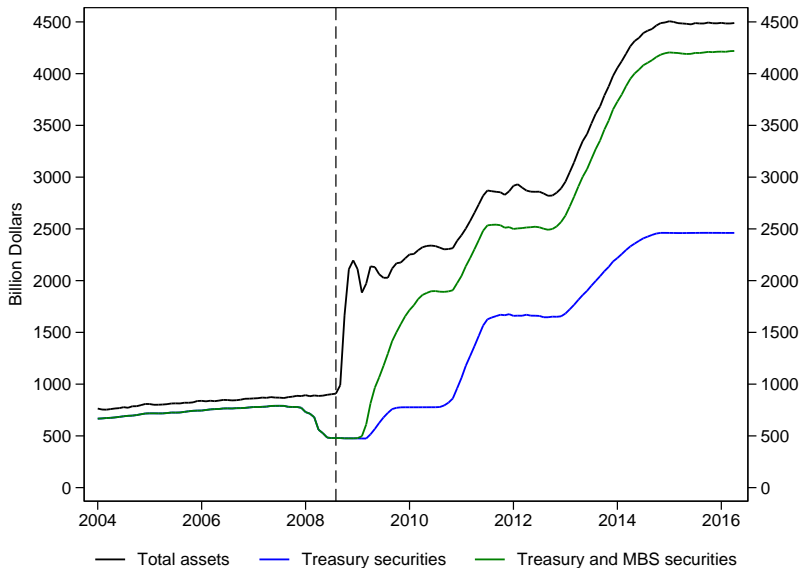


Fiscal Implications of Central Bank Balance Sheet Policies

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Fiscal Sustainability, XXI Century

The balance sheet of the Federal Reserve



The power of central bank balance sheets

- ▶ How are central banks interconnected to fiscal policy?
- ▶ Historical antecedents
- ▶ The consensus before the crisis
- ▶ The zero lower bound and unconventional monetary policy
- ▶ Fiscal operations by central banks during the crisis
- ▶ The independence of central banks
- ▶ Role after the crisis?

Historical antecedents

- ▶ Bank of England, founded in 1694 and granted monopoly on note issuance to provide financing to King William III.
- ▶ Banque de France, founded in 1800 by Napoleon Bonaparte to facilitate government finance.
- ▶ Banco de Espana, granted monopoly on the issuance of Spanish bank notes in 1874 to finance the government.
- ▶ Federal Reserve Board founded in 1913 to provide an elastic currency in response to a financial crisis. State financing *not* the reason for its founding. Nonetheless, the Fed's most important task during the first years of its operations was to facilitate the financing of World War I.

Historical antecedents: II

“It is said that Government could not be safely entrusted with the power of issuing paper money; that it would most certainly abuse it; and that, on any occasion when it was pressed for money to carry on a war, it would cease to pay coin, on demand, for its notes; and from that moment the currency would become a forced Government paper. There would, I confess, be great dangers of this, if Government—that is to say, the Ministers—were themselves to be entrusted with the power of issuing paper money” (Ricardo, 1824).

The sovereign's prerogative

- ▶ Controlling the issue and use of currency is a powerful economic weapon that can be used to extract resources from the economy and even wage economic warfare.
- ▶ Seigniorage can be a significant source of fiscal revenue. Can easily exceed 1% of GDP per year. Seigniorage exceeding 5% of GDP per year documented for 1980s.
- ▶ Tradeoffs: Seigniorage maximized at inflation over 100% per year, detrimental to growth and welfare.

The rationale for central bank independence

- ▶ Intertemporal tradeoffs: Price stability encourages growth and improves welfare in the long run.
- ▶ Faster money creation offers short-term gains: It can raise employment and increases seignorage. The costs come later with lower credibility and higher prices. Higher prices also reduce the real value of nominal government debt.
- ▶ In democracies, an independent central bank with the appropriate mandate to preserve price stability can solve this dynamic inconsistency problem.

The pre-crisis consensus

- ▶ An independent central bank with a price stability objective and support of a market-based economy, refraining from financial repression, can facilitate growth and welfare over time.
- ▶ Even though monetary policy has some fiscal implications, under ordinary circumstances these are of secondary importance and can be ignored when monetary policy aims to ensure price stability.
- ▶ The central bank can encourage free markets to allocate capital efficiently and promote growth and welfare over time, without engaging in operations that would suggest a bias in favor of regions or sectors of the economy.

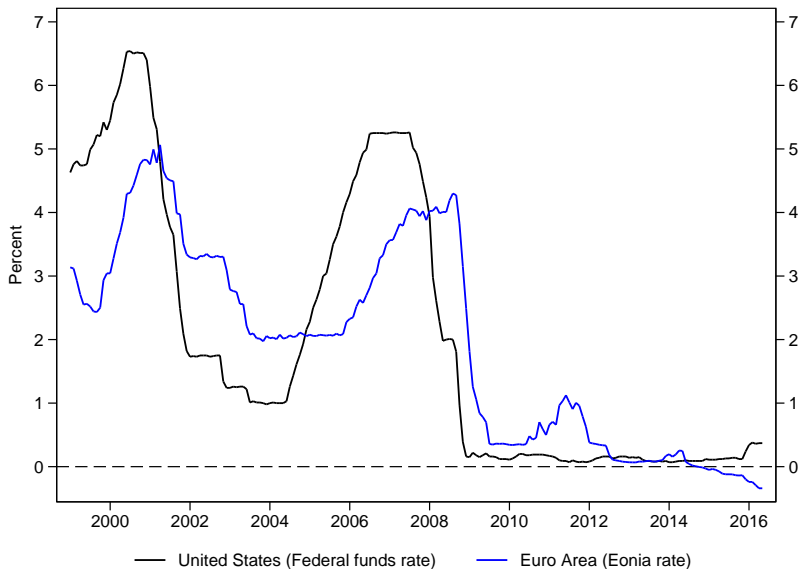
The power of a central bank's balance sheet

