

# Rethinking the role of state in Finance in the aftermath of the crisis

**Dr. Seyed Hossein Mirjalili**

**Senior Adviser to Executive Director**

**The World Bank Group**

**Securities Exchange Organization,**

**Tehran, 21 Mordad 1392 (August 12, 2013)**

## Readings: •

- 1-World Bank, "**Global financial Development Report 2013**", World bank publication, 2013 •
- 2-Martin Cihak, Asli Demirguc-Kunt, Erik Feyen, and Ross Levine, "**Benchmarking financial systems around the world**", Policy working paper 6175, August 2012. •
- 3-Martin Cihak and Asli Demirguc-Kunt, "**Rethinking the state's role in finance**", Policy Research Working Paper 6400, April 2013 •
- 4-Bank for International Settlement, "**Principles for Financial Market Infrastructure**", April 2012 •
- 5-Martin Cihak, Asli Demirguc-Kunt and R. Barry Johnson, "**Incentive Audit; A New Approach to financial Regulation**", World Bank working Paper 6308, January 2013

- The global financial crisis has given greater credence to the idea that active state involvement in the financial sector can be helpful for stability and growth.
- Some developed financial systems (such as those of Australia, Canada, and Singapore) have shown remarkable resilience so far. It means, the quality of a state's policies for the financial sector matters more than the economy's level of development.
- The state is defined as including not just the government, but also other public sector agencies, such as the central bank, securities exchange regulator, and the competition agency.
- Economics also provides arguments for state's role in finance, because of "market imperfections".

- **-First**, when one bank fails, this can cause depositors and creditors of other banks to become nervous and start a run on these other banks.
  - This “contagion”—whereby the weakness in one bank causes stress for otherwise healthy financial institutions—can reverberate through the economy, causing problems for the economy. This is the classic bank run.
  - second**, externalities associated with risk taking, especially for large financial institutions.
  - Third**, limitations on the ability of people to process information, and the tendency of some people to follow the crowd, can motivate governments to take an active role in financial markets.
  - For example, when people have difficulty fully understanding complex investments, this can lead investors to make systematic mistakes, which can jeopardize the stability of the economy, with potentially adverse ramifications for people who neither make those investments nor have any influence over those that do.

- Governments can limit the adverse repercussions of these market failures. For example, regulation and supervision can limit risk taking by financial institutions to avoid the potential externalities of financial institution fragility.
- Also, authorities can regulate the nature of information disclosure to facilitate sound decisions and even regulate financial products, similar to how governments regulate the sale of food and drugs. Thus, economics provides many reasons for an active role of the state in finance.
- In the recent crisis, the role of direct state interventions has increased quite dramatically, both in developed economies and in the developing ones.
- Early evidence reveals that some of these interventions worked, at least in the short run.
- The global financial crisis was not only about financial instability. In some economies, the crisis was associated with important changes in financial depth and access. These are characteristics of financial markets affected by the financial crisis.

**four key areas of the state's role that were highlighted by the crisis, are:**

1. the state's role in promoting financial sector competition without planting the seeds of the next crisis
2. direct government interventions, such as state ownership and guarantees
3. the state's role as regulator and supervisor of the financial sector
4. the state's role in supporting financial sector infrastructure, such as payments and securities settlements, and credit information sharing systems.

# Q1: The Role of the State in Promoting Competition in financial sector

- Even if the recent crisis is perceived as an episode where competition exacerbated private risk taking and helped destabilize the system, the correct public policy is not to restrict competition. What is needed is a regulatory framework that ensures that private incentives are aligned with public interest.
- The state can play a role in enhancing competition by designing policies that guarantee market contestability through healthy entry of well-capitalized institutions and timely exit of insolvent ones and by creating a market-friendly informational and institutional framework.
- Governments should be mindful of the consequences of their intervention during Crises and limit negative consequences on competition and risk taking.

## Q2: Direct State Interventions

- Some state banks played a countercyclical role during the global financial crisis. However, this lending continued even after economic recovery, questioning the effectiveness of the policy.
- Moreover, research finds that efforts to stabilize aggregate credit by state-owned banks come at a cost, particularly through the deterioration of the quality of intermediation and resource misallocation. This effect undermines the benefits of using state banks as a countercyclical tool.
- The empirical evidence largely suggests that government bank ownership is associated with lower levels of financial development and slower economic growth. The governance of these institutions needs to be improved.
- Another popular form of intervention during the recent crisis was through credit guarantee programs. Evaluations of these programs suggest that the benefits are modest and costs are often significant.



