ESRB High-Level Task Force on Safe Assets

Philip Lane (Chair)
Sam Langfield (Secretary)
Spyros Alogoskoufis (Assistant Secretary)
Safe assets: general issues

• **Sovereign bonds: benchmark assets**
  – Large stock; trading liquidity; common information base
  – Collateral function in many market transactions

• **Sovereign risk**
  – Multi-country monetary union; national fiscal liabilities (no joint mutualisation)
  – Nexus between bank risk and sovereign risk at national level

How to square this circle in the euro area?
A possible path to safe assets in the euro area

- Sovereign bond-backed securities (SBBS) create “safety” by contract rather than by mutualising risk
  - Pooling and tranching of cross-border portfolios of national sovereign bonds

- Properly designed, SBBS could support financial stability by helping complete banking and capital markets unions

- Reduce systemic risks by weakening the bank-sovereign nexus
  - Combination of diversification and de-risking of bank sovereign bond portfolios

- Reduce barriers to further financial integration
  - SBBS could be used to collateralize area-wide transactions
  - A mature SBBS market could provide an area-wide benchmark for asset pricing

- But SBBS not a panacea: they stand alongside other policy initiatives to complete BU and CMU and deepen EMU
ESRB High-Level Task Force on Safe Assets

- In June 2016, the ESRB General Board established a High-Level Task Force “to further investigate the empirical and practical considerations” related to SBBS

- **HLTF’s contribution is technical**: sheds light on unique properties of SBBS and their potential role in enhancing financial stability

- **Two-volume report summarises the HLTF’s findings**:
  - Vol. I (50 pp): motivation; security design; market development; regulation
  - Vol. II (240 pp.): risk measurement; contractual features; market intelligence; market liquidity; and a more detailed analysis of regulation
HLTF’s main finding: there are regulatory barriers to SBBS

• SBBS represent one interesting and attractive option for the design of an area-wide low-risk asset
• Gradual development of a demand-led market for SBBS may be feasible under certain conditions
• One necessary condition is for an SBBS-specific enabling regulation to reflect the unique design and risk properties of these securities
• The level of investor demand for SBBS is an empirical question, which can only be tested by removing regulatory impediments
Basic security design reflects policy objectives

Security design is a policy choice:
- On asset side, designed to be area-wide
- On liability side, designed for senior to be low risk (based on Volume II simulations) and non-senior to be marketable (based on market intelligence)

Portfolio of euro-denominated central government bonds (based on capital key):

- 70% Senior
- 20% Mezz
- 10% Junior

See Volume II
Risk properties of SBBS: insights from default simulations

Panel A
Uncorrelated defaults

Panel B
Correlated defaults

Average LGD in history = 37%
Risk properties of SBBS: insights from market data

<table>
<thead>
<tr>
<th>Risk measure</th>
<th>Time period</th>
<th>Senior security (70%-thick)</th>
<th>Mezzanine security (20%-thick)</th>
<th>Junior security (10%-thick)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical simulation (long-term averages)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yield and EL</td>
<td>2000-16</td>
<td>(DE = s) &lt; FI</td>
<td>BE &lt; (IT = m = ES) &lt; IE</td>
<td>PT &lt;&lt; j &lt;&lt; GR</td>
</tr>
<tr>
<td>1% VaR</td>
<td>2000-16</td>
<td>NL &lt; (DE = s = AT) &lt; FR</td>
<td>ES &lt; (IT = m) &lt;&lt; IE</td>
<td>IE &lt; (PT = j) &lt;&lt; GR</td>
</tr>
<tr>
<td>1% ES</td>
<td>2000-16</td>
<td>FI &lt; (DE = s = AT) &lt; FR</td>
<td>ES &lt; (IT = m) &lt;&lt; IE</td>
<td>IE &lt; (PT = j) &lt;&lt; GR</td>
</tr>
<tr>
<td>Historical simulation (crisis times)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yield and EL</td>
<td>2011-12</td>
<td>DE &lt; s &lt; FI</td>
<td>BE &lt; (IT = m) &lt; ES</td>
<td>PT &lt;&lt; j &lt;&lt; GR</td>
</tr>
<tr>
<td>Yield and EL</td>
<td>June 2012</td>
<td>DE &lt; s &lt; FI</td>
<td>BE &lt; (IT = m) &lt; ES</td>
<td>PT &lt;&lt; j &lt;&lt; GR</td>
</tr>
<tr>
<td>1% VaR</td>
<td>2011-12</td>
<td>DE &lt; (FR = s = NL) &lt;&lt; BE</td>
<td>ES &lt; (IT = m) &lt;&lt; PT</td>
<td>IT &lt;&lt; (j = IE) &lt;&lt; GR</td>
</tr>
<tr>
<td>1% ES</td>
<td>2011-12</td>
<td>DE &lt; (FR = s = NL) &lt;&lt; BE</td>
<td>ES &lt; (IT = m) &lt;&lt; PT</td>
<td>IT &lt;&lt; (j = IE) &lt;&lt; GR</td>
</tr>
<tr>
<td>1% VAR-for-VaR</td>
<td>June 2012</td>
<td>DE = s = NL</td>
<td>ES = m &lt; PT</td>
<td>PT &lt; j &lt; GR</td>
</tr>
<tr>
<td>GARCH volatility</td>
<td>June 2012</td>
<td>DE = s = FI</td>
<td>PT &lt; m &lt; GR</td>
<td>PT &lt; GR &lt; j</td>
</tr>
</tbody>
</table>
How would SBBS be issued?

