

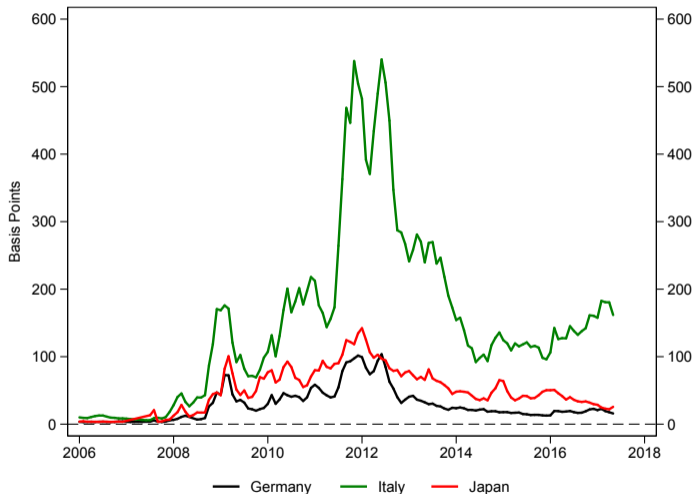
# The fiscal-monetary policy mix in the euro area: Challenges at the zero lower bound

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Brussels, 26 September 2017



# The ongoing crisis: Sovereign default risk

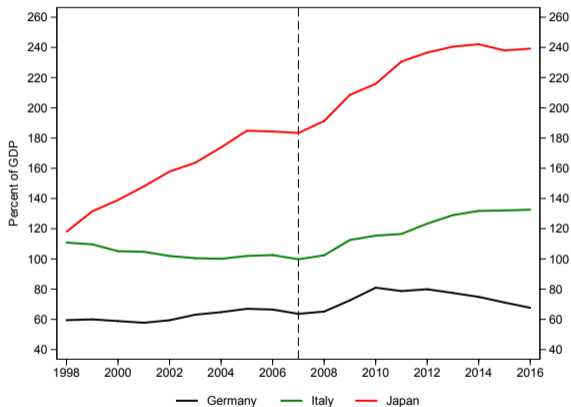


Five-year CDS spread on sovereign debt.

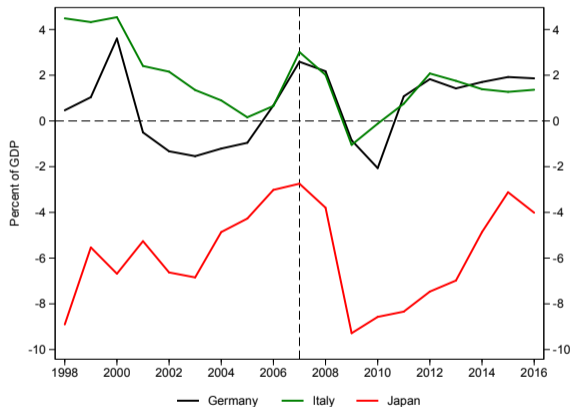


# Japanese frugality vs Italian profligacy?

## Gross debt



## Primary fiscal balance



Debt and primary fiscal balance as a percent of GDP. IMF WEO, April 2017.

Negative fiscal balance corresponds to fiscal deficit.

