The Perimeter of Regulation

Presentation to the conference

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Financial crisis highlighted the need to focus on systemic risk

- **Unprecedented reach of the financial crisis:**
  - The interconnectedness of financial institutions, markets and systems
  - The potential systemic risk posed by instruments, entities and markets that were either weakly regulated or fell outside the regulatory perimeter
- **Genesis of the crisis also highlighted:**
  - Rapid financial innovation that outpaced risk management and supervisory practices
  - Incentives for regulatory arbitrage
- **Redesign will require**
  - A macro-prudential orientation for financial stability policy
  - Need to focus on the sources of systemic risk.

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What is systemic risk?

Definition

- **Negative Externalities**
  - Risks that are not internalized and can significantly impact the financial system
- **Disruption to the flow of financial services**
- **Significant spillovers to the real economy**

What should be covered?

- **Financial institutions**
  - Credit intermediation, savings, risk management, payment services, supporting primary and secondary markets
- **Financial markets and instruments**
  - Funding channels, liquidity, risk management
  - Financial infrastructure for clearing and settlement, trading, pricing
- **All types of financial intermediaries or markets are potentially systemic to some extent.**

Identifying systemically important entities, markets or instruments

- **Systemic importance will be graduated and not binary, reflecting the potential systemic impact**
- **Time varying, conditioned by the economic environment**
  - Under weak economic conditions
    - Higher correlation of losses
    - Higher risks of contagion from otherwise unimportant elements
- **Conditioned by the structure of the financial system**
  - Robustness of other elements to withstand shocks
  - And the frameworks to deal with financial institution and market failures
- **Conditioned by geographical context**
  - National, regional or international
- **High degree of judgment needed founded on a detailed knowledge of the financial system**
  - Cannot be based simply on quantitative indicators
  - Qualitative analysis will require a system wide approach

Assessment Criteria

Primary indicators related to:

Size – the amount of services provided by the component

- Important but even more so when linked with:
  - Interconnectedness;
  - Complex business models and group structures
- Relevant in assessing clusters of institutions that may be individually small but are exposed to common risk factors.

Lack of Substitutability – difficulty of other components to provide the same services

Interconnectedness – financial distress in one institution or market raises the likelihood of distress in others through provision of funds and services, funding or confidence factors.

Contributing Factors:

- **Vulnerabilities:** Leverage, Liquidity and maturity mismatches, complexity
- **Institutional framework that can mitigate systemic risk**
  - Robustness of clearing and settlements and technical infrastructure to withstand failures and shocks
  - Crisis management framework and capacity to resolve failing institutions and transfer their activities quickly to other entities

Quantitative Analysis

- **Use of indicators**
  - Simpler, and draws on readily available information
  - Useful when systemic importance is relatively stable
  - Better at capturing some aspects (size) than others (substitutability, interconnectedness)
  - Less useful in capturing emerging trends or handling entities that fall outside the regulatory perimeter
- **Models**

  Network Analysis
  - Used to analyze the degree of interconnectedness
  - Based on a construction of a matrix of gross inter institution exposures (most often inter-bank exposures)
  - Effect of spillovers from a shock to one institution on the system can be simulated
  - Draw back is the limited availability of date on bilateral exposures and which can change rapidly
- **Portfolio models of risk based on market data**
  - Founded in portfolio risk models extended to groups of institutions;
  - Used to identify common risk factors or to track how distress in one institution may affect others
  - Advantage -- based on publicly available information, but disadvantage -- market perceptions vary greatly between normal and crisis times
- **Stress testing and scenario analysis**

  -- Help to address the state-contingent nature of systemic importance

Implications

- Need a framework to conduct assessments and update them on a regular basis:
  - Institutional arrangements;
  - Methodologies
  - Data collection and sharing etc.
- Need to calibrate the nature and scope of regulation to reflect systemic relevance
- Need to adopt a functional approach to regulation rather than one based on type of institutions
- Potential need to extend the perimeter of regulation
- Potential need to update the design and coverage of contingency plans, safety nets and crisis management arrangements

Implications for extending the perimeter of regulation

- **Different regulatory approaches and solutions**
  - Systemic importance of the unregulated sector will depend, inter alia, on the robustness of the regulated sector to withstand shocks and the capacity to handle failures
  - Potentially systemic entities need not all be regulated in the same way
- **Part of the response is to enhance the regulatory and risk management frameworks of systemic institutions within the regulated sector**
  – Reducing the probability of failures
  – Improving resolution capacity and contingency planning
  – Strengthening core financial infrastructure
- **Part of response is to level the regulatory playing field between banks, insurance and securities, and in treatment of financial groups** -- to reduce the incentives and scope for regulatory circumvention and arbitrage
- **Part will be to extend the perimeter of regulation in a graduated manner depending on the systemic importance of the institutions**
  – Minimum reporting requirements
  – Risk management frameworks scaled to size and complexity
  – Minimum capital and liquidity requirements

Entities that may be affected

- **Complex financial groups that include unregulated entities** (SPVs, unregulated holding companies);
- **Hedge funds**
  - Minimum standards for risk management
  - Reporting requirements
  - Minimum capital requirements
- **Credit risk transfer products** – credit default swaps, financial guarantees
  - Transparency (characteristics of instruments, risk exposures to market participants, valuation methods)
  - Counterparty risk management arrangements
  - Development of market infrastructure
- **Others** – mortgage originators and lenders

Issues in assessing unregulated entities

- **Data Gaps**
  - Lack of information on institutions, markets and instruments that fall outside the regulatory perimeter
  - Legal authority to collect information may be lacking

- **Approaches**
  - Emphasis on a system wide approach and to “knowing the financial system”
  - Flow of funds data can help identify emergence of significant sectors, and alert the authorities to the needs of more intensive monitoring;
  - Enhancing the granularity of the information collected and provided by the regulated entities on exposures to other sectors and entities
  - Providing the systemic risk regulator with the means to obtain and analyze information on unregulated entities;
  - Incorporating information from regulatory reporting and supervisory insights into the systemic risk analysis

Some next steps

- **IMF/BIS/FSB have developed guidelines to help assess the systemic importance of institutions, markets and instruments**
  - **High level principles that are flexible enough to apply to a broad range of countries**
    - Establishment of an assessment framework
    - System-wide assessment
    - Information and methodologies
    - Communication/transparency
    - Cross-border cooperation
  - **Follow up work is focused on the practical application of the guidelines**
    - By standard setters to help calibrate regulatory frameworks
    - By the IMF to help support financial sector surveillance
- **National authorities are developing systemic risk regulators and macro-prudential approaches,** e.g. proposals for
  - Financial Services Oversight Board in the US
  - European Systemic Risk Board