- ▶ Conventional monetary policy: adjusting short-term interest rates with open market operations.
- ▶ Unconventional monetary policy: Purchases of assets, expanded provision of credit at low interest rates upon presentation of collateral.
- ▶ Preferential lending operations: Lending to government-related or other entities at terms not available to others in the economy.
- ▶ Bailout operations: Lending to firms or governments when they lose market access and may or may not be insolvent.

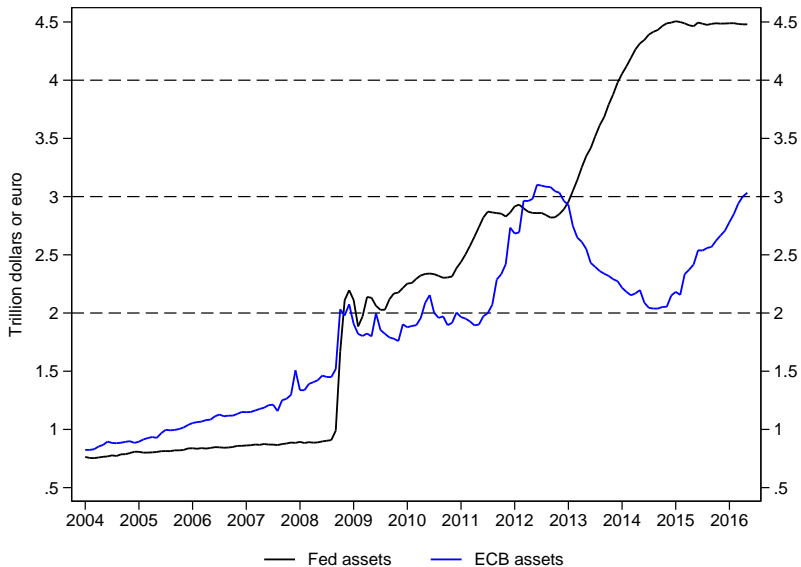
Unconventional monetary policy

- ▶ When policy interest rates are near zero, additional policy accommodation can be provided, if needed, by expanding the central bank's balance sheet.
- ▶ Asset purchases become a crucial monetary policy tool.
- ▶ QE (purchases of government bonds) is a natural extension of conventional monetary policy. QE lowers real interest rates at longer maturities than those constrained by the zero lower bound.
- ▶ Size of balance sheet becomes a useful policy indicator.

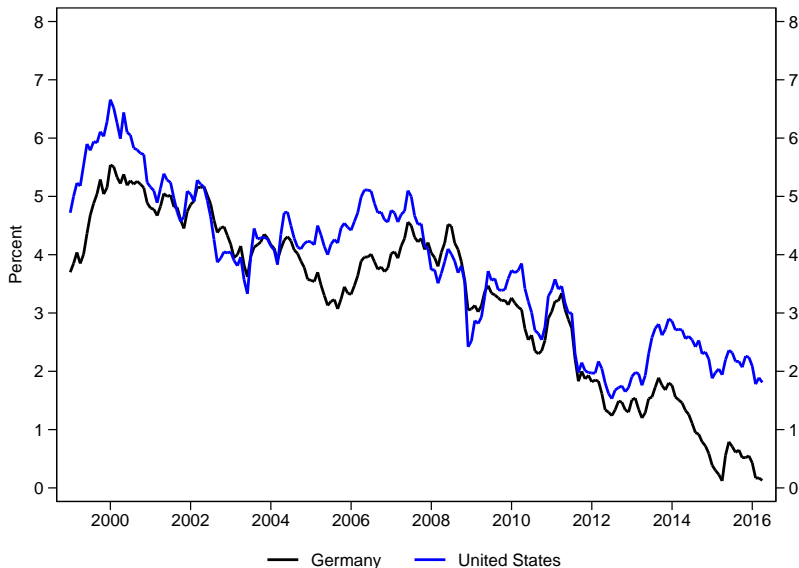
Fed vs ECB: Overnight interest rate



Fed vs ECB: Balance sheet size



Effectiveness of unconventional policy easing



Ten-year government bond yield

Fiscal operations during the crisis

- ▶ Some central bank balance sheet policies may be effectively equivalent to fiscal operations.
- ▶ At the zero lower bound, money is equivalent to short term government paper. By necessity, monetary and fiscal policy become much more closely linked.
- ▶ Bailout operations to restore the health of the financial sector are effectively fiscal operations.
- ▶ Provision of credit to some private or government-related entities may sustain some entities that would have otherwise collapsed. This is equivalent to providing fiscal support by the government.

