



# EUROPEAN DEBT CRISIS

PRINCETON PANEL

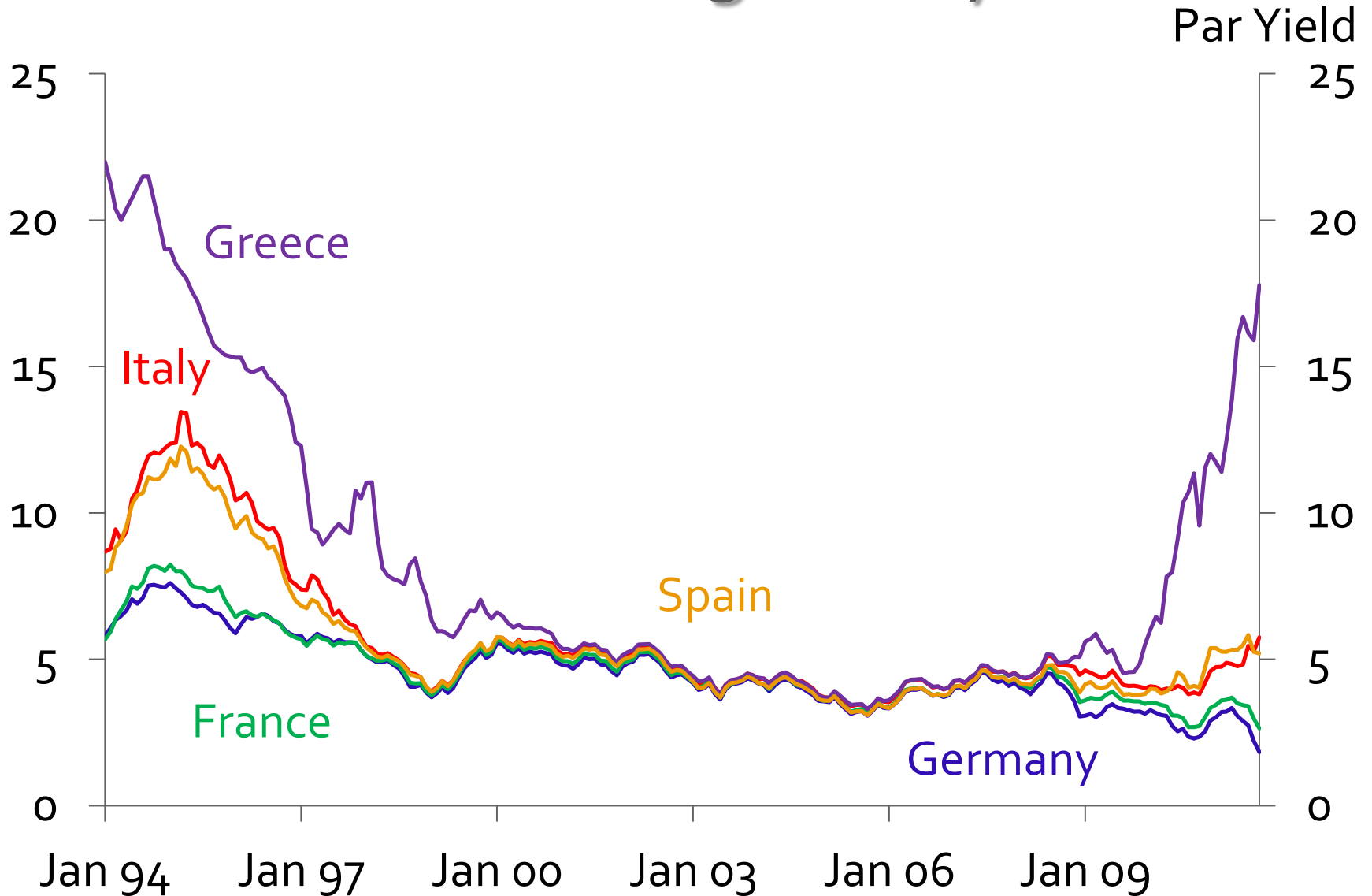
MARKUS BRUNNERMEIER, PAUL KRUGMAN, HYUN SHIN & CHRIS SIMS

Princeton, Oct 24<sup>th</sup>, 2011

# Overcoming the crisis

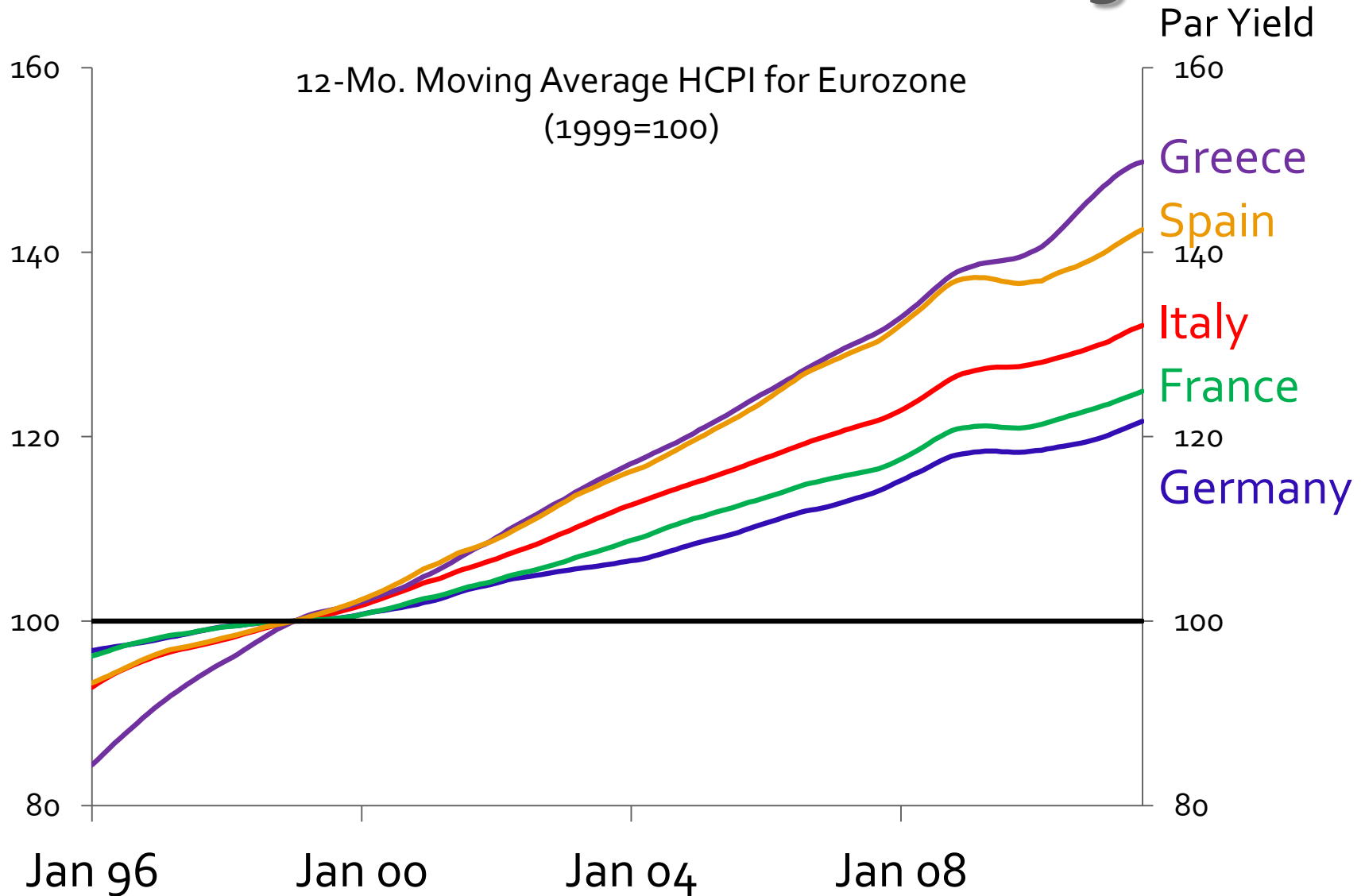
- backwards induction approach:
  1. Diagnosis – how did we get there?
    - Run-up phase
    - Crisis phase
  2. Give long-run perspective
    - Banking landscape (**ESBies**, European FDIC, resolution,...)
    - Monetary framework
    - Fiscal coordination
  3. Transition to long-run

