

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

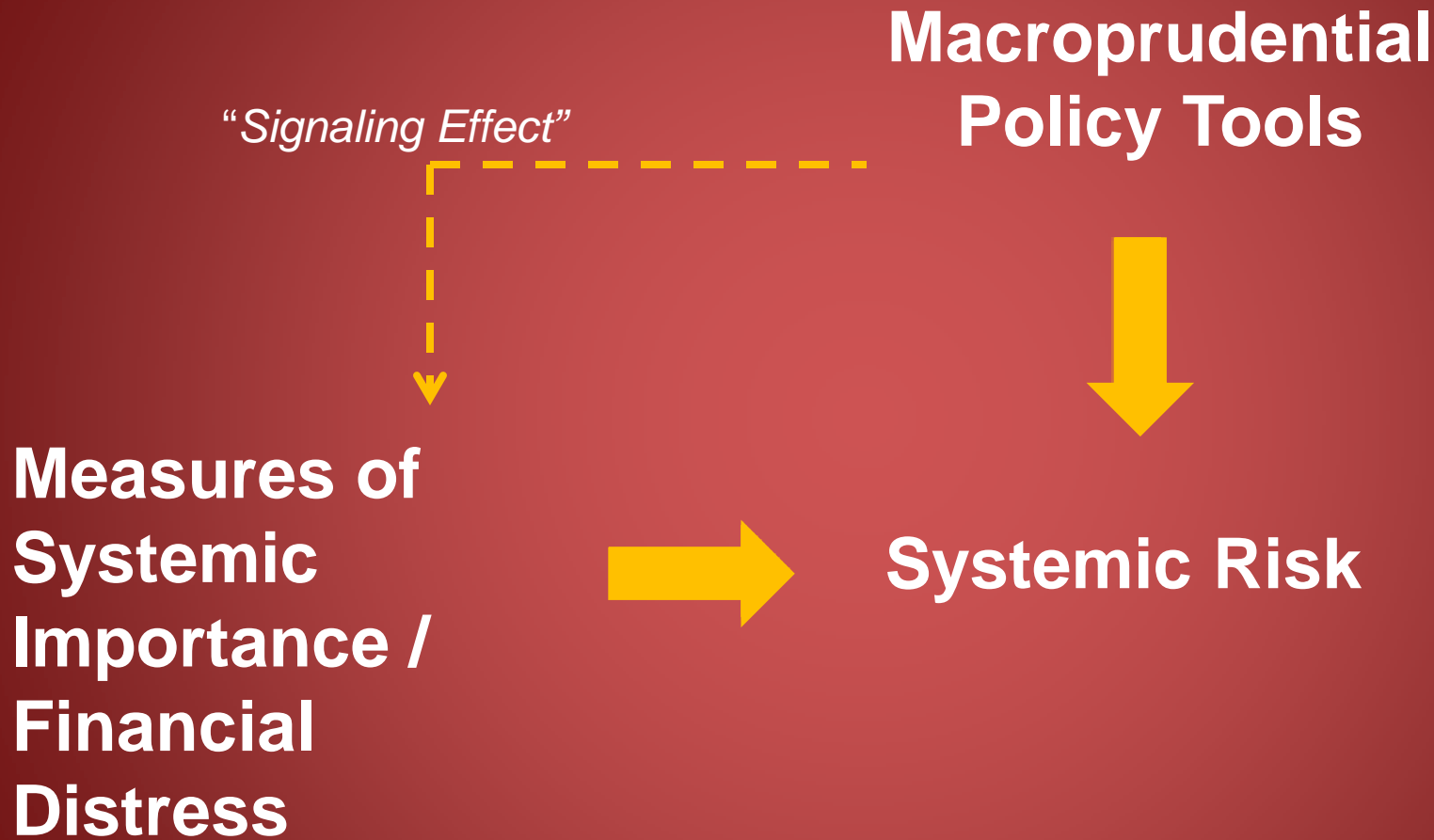
By

Maria J. Nieto

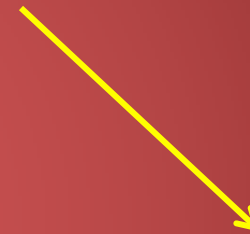
Banco de España

**Federal Reserve Bank of Chicago  
13<sup>th</sup> Annual International Banking Conference**

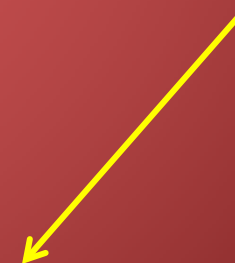
*These views do not necessarily represent those of Banco de España*