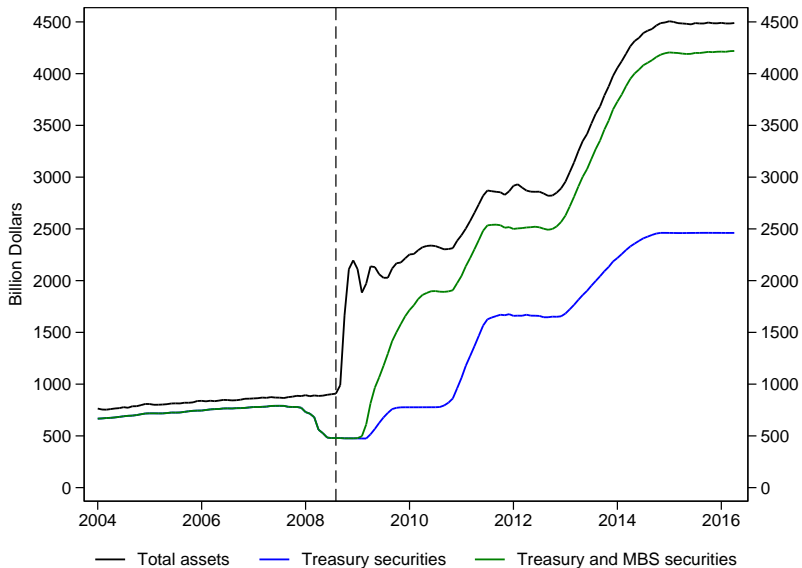
Distributional effects of CB crisis response

- ▶ During the crisis, central banks provided preferential support to *some entities* but not to others.
- ▶ Balance sheet policies had (and continue to have) immense distributional effects.
- ▶ Some distributional effects arising from central bank discretionary decisions during the crisis had no clear basis on rules that were in place before the crisis.
- ▶ Distributional policies were not intended when CBs were given independence to protect price stability over time.
- ▶ Crisis response has generated tension and questions about possible misuse of central bank independence.

Distributional issues: Federal Reserve

- ▶ Preferential treatment of sectors of the economy: As part of its toolkit of unconventional monetary policy easing, the Fed purchased large quantities of housing-related debt (MBS). This was equivalent to a massive subsidy to the housing sector, over other sectors of the economy.
- ▶ Authority to purchase MBS resulted from 1960s legislation to encourage the Fed to buy government-guaranteed debt, in an effort to advance financing of projects favored by Congress.
- ▶ Example: Purchases of bonds issued by the Washington Metropolitan Area Transit Authority (WMATA), which had been established in 1967 to fund construction of the Metro system.

The balance sheet of the Federal Reserve



Distributional issues: Federal Reserve

- ▶ Preferential treatment to firms: As part of its crisis response, the Fed allowed some firms but not others to secure financing at favorable terms.
- ▶ Goldman vs AIG. Pre-crisis, both were non-bank financial corporations, not eligible for discount window operations.
- ▶ In one case, the Fed protected the owners by providing inexpensive credit. In the other case Fed actions effectively bankrupted the owners.
- ▶ Recent legal ruling, following lawsuit against the Federal Reserve, determined that the Federal Reserve acted inappropriately.

A recent ruling

The Government's unduly harsh treatment of A.I.G. in comparison to other institutions seemingly was misguided and had no legitimate purpose, even considering concerns about 'moral hazard.'

(Ruling by Judge Thomas C. Wheeler, June 2015.)

Distributional issues: ECB

- ▶ ECB faces unique challenges as it was created to serve as the central bank for the euro area as a whole, which consists of the economies of all member states of the euro area.
- ▶ ECB is also unique in that it is effectively not accountable to any government and has no fiscal counterpart.
- ▶ ECB has immense discretionary power that could be used to favor some member states over other member states.
- ▶ If any euro area government manages to exert undue influence at the ECB it may advance its own interests to the detriment of interests of other euro area member states through the common central bank.

The euro area crisis: A nightmare for the ECB

- ▶ Focus on crisis management?
- ▶ Focus on monetary policy?
- ▶ Respect the mandate or yield to politics?
- ▶ Tradeoffs for survival of the euro area?

A nightmare for the ECB

- ▶ Because of the dysfunction of the euro area during the crisis, ECB could not avoid being immersed in decisions with distributional effects across euro area member states.
- ▶ Support for government debt markets and banking sectors across member states has been uneven during the crisis.
- ▶ Effectiveness of unconventional monetary policy was problematic, with some member states experiencing tightening of monetary conditions.
- ▶ Distribution of potential profits and losses, even those resulting from monetary policy operations, appears to have become unduly important factor for some decisions.