# || Eurozone: 10Y Sovereign debt yield



Source: Eurostat

# || Eurozone: Persistent Inflation Divergence



# Real interest rate gap

Average rates 99-07	Germany	Spain	Greece
Nominal interest rate	3.8%	3.9%	4.4%
Inflation rate	1.8%	3.3%	3.5%
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Real interest rate	2.0%	0.6%	0.9%

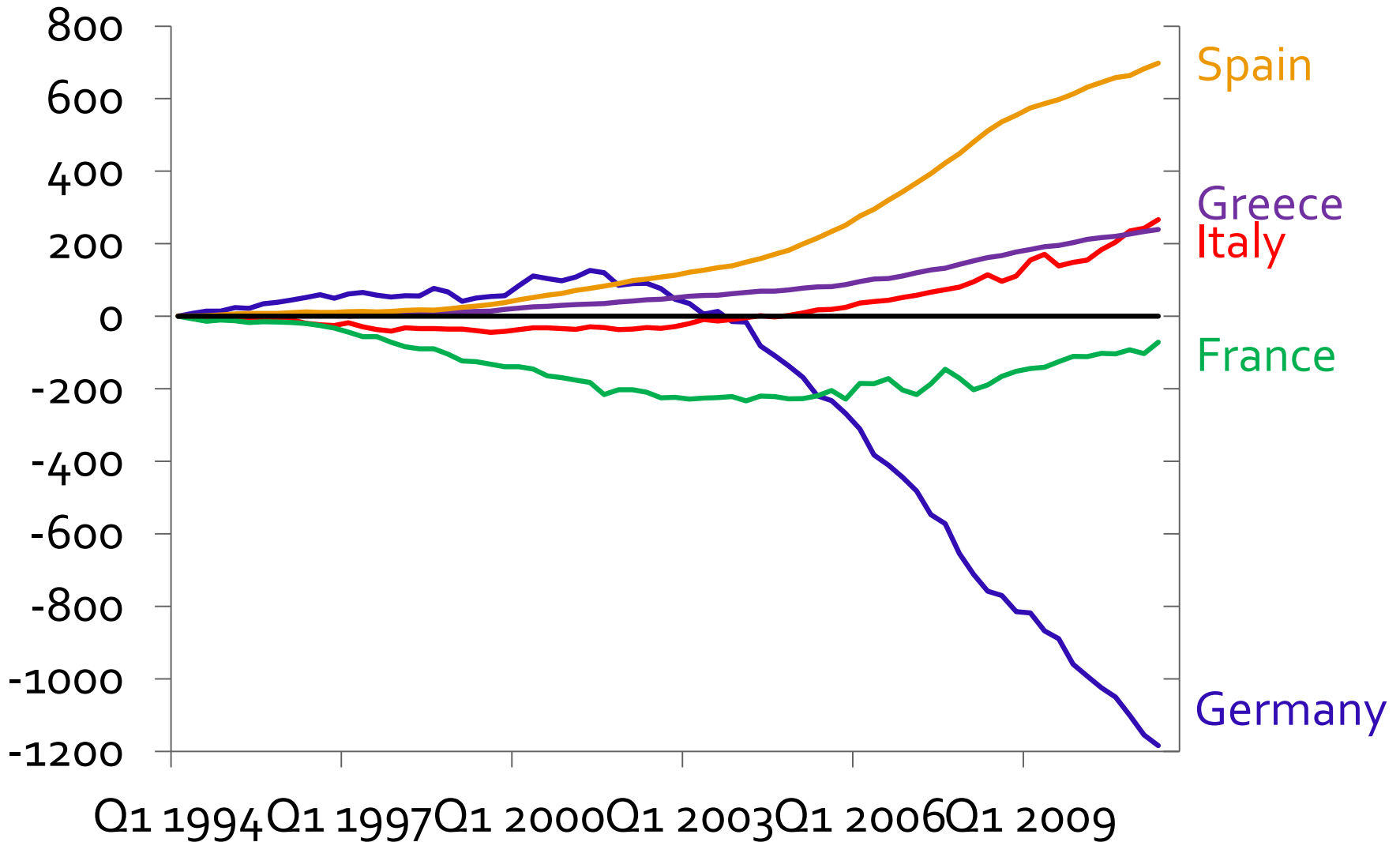
Rate for German savers > Rate for Spanish/Greek borrowers (Government)