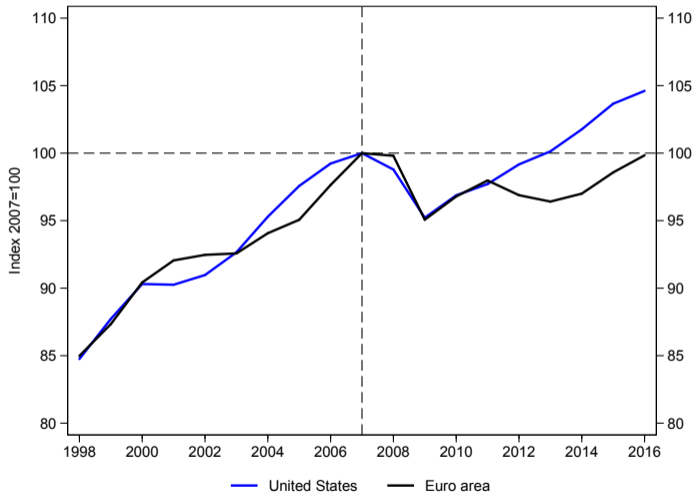


# Outline

- ▶ The crisis: US vs EA.
- ▶ The fiscal-monetary policy mix in the euro area.
  - ▶ What has hampered fiscal policy?
  - ▶ What has hampered monetary policy?
- ▶ Monetary-fiscal interactions.
  - ▶ Distributional issues with ECB QE
  - ▶ The role of compromising the “safe asset” status of euro area sovereigns
  - ▶ Credit ratings in the ECB collateral framework.
  - ▶ Moral hazard considerations and ECB monetary policy.
- ▶ A way forward for the ECB: A positive contribution to improve the policy mix and the longer-term prospects for the euro area.



# The crisis: Real GDP per person

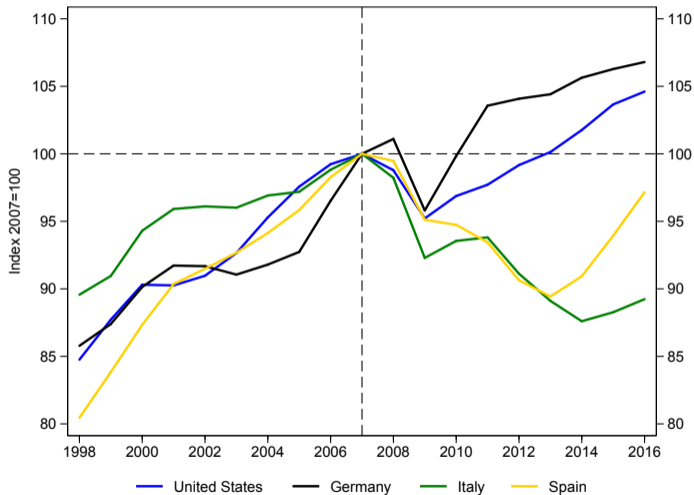


Annual real GDP per person. IMF WEO, April 2017.

Euro area reflects EA12 aggregate



# Drifting apart: Real GDP per person



Annual real GDP per person. IMF WEO, April 2017.

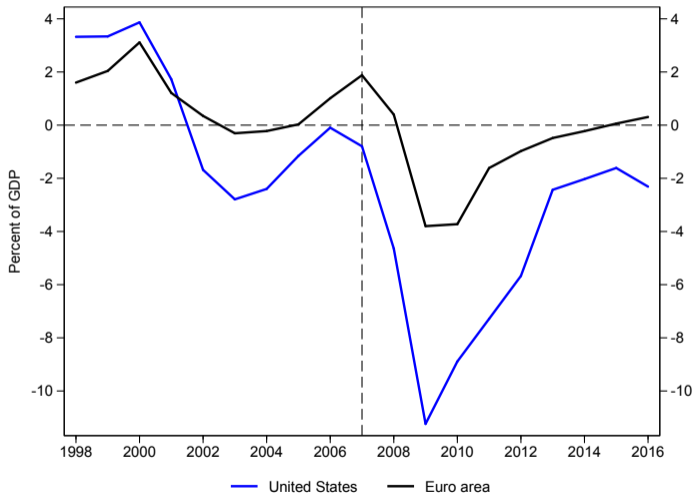


# The Fiscal-Monetary Policy Mix

- ▶ Crisis mismanagement in the euro area resulted in lower growth for euro area as a whole and greater divergence across member states.
- ▶ Fiscal policy: Too tight overall.
- ▶ Monetary policy: Too tight overall and implemented in a manner that contributes to divergence.
- ▶ Complications due to ZLB?
- ▶ Can alternative implementation improve outcomes?



# Fiscal policy: US vs EA



Primary balance ratio to GDP. IMF WEO, April 2017.





# Fiscal policy: US vs EA member states



Primary balance ratio to GDP. IMF WEO, April 2017.