The power of the ECB balance sheet

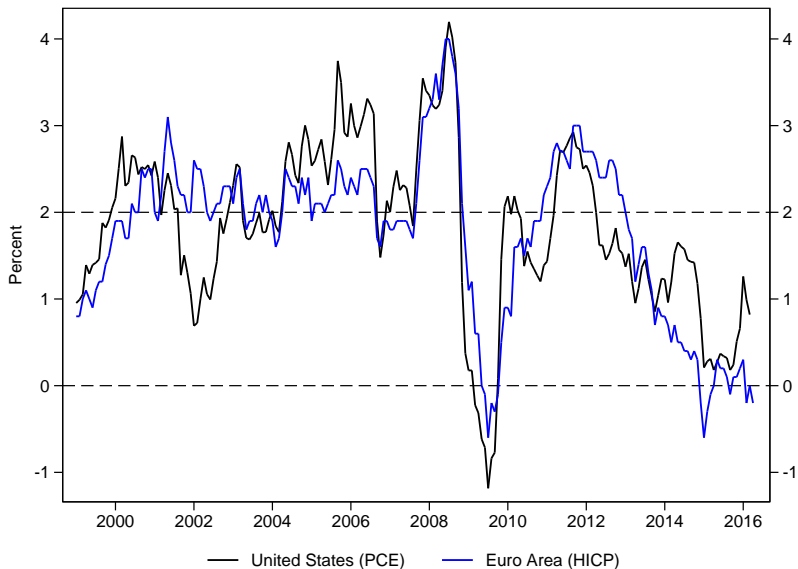
- ▶ “Germany’s debt collector.” *New York Times* op ed by Paul Krugman, 6 February 2015
- ▶ “The enforcer.” *Economist*, 7 February 2015

(Commentary following ECB decision on 4 February 2015 to declare marketable debt instruments issued by the Hellenic Republic ineligible for monetary policy operations.)

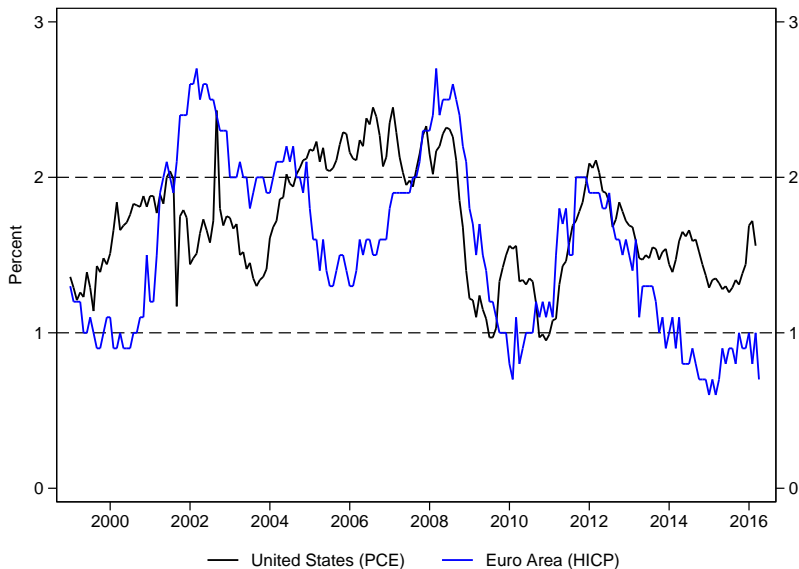
Risk sharing in a monetary union

- ▶ Monetary policy involves taking *some* risk on the balance sheet.
- ▶ In usual context of one CB and one corresponding fiscal authority not a big issue—can think of consolidated balance sheet. In monetary union?
- ▶ At ZLB, monetary policy *is* fiscal policy.
- ▶ Failure to acknowledge the inevitability of fiscal/monetary links and adopt needed balance sheet policies can lead to policy paralysis.
- ▶ Fed vs ECB policy?