Risk charge for sovereign debt = 0

➔ Consequence: larger savings in Germany + capital outflows  
boost to Spanish economy & inflation

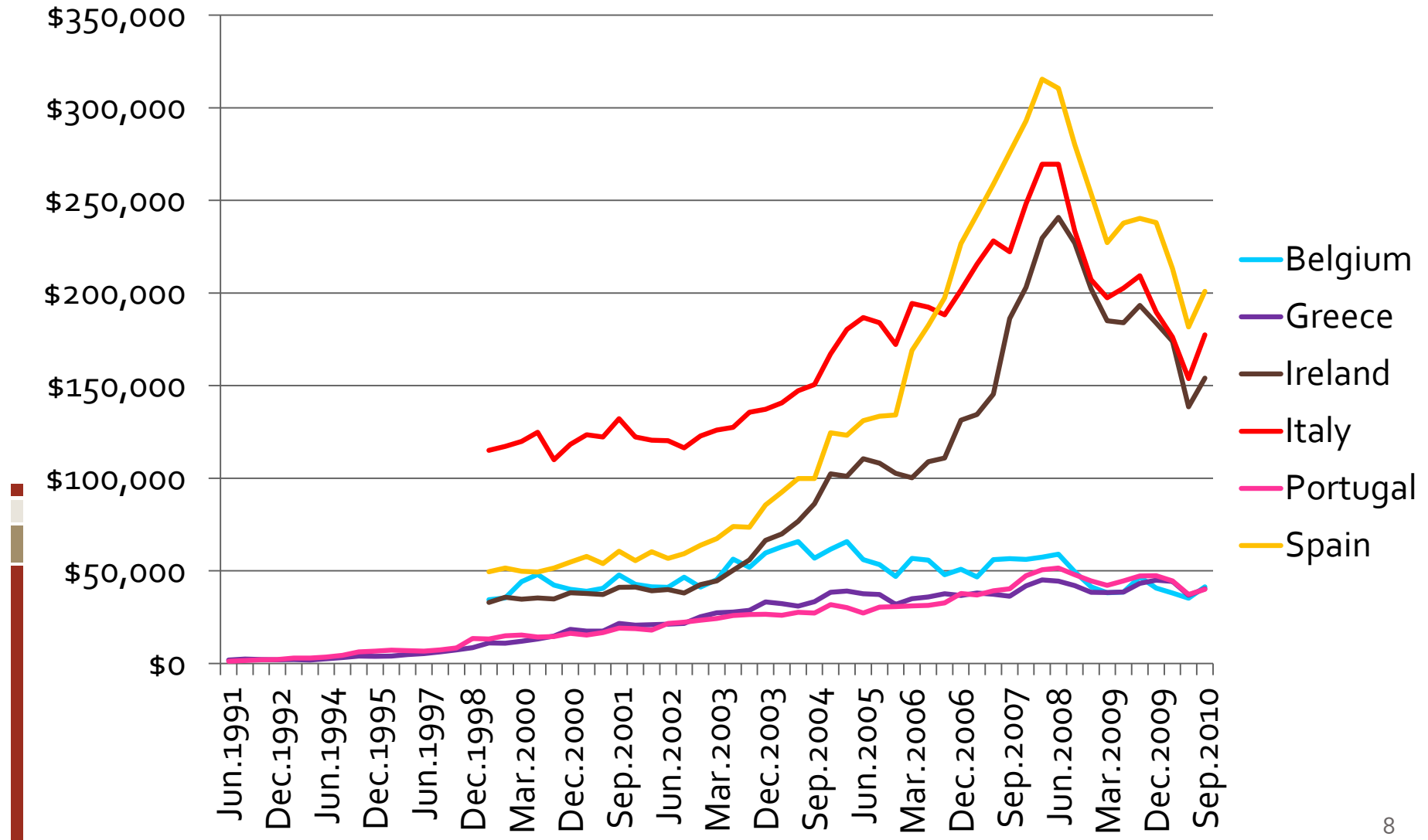
# || Eurozone Accumulated Net Capital Inflows