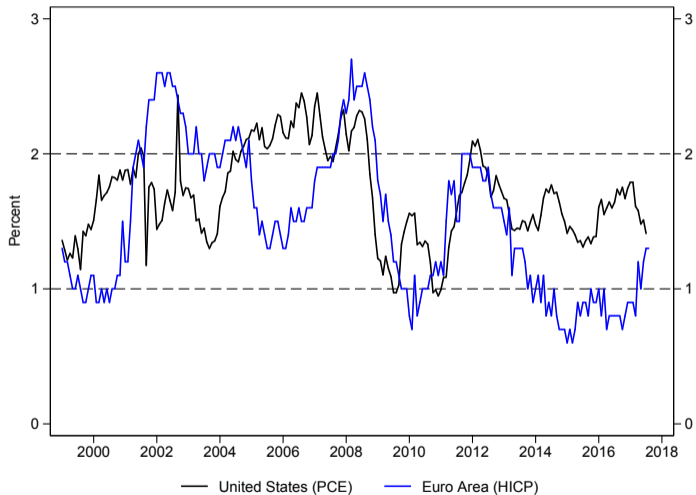


# What hampers fiscal policy?

- ▶ EU fiscal framework offers no meaningful instrument to coordinate fiscal policy among euro area member states.
- ▶ SGP places limits on individual states. Member states that lack fiscal space cannot expand. Member states that have fiscal space may not need to.
- ▶ Aggregate outcome is biased towards “sub-optimal” excessive austerity. (Acknowledged by the European Commission in November 2016.)
- ▶ In theory, ECB monetary policy could try to compensate by providing additional monetary accommodation.
- ▶ In practice?



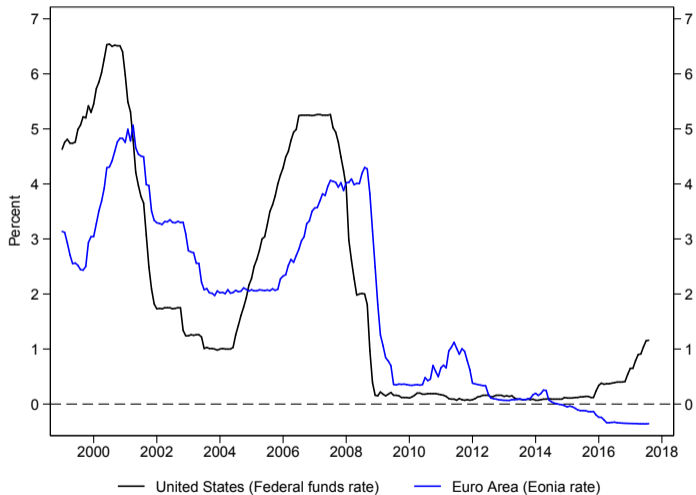
# Monetary Policy? Fed vs ECB: Core Inflation



A sustained divergence in inflation outcomes since 2012.



# The zero lower bound: A constraint on policy?



Overnight interest rate.



# The zero lower bound: A constraint on policy?

- ▶ The zero lower bound constrains “conventional” easing corresponding to reducing very short-term nominal interest rates.
- ▶ But monetary policy remains **supremely effective**.
- ▶ Focus turns on longer-term interest rates and asset prices.
- ▶ Monetary policy easing through government bond purchases.
- ▶ A complication: Dealing with risks on CB balance sheet.



## Legal challenges on bond purchases

“Former German top judge says ECB could face more legal challenges”  
(Reuters, September 24, 2014)

“ECB’s plans to buy rebundled debt draw criticism from Germany”  
(Reuters, October 5, 2014)

“Europe’s Highest Court Hears Clash on ECB Policy”  
(WSJ, October 14, 2014)

“Legal opinion paves way for ECB bond-buying programme”  
(FT, January 14, 2015)

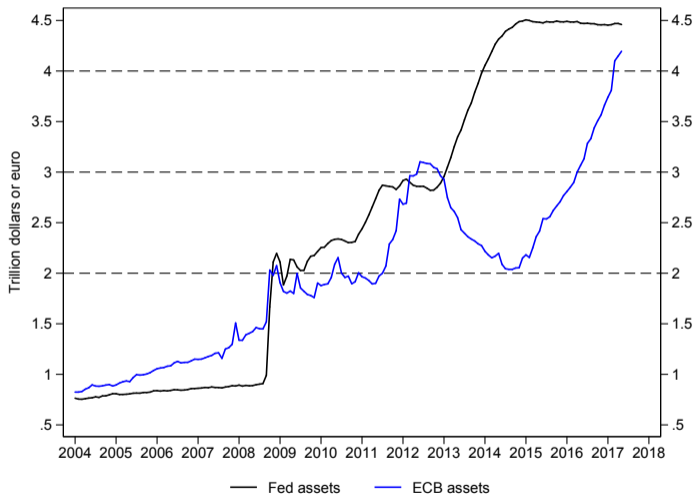


# Risk sharing in a monetary union

- ▶ Monetary policy always 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?