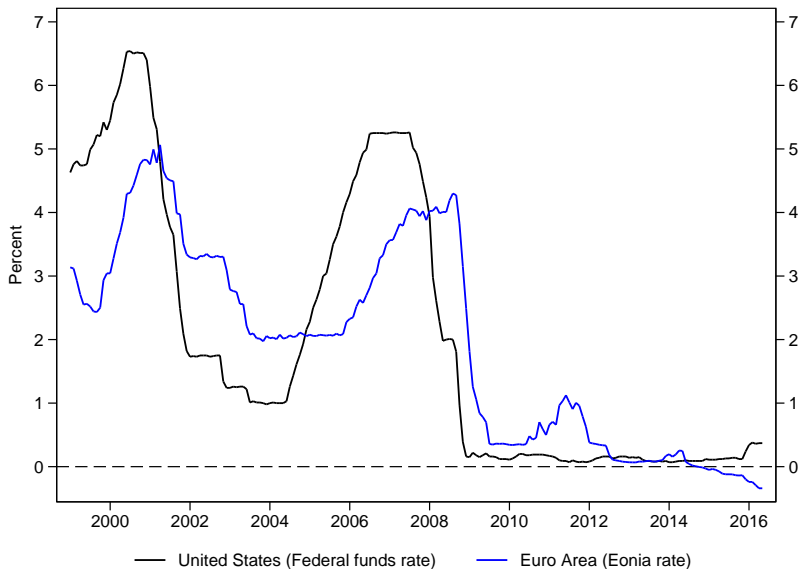
Fed vs ECB: Inflation



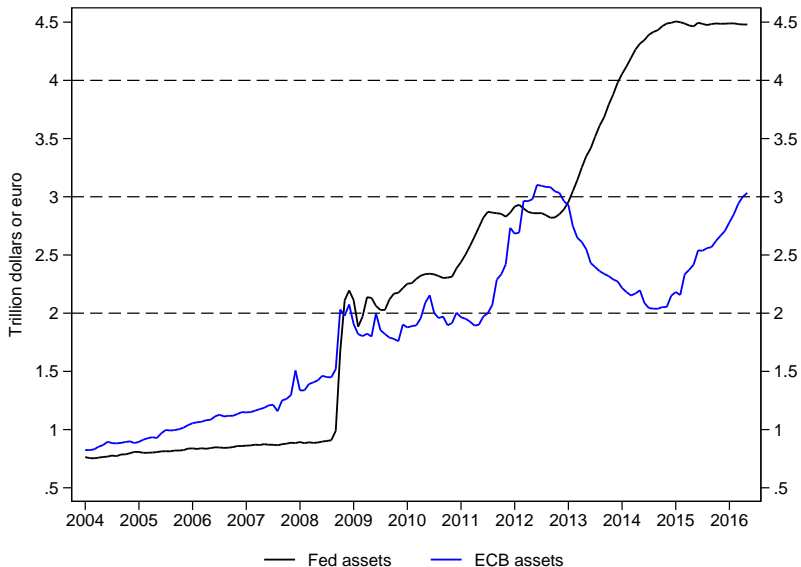
Fed vs ECB: Core Inflation



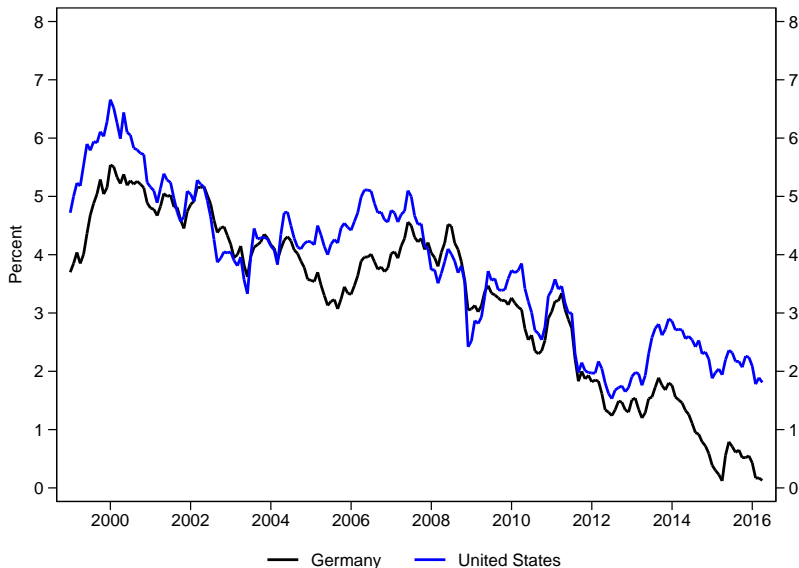
Fed vs ECB: Overnight interest rate



ECB vs Fed policy: Size of balance sheet

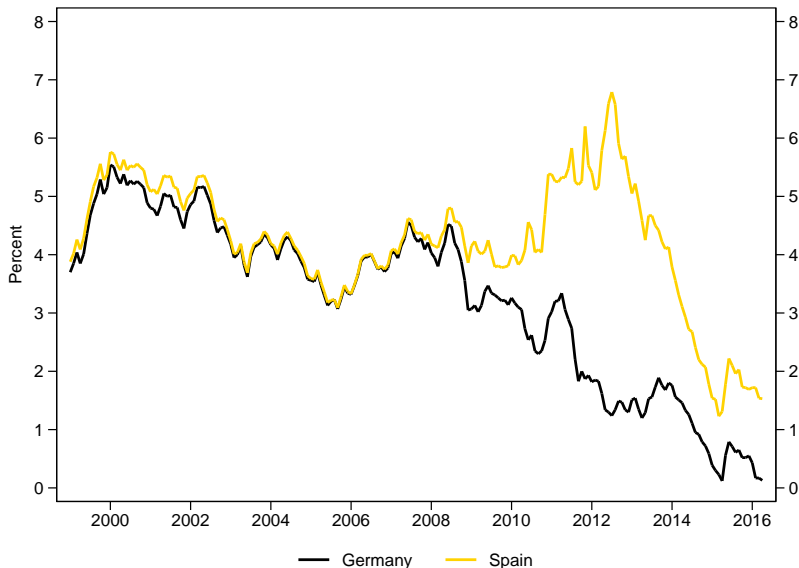