- Each government still issues and services its own bonds
  - SBBS arranger(s) buy conventional sovereign bonds at market prices
  - If a bond does not have a market price, it would not be included in the portfolio

- SBBS arranger(s) could be private or public
  - Private: Multiple arrangers to be regulated and supervised
  - Public: Single arranger would require institutional framework to preclude perception of joint guarantees

- SBBS issuers are bankruptcy-remote pass-through entities
  - Issuers bear no risk on their own account: they receive portfolio directly from SBBS arranger(s), and pass cash flows to SBBS investors according to seniority
Generic SBBS issuance model
Venue of purchases and institutional framework

- SBBS arranger(s) could assemble sovereign bonds on primary and/or secondary markets

- The choice of venue represents a potential trade-off
  - Minimise changes in DMO issuance vs minimise warehousing by arranger(s)
  - To further reduce warehousing risk, arranger(s) could make use of an order book: investors submit orders before arranger(s) assemble the cover pool

- The institutional framework can be designed to assuage concerns arising from potential warehousing of the underlying
  - Private sector arrangement would exclude mutualisation from warehousing
  - Endowing a public sector arranger with fixed initial paid-in capital (similar to ESM on a much smaller scale) would prevent uncontrolled mutualisation
Incremental development of an SBBS market

• SBBS issuance would be demand-led
  – Issued only insofar as there is investor demand for the three securities

• SBBS market would develop gradually
  – Early phase: Similar to ESM bond market development
  – Transitional phase: Market grows gradually (e.g. to €1.5tn), conditional on smooth market functioning

• Market size can be controlled by policymakers
  – Unintended side-effects can be managed by rationing the issuance of “SBBS license numbers”
  – An issuer limit for SBBS could help to maintain market functioning and price formation in national sovereign bond markets (similar to PSPP)
Ambiguous effects on sovereign bond market liquidity

**Freezing effect (-ve):**
Sovereign bonds frozen on SBBS issuers’ balance sheets

**Spillover effect (+ve):**
Liquid SBBS could be used to reduce hedging costs

(Hedge=Snr & Mezz)

![Graph showing share of government debt purchased under PSPP vs conditional normalised bid-ask spread](image)
Investment-enhancing effect from non-euro investors

Holdings of government bonds

- Non-EA investors: €2.3tn (26%)
- EA non-financials: €0.4tn (4%)
- EA other financial institutions: €0.2tn (2%)
- EA pension funds: €0.3tn (3%)
- EA investment funds (non-MMF): €0.9tn (10%)
- EA insurance firms: €1.5tn (17%)
- EA banks: €1.5tn (17%)
- Eurosistema: €1.8tn (20%)

Holdings of supranational bonds

- Non-EA investors: €410bn (50%)
- EA other financial institutions: €23bn (3%)
- EA investment funds (non-MMF): €40bn (5%)
- EA insurance corporations and pension funds: €77bn (9%)
- Eurosistema: €178bn (22%)
- EA banks: €87bn (11%)
- EA other: €23bn (3%)

EA insurance firms and pension funds: €77bn (9%)

ESRB
European Systemic Risk Board
European System of Financial Supervision
Which investors would buy junior SBBS?

Holdings of high yield debt securities

Demand for junior SBBS is an empirical question

- It could arise from investors seeking high returns
- Euro area investors currently hold more than €800bn in instruments with risk/return characteristics similar to junior SBBS
- Most of these investors are investment funds

- What happens to junior SBBS during “risk-off” episodes?
  - Price effect (yes): senior SBBS increase in value; junior SBBS fall in value (see Volume II, Section 1)
  - Volume effect (no): New SBBS would only contain bonds with a market-clearing price, so junior SBBS must also have a market-clearing price (see Volume II, Section 2)

European Systemic Risk Board
European System of Financial Supervision
Regulation: necessary to remove existing barriers

• At present, SBBS receive unfavourable regulatory treatment
  – Sufficient reason why the securities have not yet been created by markets

• One necessary condition for market creation is to treat SBBS in line with their unique design and risk properties
  – Senior SBBS: Analysis in Volume II suggests that they should be treated no more severely than sovereign bonds
  – Non-senior SBBS: Treatment should reflect their greater riskiness

• An enabling SBBS-specific product regulation could remove existing barriers by providing a new treatment for all sectors

• RTSE reform would substantially enhance demand for SBBS
  – However, this does not provide sufficient justification for RTSE reform, which should be evaluated on its own merits
Conclusion and next step

- SBBS represent one interesting and attractive option for the design of an area-wide low-risk asset
- Gradual development of a demand-led market for SBBS may be feasible under certain conditions (notably regulation)
- HLTF published its report on 29 January 2018 to inform policy discussions
- Next step: initiative from the EU Commission in Q2 2018
  - Commission launched an inception impact assessment on SBBS product regulation for interested parties to submit their feedback (closed 20 February)