# An unusual divergence in balance sheet policy



Size of balance sheet, in dollars/euro, respectively.





# Inflation projections before ECB QE

Forecast Date	ECB Forecast		
	2014	2015	2016
Sept. 2013	1.3		
Dec. 2013	1.1	1.3	
Mar. 2014	1.0	1.3	1.5
June 2014	0.7	1.1	1.4
Sept 2014	0.6	1.1	1.4
Dec. 2014	0.5	0.7	1.3

ECB balance sheet contraction despite declining inflation forecasts.



# Inflation projections after ECB QE

Forecast Date	ECB Forecast			
	2016	2017	2018	2019
Mar. 2015	1.5	1.8		
June 2015	1.5	1.8		
Sept. 2015	1.1	1.7		
Dec. 2015	1.0	1.6		
Mar. 2016	0.1	1.3	1.6	
June 2016	0.2	1.3	1.6	
Sept. 2016	0.2	1.2	1.6	
Dec. 2016	0.2	1.3	1.5	1.7
Mar. 2017	0.2	1.7	1.6	1.7
June 2017	0.2	1.5	1.3	1.6
Sept. 2017	0.2	1.5	1.2	1.5

## Fed vs ECB: Outlook for headline inflation

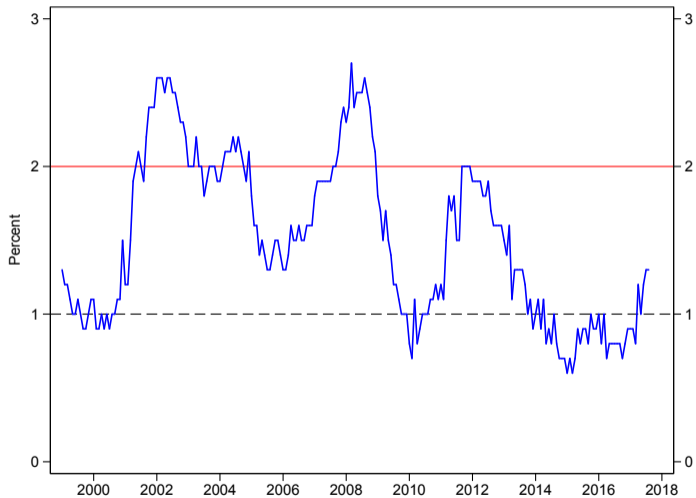
	September 2017 projections				
	2016	2017	2018	2019	2020
Fed	1.4	1.6	1.9	2.0	2.0
ECB	0.2	1.5	1.2	1.5	

Implications of tight ECB monetary policy:

- ▶ Inflation projected to remain too low well into the future.
- ▶ Unnecessary harm to real economy in most member states.
- ▶ Deterioration of debt dynamics (raising odds of failure of euro).



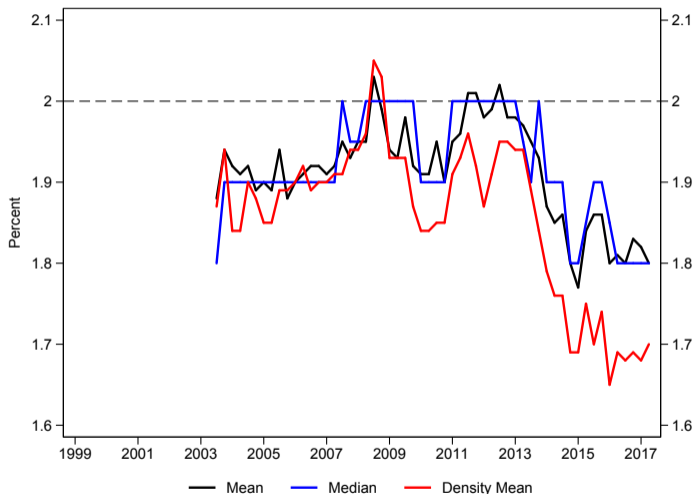
# Core Inflation



Notably below and **not** close to 2% for several years.



