It is not just about the experience of 2008...

• 2008/09: governments issued guarantees to contain deterioration of financial conditions. They were subsequently discontinued...
It is not just about the experience of 2008...

• 2008/09: governments issued guarantees to contain deterioration of fin’l conditions. They were subsequently discontinued...
• ...but EA mkt conditions are worse today than in 2008!

Bond issues by EA banks: 2011 vs. 2008
(billion €)

CDS on EA banks: 2001 vs. 2008
(iTraxx financials)

Outline of the presentation

1. Guaranteed bank bonds (GBBs) in the context of rescue measures
2. GBBs: were they effective?
3. Can we do the trick again?
   - Medium-term costs (distortions, moral hazard)
   - Are sovereign guarantees still valuable?
4. Conclusions
The rescue measures: some background

- Oct. 2008: Gvts adopt measures to support banks
  - Guarantees on new debt;
  - Capital injections;
  - Asset purchases/asset guarantees

- These measures had two main objectives:
  - Support funding, in order to avoid liquidity crises and bankruptcies
  - Support lending, in order to reduce the likelihood of credit crunch

Focus on GBBs

- Did GBBs achieve the two objectives?

- Caveat: assessing effectiveness is a challenging task
  - Counterfactual is unknown (eg, what would have happened in the absence of intervention?)
  - Difficult to separate effects of GBBs from those of other rescue measures
1. GBBs in the context of rescue measures

Some facts: banks used GBBs extensively

- GBBs were the most heavily used tool, partly because they do not affect budget deficits
- GBBs represented a large % of total issuance of bank bonds, especially until mid 2009
- GBBs were used extensively in countries hit hard by the crisis, especially by banks that had lost mkt access

2. GBBs: were they effective?

Obj. 1: Avoid widespread bankruptcies

- Three indicators of the impact on banks’ default risk:
  - The CDS spread of the banks that issued GBBs decreased (Chart)
  - The cost of non-guaranteed bond funding decreased significantly (Chart)
  - No. of guarantee calls: despite large volumes of GBBs and bank vulnerability, guarantee calls have been rare
2. GBBs: were they effective?

Obj. 2: Support credit supply (1)

- Assessing the effect on financial intermediation is even more difficult, due to several factors that may generate confounding effects on credit supply:
  - **Banks’ strategies**: banks may have chosen to use funds to strengthen balance sheets rather than to increase lending
  - **Macro conditions**: credit supply was likely affected by strongly expansionary monetary policies, economic recovery
  - **Micro factors**: lending standards likely influenced by bank-specific characteristics which are hard to measure and may emerge slowly (eg losses)

Obj. 2: Support credit supply (2)

- Systematic analyses of the effect of guarantees on bank lending are not available

- These (very) preliminary analyses point to a positive relation between lending growth and the intensity of recourse to GBBs
3. Can we do the trick again?

Can we use GBBs again?

- All in all, guarantees seem to have contributed to the smooth functioning of the financial system
- Can we use them again? At which conditions?
  - Distortions to functioning of banking markets
  - Deteriorating sovereign risk

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3. Can we do the trick again?

Cost Distortions (1)

Cost of GBBs differs sharply even for equally rated banks

Spreads at launch over swap – June 2009

<table>
<thead>
<tr>
<th>S&amp;P Issuering</th>
<th>AAA+</th>
<th>AAA</th>
<th>AAA-</th>
<th>AA+</th>
<th>AA</th>
<th>A+</th>
<th>A-</th>
<th>BBB+</th>
<th>BBB</th>
<th>BBB-</th>
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<tr>
<td>Spread at launch</td>
<td>140</td>
<td>120</td>
<td>100</td>
<td>80</td>
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</table>
Cost Distortions (2)

**Empirically**, during the crisis 65% of the spread of GBBs reflected the risk of the sovereign, NOT the risk of the bank (fig. 1). In **normal times** country-specific factors have **negligible** effects (fig. 2).

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3. Can we do the trick again?

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**Empirically**, during the crisis 65% of the spread of GBBs reflected the risk of the sovereign, NOT the risk of the bank (fig. 1). In **normal times** country-specific factors have **negligible** effects (fig. 2).

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Hence the adoption of GBBs implied that **weak banks** from strong countries got cheaper funds than **strong banks** from weak countries.

