What role, if any, can market discipline play in supporting macroprudential policy?

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Macroprudential Policy Tools

“Signaling Effect”

Measures of Systemic Importance / Financial Distress

**BS Indicators*
**Market prices*

Systemic Risk

Macroprudential Policy

***Conditions for effective market discipline*:**

- Reliable and timely information
- Creditors must consider themselves at risk
- The reaction to market signals needs to be observable

Measuring tools of Systemic importance / Financial instability

Market Discipline

Outline

- Balance sheet indicators and market prices: inputs of macroprudential policy
- Preconditions for effective market discipline and its supporting role of macroprudential policy
- Policy conclusions and the way forward

BSI and MP as measurement tools of **systemic importance**

- Measures of systemic importance must capture the spillover or contagion effects from the institution whose systemic importance we want to measure
- Challenges/Limitations:
  - EMH
  - MP only available for institutions that tap the markets: No regulatory requirements (Evanoff and Wall, 2002). Relevance!!!
  - Policy makers´ intervention affects market signals

BSI and MP as measurement tools of **systemic importance**

- Other Challenges/Limitations:
  - The time dependence character of systemic importance
  - The difficulty to separate the externalities that the failure of a large firm can cause on the financial system and the externalities associated with common exposure to a common shock

BSI and MP as measurement tools of **systemic importance**

- Approaches:

BS Data

-A&L Valuation

-Gaps:
Lack of info on interconnectedness
+
Substitutability

  - **Indicator based approach**
  - **Network approach**

Mkt prices

- Frequent & publicly available info

  - **Market information-based approaches**
    - Co-Risk measures: ΔCo VaR (Adrian and Brunnermeier, 2009)
    - Portfolio approach

BSI and MP as measurement tools of **financial instability**

- **“Quantitative tools”** designed to identify episodes of financial distress in advance:
  - **Market prices** and **balance sheet indicators**
  - EWIs (include market prices and balance sheet indicators among other explanatory variables)
  - Others: Single model measures (VARs) and multiple-module measures (macro stress test)

BSI and MP as measurement tools of **financial instability**

- Market prices:
  - – Raw indicators (CDS and yield spreads)
  - – Estimates of credit risk from market prices (i.e. Credit Ratings)

List of EU banks with quoted CDS (September, 2010)

Allied Irish Banks PLC
Banco Bilbao Vizcaya Argentaria SA
Banco Comercial Portugues SA
Banco Santander SA
Anglo Irish Bank Corp Ltd
Governor & Co of the Bank of Ireland/The
Lloyds TSB Bank PLC
HSBC Bank PLC
Standard Chartered PLC
BNP Paribas
Natixis
Societe Generale
UniCredit SpA
Banco Espirito Santo SA
Mediobanca SpA
Commerzbank AG
Deutsche Bank AG
Dresdner Bank AG
UniCredit Bank AG
NIBC Bank NV
Skandinaviska Enskilda Banken AB
Svenska Handelsbanken AB
Banca Nazionale del Lavoro SpA
Alpha Bank AE
Danske Bank A/S
IKB Deutsche Industriebank AG
Erste Group Bank AG
Raiffeisen Zentralbank Oesterreich AG
Intesa Sanpaolo SpA

DnB NOR Bank ASA
Rabobank Nederland NV
Barclays Bank PLC
Caja de Ahorros y Monte de Piedad de Madrid
BAWAG PSK Bank fuer Arbeit und Wirtschaft und Oesterreichische Postsparkasse
Landesbank Baden-Wuerttemberg
Fortis Bank SA/NV
Banca Monte dei Paschi di Siena SpA
Royal Bank Of Scotland NV
Bayerische Landesbank
FCE Bank PLC
ING Bank NV
Caja de Ahorros de Valencia Castellon y Alicante
SNS Bank NV
Banco de Sabadell SA
Banca Italease SpA
Nordea Bank AB
Banco Popolare SC
Standard Chartered Bank
Royal Bank of Scotland PLC/The
Dexia Credit Local
HBOS PLC
Credit Agricole SA
WestLB AG
Unione di Banche Italiane SCPA

Market prices as measurement tools of **financial instability**

- **Market prices as indicators of financial distress**
  - *Raw indicators (CDS and yield spreads)* (IMF GFSR, 2007; Annaert, De Ceuster, Van Roy, Vespro, 2010): Limitations
    - Are marginal contributions of the determinants of <u>changes</u> in banks´ CDS spreads (credit risk, liquidity, business cycle, mkt conditions e.g. risk aversion) stable overtime? If not, must be re estimated frequently in order to be an effective measuring tools
    - Do fundamental variables explain changes in CDS spreads in periods immediately before or during crisis?
    - Do regulators´ intervention (e.g. bail out) result in paradigm changes in the determinants of CDS spreads? (Balasubramnian, Cyree, 2010)

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Preconditions for effective market discipline and its supporting role of macroprudential policy

- Three conditions are necessary for market discipline to be effective:
  - Adequate and timely information on financial institutions´ risk profiles
  - Financial institutions´ creditors must consider themselves at risk and
  - Reaction to market signals needs to be observable

Preconditions for effective market discipline and its supporting role of macroprudential policy

- *Adequate and timely information on financial institutions´ risk profile*
  - The market assessment of risks relies on auditors and supervisors to enforce not only honest accounting but also accounting frameworks that allow for the prompt recognition of losses (Huizinga and Laeven, 2009)
    - Emphasizes the need for public communication of stress test

Preconditions for effective market discipline and its supporting role of macroprudential policy

- *Adequate and timely information on financial institutions´ risk profile (cont.)*
  - Availability of sufficient and comparable information
    - Comparability demands convergence between accounting standard setters over global accounting rules
    - Financial information on “interconnectedness” and “substitutability”

Preconditions for effective market discipline and its supporting role of macroprudential policy

- *Financial institutions´ creditors must consider themselves at risk*

  - PCA and credible resolution regime (Benston and Kaufman,1998)
    - Prompt supervisory action limits the probability systemic spill over → preserving the information value of BS & market indicators
    - Absolute priority of claims needs to be protected so that creditors know *ex ante* the repayment priority (Hart, 2002) → **PD** and **LGD**
    - In spite of the existing credible resolution regimen (FDICIA) yield spreads signaled the return of implicit guarantees after the government´s intervention in the LTCM (Balasubramnian and Cyree, 2010)

Hart & Zingales (2010) include haircut 20%

Preconditions for effective market discipline and its supporting role of macroprudential policy

- *Financial institutions´ creditors must consider themselves at risk (Cont.)*
  - Mechanisms to shift the gov´t trade off between restructuring and bail out in favor of restructuring
  - The regulatory requirement of additional cushion of junior LT debt: extraprotection + financial instrument (market price)
  - Aimed at lim systemic risk (P, cost) rely on individual FI info → Do not address prob of all institutions having problems simultaneously
  - Effectiveness: rule based PS + Credible resolution regime (mkt and PS)

Preconditions for effective market discipline and its supporting role of macroprudential policy

- *Financial institutions´ creditors must consider themselves at risk (Cont.)*
  – Regulatory contingent capital instruments (CoCos) → strengthen capitalization
  – Hart & Zingales (2010) “bail in” schemes that would impose losses onto LT unsecured debt better suited to deal w/ tail risks
  – Contribute ↑ mkt discipline <u>if triggers are transparent and predictable</u>

Preconditions for effective market discipline and its supporting role of macroprudential policy

- *Financial institutions´ creditors must consider themselves at risk (Cont.)*
  - What would the pricing of CoCos, CDS (Hart & Zingales , 2010) /debt under bail-in reflect?
    - CoCo´s conversion rate → to deter shareholders excessive risk taking
    - Conversion at supervisors´ discretion → mkt signals reflecting P (PS trigger + financial condition)
    - Limits in comparability across countries and overtime
    - Reduce the attractiveness for investors

Preconditions for effective market discipline and its supporting role of macroprudential policy

- *Reaction to market signals needs to be observable*
  - Investors have no limitations on analyzing that information and do not suffer from co-ordination failure when monitoring (retail investors are more likely to have these limitations) (BIS 2003)
  - Sufficiently deep market and liquid markets of Jr LT debt
    - Hence the need of having mandatory requirements
    - Advantage of CDS: standardization and exchanges

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Policy conclusions and the way forward

- In spite of their limitations market prices and balance sheet data either “raw” or as part of a methodology, are under consideration as measuring tools in macroprudential policy
- Market discipline is a necessary condition to ensure their info quality → Supporting role of macroprudential policy
- How? ….

Policy conclusions and the way forward

- Convergence between accounting standard-setters over global accounting rules
- Supervisors must have private information on "interconnectedness" and "substitutability" to supplement the info content of market prices
- Supervisors´ communication of their systemic assessments to the FIs (including stress test) as well as communication of the changes in the stringency of their policy measures could improve the information content of <u>balance sheet indicators</u> and <u>market prices</u>

Policy conclusions and the way forward

- Mandatory requirements of Jr LT Debt which includes bail-in clauses
- **+** supervisors´ prompt corrective policy **+**credible resolution regimes for failed institutions → adequate incentives to shareholders and uninsured creditors to engage in risk analysis and act consequently