# Q3: What is the state's role in regulation and supervision of financial sector?

- Financial sector regulation and supervision are areas where the role of the state is not in dispute; the debate is about how to ensure that the role is carried out well.
- A key challenge of regulation is to better align private incentives with public interest. Supervision is meant to ensure the implementation of rules and regulations.
- The financial crisis underscored limitations in supervisory enforcement and market discipline. It emphasized the importance of combining strong, timely, anticipatory supervisory enforcement with better use of market discipline. It also highlighted the importance of solid and transparent legal and institutional frameworks to promote financial stability. Thus, in many developing economies building supervisory capacity needs to be a priority.
- A lesson learned from the crisis is that economies suffered from the crisis had weaker regulation and supervision practices as well as less scope for market incentives than the rest

- Distorted incentives at various levels were one of the main causees of the financial crisis.

The financial crisis gave rise to a debate on approaches to reform regulation and supervision. We discuss in this presentation a new approach to financial regulation as “incentive audit”.

### Problems and reforms of Credit Rating Agencies:

1. Empirical evidence suggests that ratings have often been lagging indicators that show at best only information already known by the market (see, for example, Afonso, Furceri, and Gomes 2011; Arezki, Candelon, and Sy 2011).
2. Much of the post-crisis debate on credit rating agencies has revolved around conflicting interests because of the mixing of rating and advisory services. Many credit rating agencies offer “credit rating advisory services” that essentially advise an issuer on how to structure its bond offerings and “special purpose entities” so as to achieve a given credit rating for a certain debt tranche. This creates potential conflicts of interest, because credit rating agencies may feel obligated to provide issuers with those ratings if issuers followed their advice on structuring the offering.

This was an important reason why many of the risky, complex structured financial products had very favorable ratings.

3-Credit rating agencies derive some of their importance from the fact that the regulatory system relies on their assessments.

4-Following failures of ratings in the U.S. subprime mortgage-based securities market, work has been undertaken to reduce regulatory reliance on credit ratings.

5-Replacing references to ratings with references to market-based risk indicators could sharply increase pro-cyclicality because such indicators are typically much more volatile than credit ratings.

6-As a result, it is expected that ratings will be complemented with other measures of risk.

- 7-But eliminating references to credit ratings in regulations is impractical and undesirable given the lack of proper alternatives.

8-Vernon and Wolff (2012) argue that the role of credit ratings in regulation should be reduced. (Vernon,Nicolas and Guntram Wolf,2012,"rating agencies and sovereign credit risk assessment", Bruegel 2011/17.<http://www.bruegel.org>)

9-Transferring the responsibility for ratings to public authorities is unlikely to be a good alternative because of inherent conflicts of interest.

10-Goodhart (2008) and Caprio, Demirguc-Kunt, and Kane (2010) suggest that credit rating agencies need to bond the quality of their work by subjecting it to effective independent review and setting aside some of their fees in a fund from which third-party special masters of expedited civil judgments could indemnify investors for provable harm.  
(Capiro, Gerard, Asli Demirguc-Kunt, and Edward J, Kane, 2010, "The 2007 meltdown in structured securitization: search for lessons, not seapegoats", World Bank research observer, 25(1):125-155 )

- Currently 17 percent of Emerging Market Developing Economies regulators require their commercial banks to have external credit ratings; the comparable number for advanced economy regulators is 8 percent.
- Institutional Structures for Regulation and Supervision in financial sector
  - Regarding the structure, three broad models are being used for regulation and supervision around the world:
    - three-pillar or “sector” model (banking, insurance, and securities);
    - two-pillar or “twin peak” model (prudential supervision for banking, securities and insurance and business conduct supervision, consumer protection and corporate governance of banking, securities and insurance),(Australia, Canada, Netherland, France and Italy)  
(Two pillar model in Australia comprises: “Australian Prudential Regulation Authorities” and” Australian Securities and Investments commission”)
    - 3- