European Debt Crisis

Princeton Panel
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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: 10 Y Sovereign debt yield

Source: Eurostat
Eurozone: Persistent Inflation Divergence

12-Month Moving Average HCPI for Eurozone (1999=100)

Germany
Italy
France
Spain
Greece

Par Yield

Source: IMF
# Real interest rate gap

<table>
<thead>
<tr>
<th>Average rates 99-07</th>
<th>Germany</th>
<th>Spain</th>
<th>Greece</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal interest rate</td>
<td>3.8%</td>
<td>3.9%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>1.8%</td>
<td>3.3%</td>
<td>3.5%</td>
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<tr>
<td>Real interest rate</td>
<td>2.0%</td>
<td>0.6%</td>
<td>0.9%</td>
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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

Source: Bloomberg 5 year government note indices
Eurozone Accumulated Net Capital Inflows

€Billion

Spain
Greece
Italy
France
Germany

Source: Eurostat
Eurozone: Accumulated GDP Growth

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
Crisis diagnosis 1: Flight to safety

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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
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