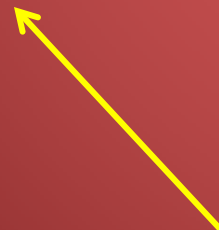
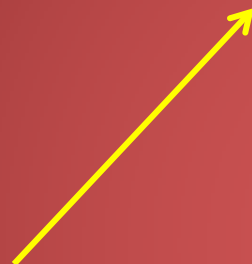
# Macroprudential Policy



*Measuring tools of Systemic importance / Financial instability*



# Market Discipline



- Conditions for effective market discipline:**
- Reliable and timely information
  - Creditors must consider themselves at risk
  - The reaction to market signals needs to be observable

# 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**

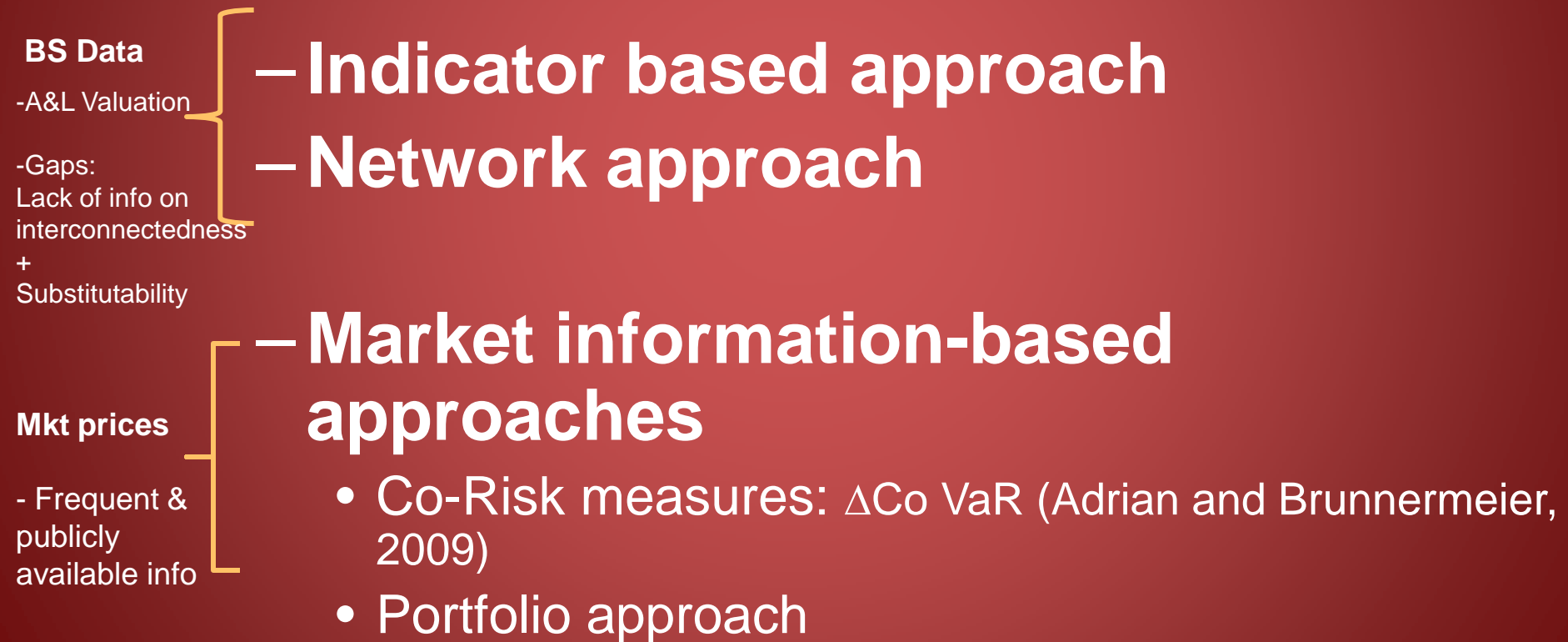
- **Measures** of systemic importance must capture the **spillover or contagion effects** from the institution whose systemic importance we want to measure
- **Challenges/Limitations:**
  - **EMH**
  - **MP only available for institutions that tap the markets: No regulatory requirements (Evanoff and 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:



# 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 changes 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)

# 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

# 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 if triggers are transparent and predictable

# 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 coordination 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

# 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**

# 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 balance sheet indicators and market prices

# 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