Effectiveness of unconventional policy easing



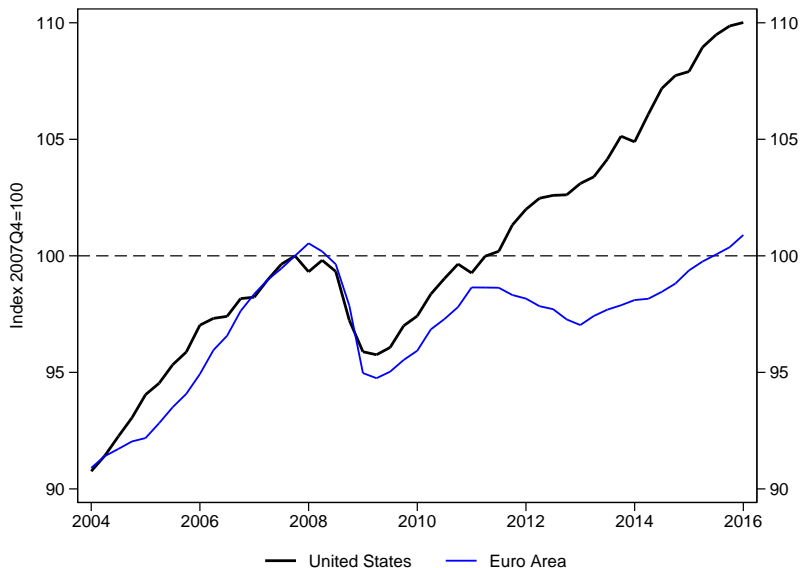
Ten-year government bond yield

Effectiveness of unconventional policy easing



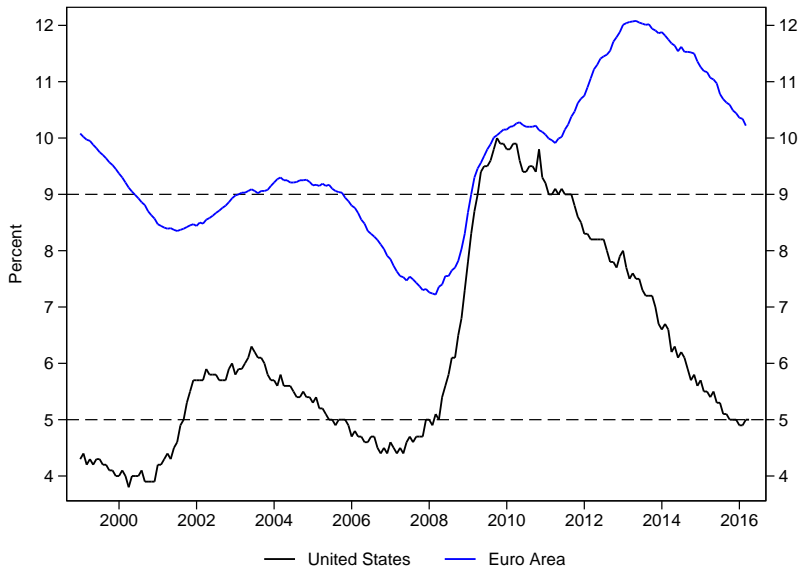
Ten-year government bond yield

The crisis: Real GDP

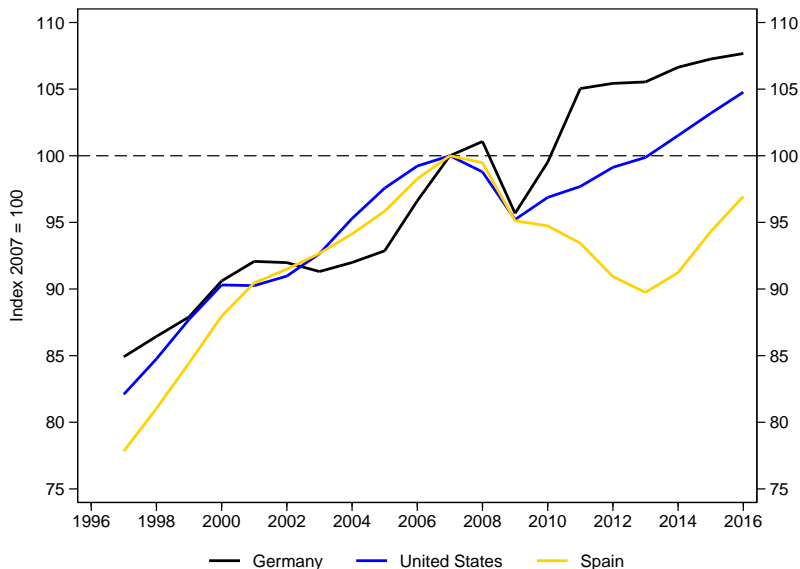


Quarterly real GDP. Index 2007Q4 = 100.

