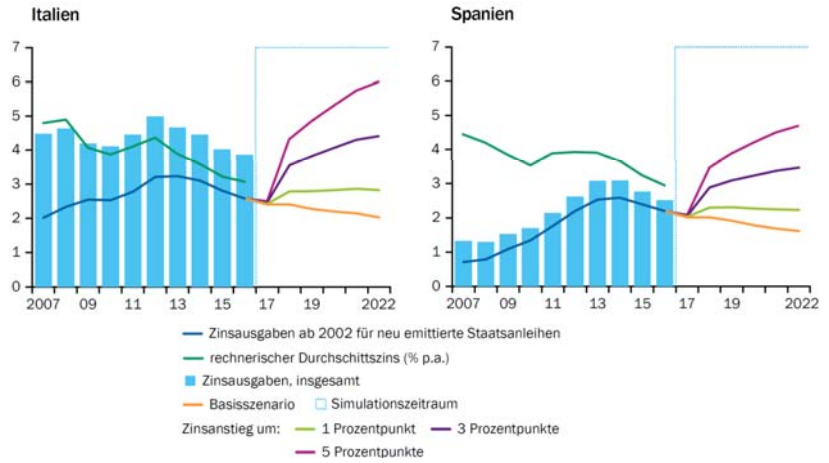


Gold & FX
Anleihen
Ankaufprogramme
LRG
GLRG
Sonstige Aktiva
Hauptrefinanzierungsgeschäfte

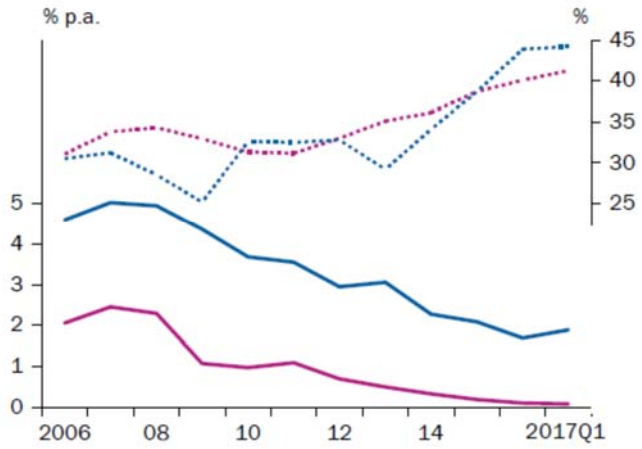
Taylor-Regel vs Schattenzins: Geldpolitik sollte normalisiert werden



Normalisierung und Zinsausgaben: Italien & Spanien



Bankbilanzen bergen Risiken: Vorsorge treffen!



Deutschland

Neugeschäft

— Kreditzins

— Einlagenzins

Anteile (rechte Skala)

.... Langfristige Wohnungsbaukredite

.... Kurzfristige Refinanzierung