€Billion



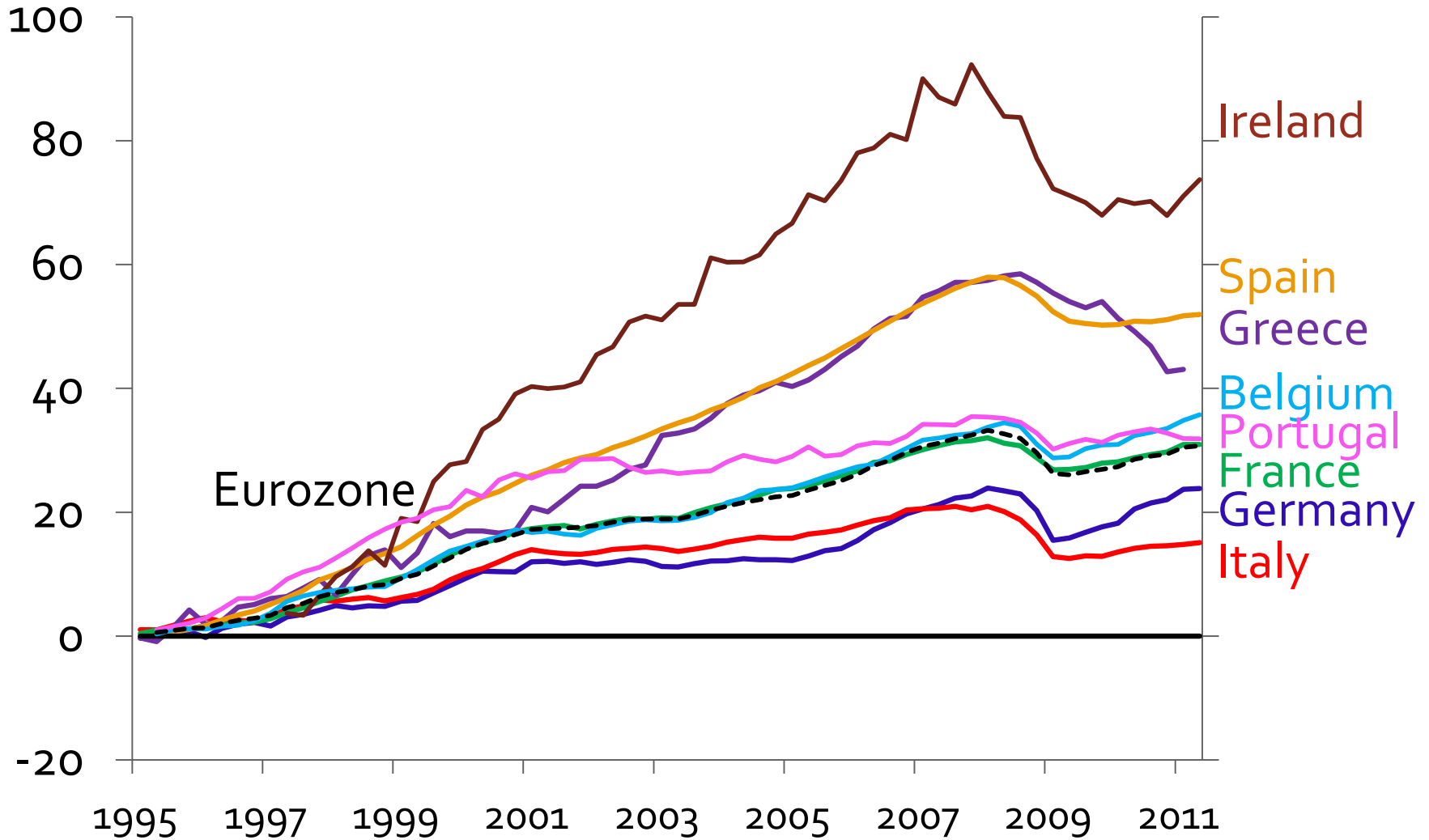
Source: Eurostat

# German Foreign Claims



# || Eurozone: Accumulated GDP Growth

Percent



Source: OECD

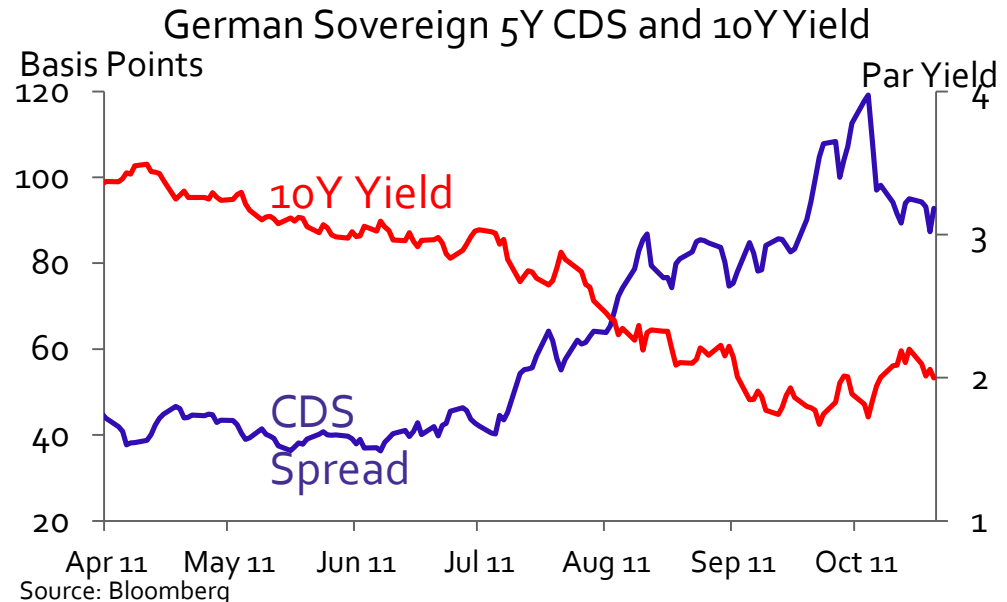


# || Crisis diagnosis 1: Flight to safety



- Today: asymmetric shifts **across borders**
  - Value of German bund/French debt increases
    - German CDS spread rises, but yield on German Bund drops (flight to safety)
  - Value of Italian/Spanish/Greek... sovereign debt declines