# Long-term inflation expectations



ECP SPF. Surveys after May 2003 clarification of ECB inflation objective.

An unhelpful disanchoring of inflation expectations.



# The ECB's low inflation problem

- ▶ Costs of too low inflation in the environment of a depressed euro area economy well understood:
  - ▶ “Lowflation” (IMF and others, since 2014)
  - ▶ Eggertsson, Ferrero and Raffo (2014), Arias, Erceg, Trabandt (2016) (interactions with ZLB)
- ▶ Eurosystem research acknowledges that policy easing (through asset purchases) can reduce these risks:
  - ▶ Coenen and Schmidt (2016) (De-anchoring)
  - ▶ Andrade et al (2016), Mouabbi and Sahuc (2016) (Effectiveness)
- ▶ **Overly tight ECB policy a big part of euro area's problems.**



## Two issues with ECB QE

- ▶ Problem with quantity: Insufficient balance sheet expansion.
- ▶ Problem with implementation: It reinforces divergence in yields.



# Two issues with the implementation of ECB QE

- ▶ Eligibility
- ▶ Loss sharing





# The single monetary policy and loss sharing

“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, emphasis added.)

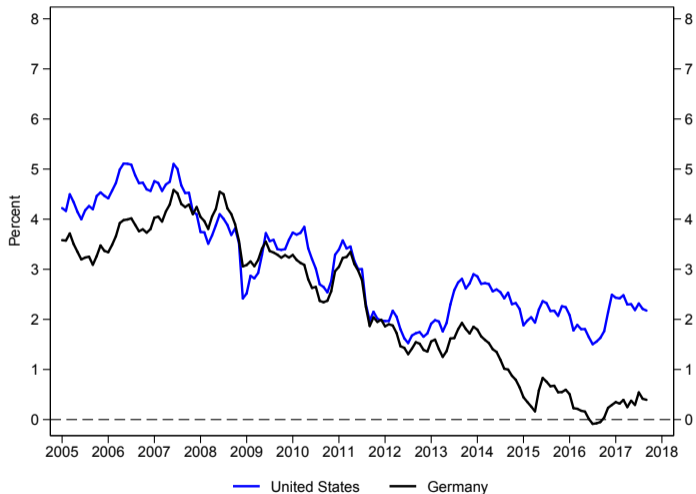


# The ECB's self-imposed restriction on eligibility

- ▶ The ECB has imposed a restriction that it will only purchase government debt with an investment-grade rating (unless a country is in a program).
- ▶ This policy raises the financing costs of governments facing market pressure and elevates importance of ratings agencies (S&P, Moody's, Fitch and DBRS).
- ▶ Case in point: Portugal faced possibility of exclusion from QE on 21 October 2016, when DBRS was considering downgrading Portugal by one notch.



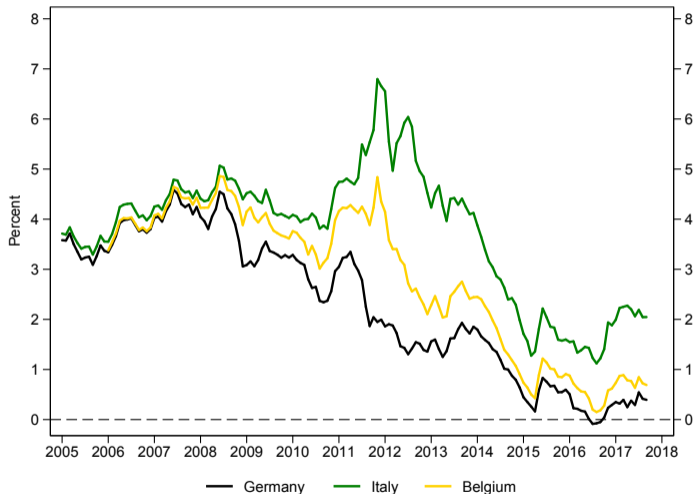
# Effectiveness of unconventional policy easing



Ten-year government bond yield



# Effectiveness of unconventional policy easing



Ten-year government bond yield



# Unintended consequences of discretionary operational decisions

- ▶ Multiple expectational equilibria in sovereign debt markets.
- ▶ Credit ratings and collateral eligibility.