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**Fig. 1 - Crisis period (Oct. 08-Oct. 09)**

**Fig. 2 - Pre-crisis period (2006)**
Implications of cost distortions

- Absence of level playing field harms competition...
- ... and leads to misallocation of resources and lower banking system productivity

Moreover, guarantees may distort banks’ strategies and create MH (excessive risk-taking). Credit quality of issuers worsened over time: issues declined (increased) for banks with high (low) rating.

The European crisis: sovereign risk higher, value of guarantees lower

- Since end-2009, the sovereign debt crisis has reduced significantly the value of guarantees, especially those by weaker EA countries.
- Extension of public guarantees by weak countries may not improve funding conditions of banks. It may even worsen the conditions of the sovereign.
<table>
<thead>
<tr>
<th>Conclusions</th>
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| • Bond guarantees proved to be an effective policy tool  
  o Issuance was sizable, and has likely contributed to lower funding costs and to prevent a credit crunch  
| • They contributed to avoiding worst case scenarios, reducing the likelihood of widespread bankruptcies  
| • Can we use them again? Maybe, but probably not in the same form. Two issues need to be addressed  
  o Distortions due to differences in the value of guarantees (sovereign-based pricing of the guarantees?)  
  o Weaknesses of domestic sovereign in some countries (International guarantees? In which form?)  

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<table>
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<th>Sources:</th>
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<tr>
<td>Panetta F. et al. (2011), &quot;The Impact of Sovereign Credit Risk on Bank Funding Conditions&quot;, CGFS Paper No.43.</td>
</tr>
</tbody>
</table>
Cost of bond issues decreased significantly

Yield on non-guaranteed bank bonds
(the vertical line indicates the approval of the GBB program; basis points)

- In 2008-09 the recourse to GBBs was associated to a large reduction of the cost of senior non-guaranteed bank debt

GBBs issuance was associated to lower CDS spreads

Event-study on the announcement of rescue measures:
changes in bank CDS premia by type of measure (basis points)

- Issuance of GBBs was associated to a persistent decline in CDS premia by about 40 basis points from peak to trough
- Recapitalizations have also had significant announcement effects
In order to disentangle the contribution of each characteristic of guaranteed issuance (issuer, sovereign, bond, mkt conditions) a cross-section regression was run on a sample of guaranteed bonds issued in 13 countries between Oct. 2008 and Oct. 2009. The regression was replicated for non-guaranteed bonds before the crisis.

\[ \text{spread} = a_0 + \sum a_j D_j^\text{iss} + \sum a_k D_k^\text{gov} + \sum a_p D_p^\text{mkt} + \sum a_q D_q^\text{iss, mkt} + \varepsilon \]

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<thead>
<tr>
<th>Variable</th>
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<th>Breakdown</th>
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<tbody>
<tr>
<td>Issuer's country</td>
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<td>Low, medium, high</td>
</tr>
<tr>
<td>Issuency</td>
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<td>Low, medium, high</td>
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<tr>
<td>Currency of denomination</td>
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<td>Euro, US dollar, other currencies</td>
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<td>Rating of issue issuer</td>
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<td>AAA, AA, A, BBB</td>
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<tr>
<td>Issuer rating</td>
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<td>BBB, AA, A, AAA</td>
</tr>
<tr>
<td>Issuer sector</td>
<td>2</td>
<td>Banks, non-bank financial institutions</td>
</tr>
<tr>
<td>Issuer CDS spread</td>
<td>3</td>
<td>Low, medium, high</td>
</tr>
<tr>
<td>Bond issuer frequency</td>
<td>2</td>
<td>Once, more than once</td>
</tr>
<tr>
<td>Sovereign CDS</td>
<td>3</td>
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<tr>
<td>Sovereign rating</td>
<td>2</td>
<td>AAA, not AAA</td>
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<tr>
<td>Size of bond guarantee pledged by government</td>
<td>3</td>
<td>Low, medium, high</td>
</tr>
<tr>
<td>Total resources committed by government (% to GDP)</td>
<td>3</td>
<td>Low, medium, high</td>
</tr>
<tr>
<td>Consequence of payment in case of default</td>
<td>3</td>
<td>Low, medium, high</td>
</tr>
<tr>
<td>Consequence of non-payment</td>
<td>3</td>
<td>Low, medium, high</td>
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