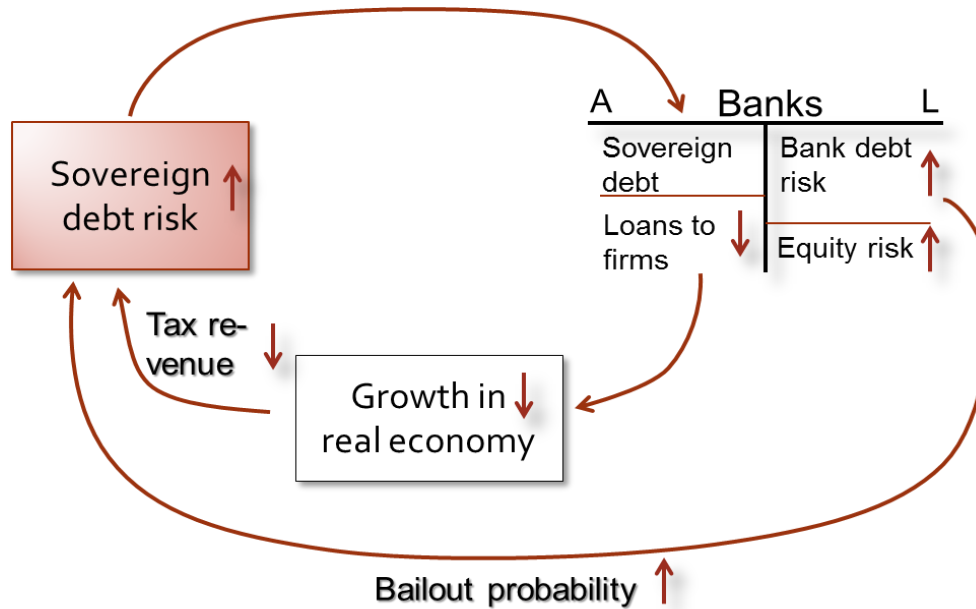
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# || Crisis diagnosis 2: Diabolic Loop

Contagion due to diabolic loop – “twin crisis”



- Trigger
  - Bank insolvency (Ireland, Spain)
  - Public debt/slow growth (Greece, Portugal, Italy)

Banks need risk-free asset for transactions (best collateral)

# Distortions - Inconsistency

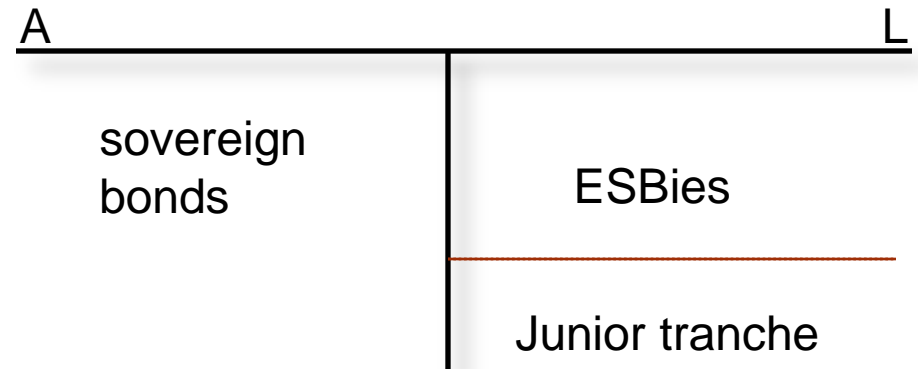
- Sovereign debt is treated as safe asset
  - Basel: Zero risk-weight (for own sovereign)
  - ECB: Low haircut  
e.g. 10 year Greek bond has 10% haircut
- Concentration of sovereign risk in banks
- Inconsistency
  - No-bailout clause
  - Zero risk weight

# ESBies proposal

9 economists: [www.euro-nomics.com](http://www.euro-nomics.com)