# Debt dynamics and multiple expectational equilibria

$$\Delta b_t = (r - g)b_{t-1} + d_t$$

$b_t$ , debt (ratio to GDP).

$d_t$ , primary deficit (ratio to GDP).

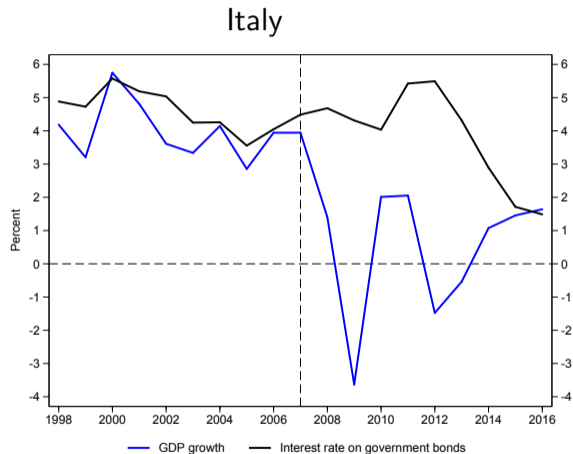
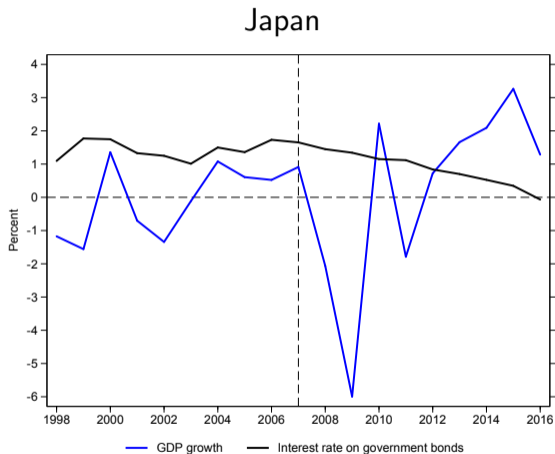
$r$ , real interest rate.

$g$ , real GDP growth.

- ▶ Within a range of fundamentals for growth and projected primary deficits, multiple expectational equilibria are possible in debt markets.
- ▶ If fears of default are allowed to raise  $r$ , debt may become unsustainable even with sound fiscal fundamentals.



# The snowball effect: Japan vs Italy



# The ECB and the snowball effect: Germany vs Italy

## Germany



## Italy





# The central bank as a backstop against adverse equilibria

- ▶ A CB can eliminate adverse self-fulfilling expectational equilibrium by serving as a backstop to a government with sound fundamentals.
- ▶ This requires the willingness of the CB to maintain **collateral eligibility** of government debt for monetary policy operations even in the presence of market fears of default.
- ▶ Does the ECB serve as a backstop to member state sovereigns, as other central banks do?
- ▶ Should the ECB serve as backstop to sovereigns with sound fundamentals?
- ▶ Should the ECB validate/support adverse equilibria?



# Actual ECB practice? An example from Summer 2012

- ▶ Debt sustainability analysis for Spain and Italy (ECB, 2012).
- ▶ In July 2012, ten-year government yields for Spain and Italy were 6-7%. For the baseline simulation, the ECB adopted the prevailing market rates, stating: “It is assumed that nominal market interest rates at ten-year maturities will converge from their present levels to 5% by 2015.” (p. 89.)
- ▶ By comparison, in July 2012 the average 10-year OIS rate was 1.4% while the corresponding German yield was merely 1.3%.
- ▶ Including an outsized credit risk premium reflecting an adverse self-fulfilling equilibrium made sustainability appear unnecessarily tenuous.
- ▶ Unintended consequences of discretionary decisions?



# Alternative benchmark

- ▶ A country's central bank should **not** validate/support adverse equilibria.
- ▶ ECB should **not** rely on market rates to perform DSA when market rates reflect outsized credit premia.
- ▶ An alternative benchmark for analysis could be based on OIS rates or equivalent near-safe rates, possibly adding a small margin, e.g. 25bps.
- ▶ Debt should be deemed unsustainable if it fails DSA based on near-safe rates, **not** if it **only** fails DSA based on market rates.