The crisis: Unemployment Rate

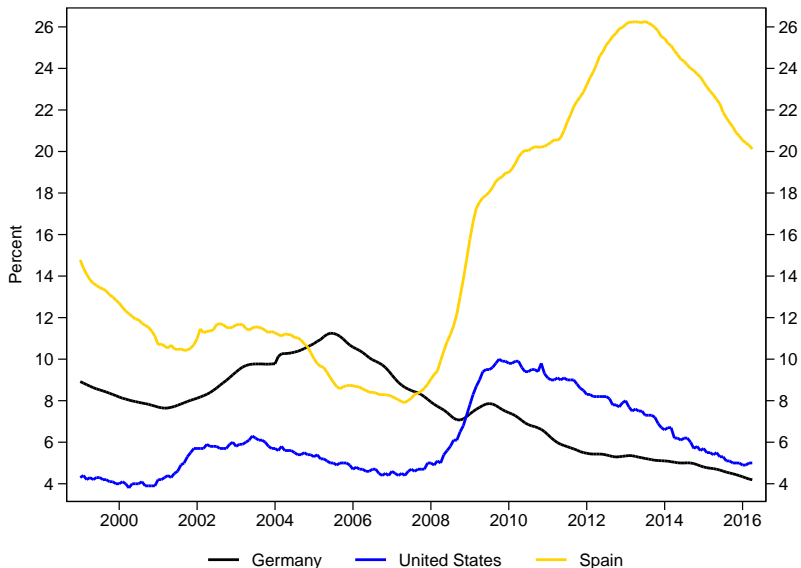


The distribution of crisis costs: GDP



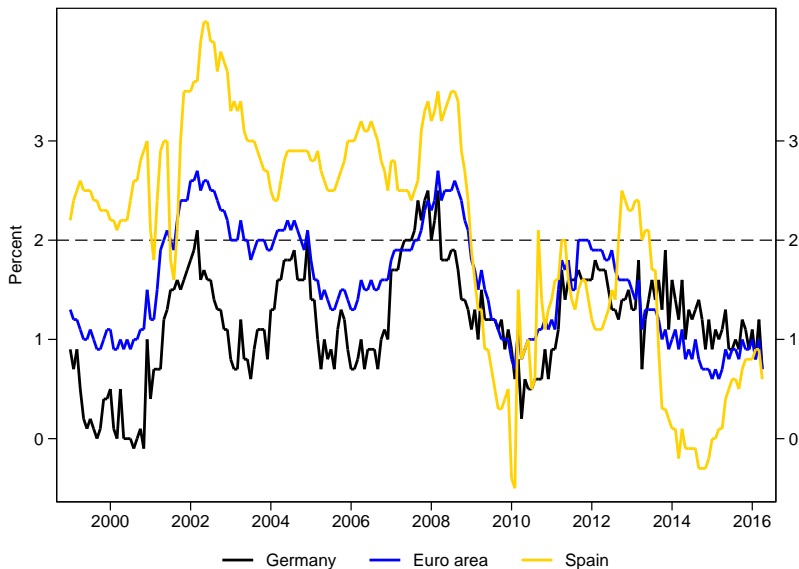
Annual real GDP per person. IMF WEO, April 2016.

The distribution of crisis costs: Unemployment

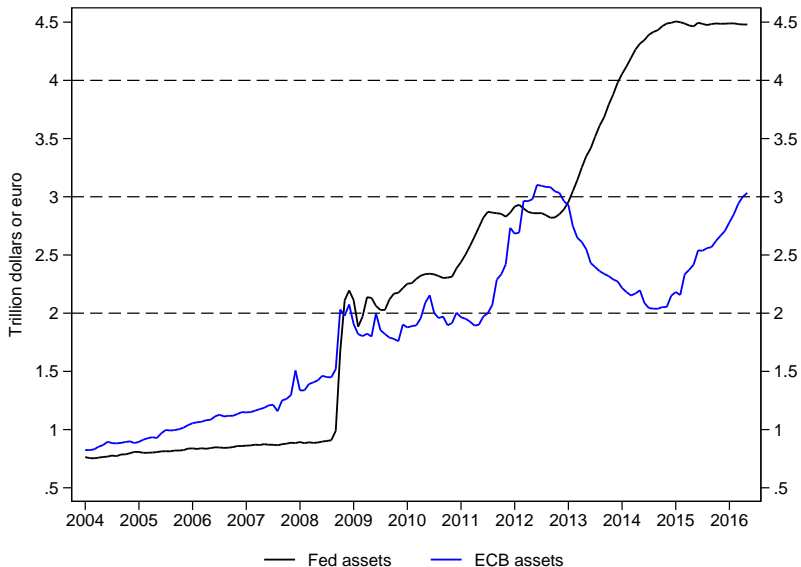


Monthly unemployment rate.

Euro area core inflation: A closer look



Why the ECB tightening in 2012-2014 period?



What is the mandate of the ECB?

“We have a monetary policy that is too expansive for Germany.”

“Extremely low interest rates caused countries’ willingness to implement structural reforms to tail off.”

(ECB Governing Council member, as quoted by Reuters on 4 December 2014.)

ECB QE: January 2015

- ▶ “[The Governing Council] decided to launch an expanded asset purchase programme, encompassing the existing purchase programmes for asset-backed securities and covered bonds. Under this expanded programme, the combined monthly purchases of public and private sector securities will amount to €60 billion.”
- ▶ “They 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 which is consistent with our aim of achieving inflation rates below, but close to, 2% over the medium term.”

ECB QE: Moving away from risk sharing

- ▶ “The Eurosystem will make use of decentralised implementation to mobilise its resources.”
- ▶ “With regard to the sharing of hypothetical losses, the Governing Council decided that purchases of securities of European institutions (which will be 12% of the additional asset purchases, and which will be purchased by NCBs) will be subject to loss sharing. **The rest of the NCBs' additional asset purchases will not be subject to loss sharing.**”
- ▶ “The ECB will hold 8% of the additional asset purchases. This implies that 20% of the additional asset purchases will be subject to a regime of risk sharing.”