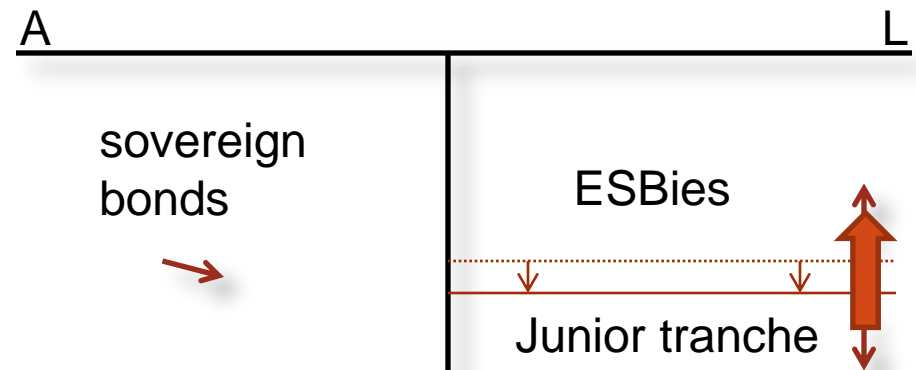
1. Create "safe" asset
    - With "flight to quality" correlation structure
    - ➔ Remove pressure for capital flows **across borders**  
channel them **across different tranches**
  2. Appropriate risk weights + haircuts for sovereign debt
    - ➔ Break diabolic loop
- 
- Part of bigger proposal
    - European FDIC, bank resolution, etc.

# ESBies structure



- up to 60% of GDP (5 year average) from all Euro-members
- ESBies – “flight to quality/safety asset” – *coordination!*
  - Basel: zero weight
  - ECB: preferred asset to conduct open market operations
- No control rights for junior tranche!

# Flight to safety: in times of crisis



- Today: asymmetric shifts **across borders**
  - Value of German bund/French debt increases
    - German CDS spread rises, but yield on bund drops (flight to quality)
  - Value of Italian/Spanish/Greek... sovereign debt declines
- With ESBies: Negative co-movement **across tranches**
  - Value of ESBies tranche expands – due to flight to quality
  - Value of Junior tranche shrinks – due to increased risk
  - Asset side is more stable

# How to create value?

- “Flight to safety fluctuations” are reduced
  - No negative distributional effects away from Greece, Italy, ... towards Germany in times of crisis
  - Can be used in current transition phase!
- ESBies’ liquidity premium in normal times (ex-ante)
  - Estimates: 0.7% in normal times
  - Shared across all euro-members
  - Advantages in crisis times are much larger
    - Especially for peripheral countries!



# Transition phase

- Give long-run perspective
- **Phase in**
  - ESBies (market has to learn about junior tranche)
  - Increase in capital requirements
- **Swap** existing holding of sovereign debt for ESBies (at market prices after price adjustment due to ESBies proposal)
- **Recapitalization** of banks
  - Now smaller --- but there is no way around it
  - “mandated” private (to avoid stigma) + public backup
    - Similar to U.S. in spring 2009 after SCAP
  - Has to be done in coordinate fashion – otherwise free-riding

# Conclusion: Guiding Principles

- Reduce “flight to safety” capital flow fluctuations – coordinate on new asset
- Isolate banks from sovereign risk - avoid diabolic loop
  - Higher risk charges for sovereign debt are essential!
- Don’t distort incentives for sovereigns
  - Interest rate signal as corrective (market) force should remain intact
- Stable **credible** and transparent rule for portfolio weights
  - Fixed rule based on easily measurable units (e.g. (lagged) GDP or ECB key)
  - Change require anonymity of parliamentary approval and go along with change in voting power (change in ECB key)
- Avoid procyclicality
  - Set tranching points conservatively (in good times) in order to have buffer for bad times – note that correlation will shoot up in times of crisis!
- Extra “Sweetener” for transition phase
  - Take advantage of liquidity premium
- Not a guiding principle
  - Maximize size of ESBIES tranche