# What is the ECB DSA methodology?

- ▶ Recent ECB publication generates concerns:

“The sovereign yields beyond the short-term (EC) forecast horizon can be derived from the implied forward rates from national yield curves for the available countries. For these countries, the country-specific long-term interest rate assumptions can be defined as the ten-year (five-year, one-year) benchmark bond extended with the forward par yield yields derived on the cut-off date from the corresponding country-specific spot yield curves.”  
(ECB Occasional Paper No 185, April 2017.)
- ▶ Is including the outsized credit premia reflected in market prices part of the official ECB methodology?



## This is an important reason why . . .

“Turning to fiscal policy, since 2010 the euro area has suffered from fiscal policy being less available and effective, especially compared with other large advanced economies. This is not so much a consequence of high initial debt ratios-public debt is in aggregate not higher in the euro area than in the U.S. or Japan. **It reflects the fact that the central bank in those countries could act and has acted as a backstop for government funding.** This is an important reason why markets spared their fiscal authorities the loss of confidence that constrained many euro area governments’ market access.” (Draghi, 2014.)



## Government debt as a safe asset

- ▶ Key feature of euro area crisis has been the compromising of the safe asset status of government debt.
- ▶ ECB did **not** serve as backstop to sovereigns facing roll-over risk and tolerated unnecessarily high credit risk premia.
- ▶ OMT partially reduced damage—demonstrating ECB power to indirectly control outsized risk premia.
- ▶ What has been the role of ECB collateral framework in compromising the safe asset status of government debt?
- ▶ Unintended consequences of discretionary decisions?



# Credit ratings in the ECB collateral framework

- ▶ Before the creation of euro, the eligibility of government debt as collateral for monetary policy operations was beyond questioning.
- ▶ With euro adoption, ECB accepted all government debt as eligible collateral within its collateral framework.
- ▶ Private credit ratings were introduced in collateral eligibility framework to manage the large number of available private assets.
- ▶ After the Franco-German initiative that weakened the SGP in 2004, the ECB was criticized for insufficient differentiation of government debt in its collateral policy and was encouraged to exert **fiscal discipline**.
- ▶ **In November 2005, the ECB communicated that eligibility of government debt was subject to a credit rating threshold.**



# The cliff effect

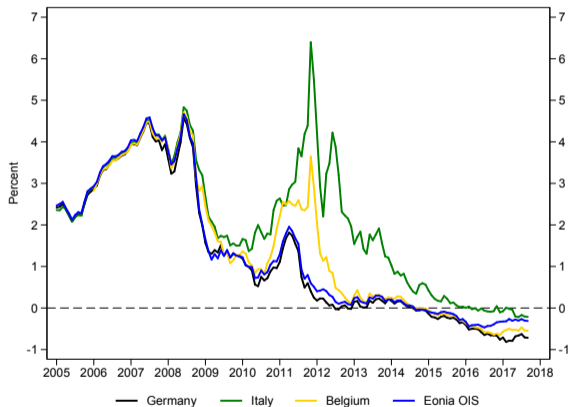
- ▶ During a panic, credit-ratings based eligibility thresholds are destabilizing.
- ▶ Fears of downgrades and potential default become self-fulfilling as investors project that the ECB may refuse to accept government debt as collateral, even for sovereigns with sound fundamentals.
- ▶ Reliance on credit ratings unintentionally guides markets to the adverse expectational equilibrium for weaker sovereigns.
- ▶ The shift in relative demands away from “weak” governments to “strong” governments, induces an indirect fiscal transfer in the form of a risk premium for “weak” sovereigns and a safe haven subsidy for “strong” sovereigns.