Discussion as reflected in account of meeting

“With regard to the sharing of hypothetical losses under an expanded asset purchase programme, the Governing Council could choose from a continuum of loss-sharing options. One polar option was full loss sharing and another was no loss sharing for the part of the portfolio held on the balance sheets of NCBs. Both options involved trade-offs.” (ECB, 2015.)

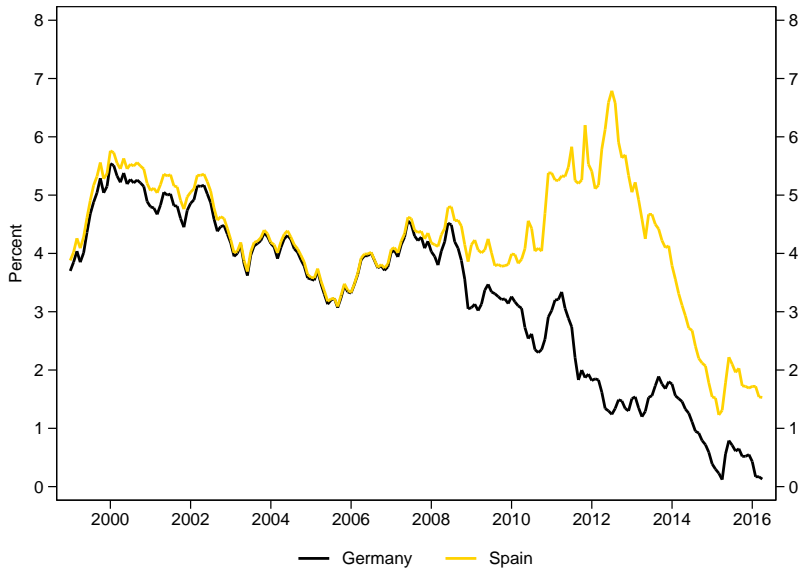
Discussion as reflected in account of meeting

“Members discussed the appropriate modalities of risk sharing related to the purchases of securities issued by euro area governments and agencies and European institutions. On the one hand, arguments were made in favour of full risk sharing so as to counter perceptions of a lack of unity. Full risk sharing would also underline the singleness of monetary policy. On the other hand, in view of concerns about moral hazard it was argued that a regime of partial loss sharing would be more commensurate with the current architecture of Economic and Monetary Union and the Treaties under which the ECB operates.” (ECB, 2015.)

Implications of deviation from risk sharing

- ▶ Decision signaled that ECB wishes to be prepared for states leaving the euro area, creating a dynamic that might make a member state leaving the currency area inevitable, hardly consistent with the ECB's mandate.
- ▶ Decision reinforced spreads among government debt of different member states. Effectively this represented a tax on member states perceived as weak and a subsidy on member states perceived as strong.
- ▶ Instead, purchases should have reflected the joint responsibility of the eurosystem for euro area monetary policy, as is the case with ordinary monetary policy operations.

Distributional Effects of ECB policy



The ECB mandate

“The primary objective of the ESCB shall be to maintain price stability.” (Article 127(1), 2012).

The ECB mandate

“The primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability the ESCB shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union as laid down in Article 3 of the Treaty on European Union.” (Article 127(1), 2012).

The ECB mandate: Article 3 of the Treaty

1. The Union's aim is to promote peace, its values and the well-being of its peoples.
2. The Union shall offer its citizens an area of freedom, security and justice . . .
3. The Union . . . shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, . . .
It shall combat social exclusion and discrimination, . . .
It shall promote economic, social and territorial cohesion, and solidarity among Member States. . . .
(Article 3, 2012)

Distributional issues: ECB

- ▶ ECB proved to be an effective central bank during the crisis but only for some member states of the euro area.
- ▶ For some member states, ECB actions reflected both the crisis response and unconventional monetary policy measures expected from the central bank of any economy.
- ▶ For other member states, ECB actions reflected neither the crisis response nor the unconventional policy measures expected from the central bank of a country.

Distributional issues: ECB

- ▶ Many ECB policy decisions during the crisis were not pre-ordained by rules that had been agreed when the euro area was created. They were the outcome of discretionary decisions during the crisis.
- ▶ Alternative discretionary decisions could have ensured less unequal implications for member states.
- ▶ Alternative discretionary decisions could have contributed to outcomes more in line with the ECB's mandate, as spelled out in the Treaty.

Lessons from the crisis

- ▶ Both in the cases of the Federal Reserve and the ECB, the central bank used its discretionary power to implement fiscal operations with immense distributional consequences.
- ▶ Distributional aspects of CB balance sheet policies raise troubling questions regarding the discretionary power granted to independent central banks.
- ▶ How should this be resolved going forward?

After the crisis

- ▶ In democratic societies, independent central banks do not have the legitimacy and should not have the authority to make discretionary decisions with immense distributional fiscal consequences, as has been observed during the crisis.
- ▶ If central bank independence is to be maintained going forward, strict rules and boundaries may need to replace current discretionary powers. (Goodfriend, 2014)
- ▶ The alternative? “The idea of the Central Bank as an independent *institution* will be put aside.” (Goodhart, 2010).