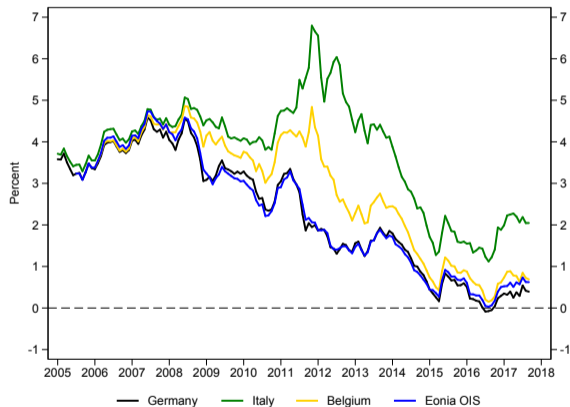


# Quantifying the fiscal transfer: Government bond yields vs OIS

## Two-year maturity



## Ten-year maturity

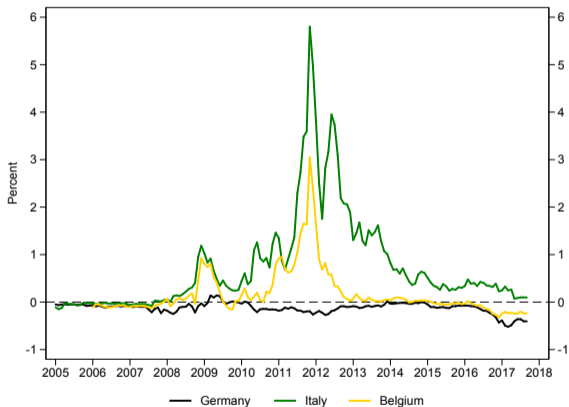


Role of discretionary ECB decisions?

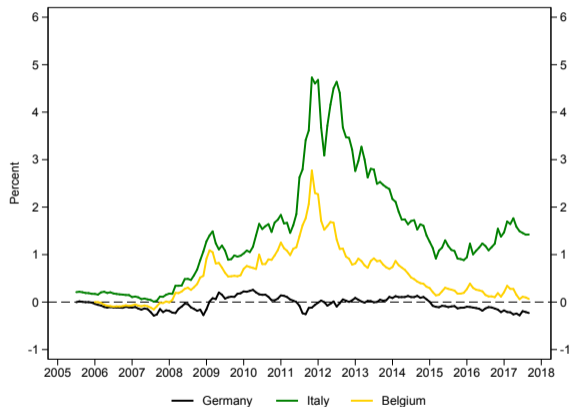


# Government bond yield spread over OIS

## Two-year maturity



## Ten-year maturity



Role of discretionary ECB decisions?



# A question of legitimacy and unintended consequences

- ▶ In 2005, ECB reliance on credit ratings was encouraged by commentators as welcome pressure on governments to reduce debts and deficits.
- ▶ Similar to 2015 decision to deviate from loss sharing for QE, decision could be “rationalized” by referring to **moral hazard**.
- ▶ Given the ECB’s mandate, is “moral hazard” a legitimate argument for determining discretionary aspects of policy?
- ▶ Following Deauville, the reliance on credit ratings unintentionally guided markets to the adverse self-fulfilling expectational equilibrium for weaker sovereigns.
- ▶ Is tolerating unnecessarily high credit risk premia and creating the scope for fiscal transfers from “weak” governments to “strong” governments consistent with the ECB’s mandate?



## A warning before the crisis

“It has been recently argued that the ECB should use its collateral policy as a sanction to exert fiscal discipline . . .

Although superficially appealing, this suggestion would be misguided. . . .

Third, and most importantly, it is clear that the design of the Stability and Growth Pact and its implementation are governmental responsibilities, to be controlled by parliaments. . . . [I]t is not and cannot be the ECB's role to enforce fiscal discipline and to correct shortcomings in the implementation of the Stability and Growth Pact. Attempting to do so would politicise the ECB's operations and ultimately threaten its independence, on which the credibility and effectiveness of monetary policy crucially rely. The ECB therefore focuses on its own mandate, with the primary objective to maintain price stability, leaving others to meet their own responsibilities.” (Issing, 2005)



# The ECB mandate for “misbehaving” governments?

- ▶ Police?
- ▶ Prosecutor?
- ▶ Judge?
- ▶ Executioner?



# 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)





# Towards a positive contribution by the ECB

- ▶ Calibrate QE as appropriate for the euro area as a whole.
  - ▶ Reaffirm symmetry of 1.9% inflation goal.
  - ▶ Commit to continue QE purchases until inflation and inflation expectations are firmly reanchored at 1.9%.
- ▶ Eliminate self-imposed restrictions for QE, expand pace of asset purchases.
- ▶ Eliminate reliance on private credit rating agencies for determining collateral eligibility of sovereign debt.
- ▶ In the absence of a common safe asset, restore safe asset status for all sovereigns with sound fundamentals and in good standing in the euro area.
- ▶ Avoid using monetary policy framework as a disciplining device.
- ▶ Focus policy on ECB mandate, in accordance with Treaty.

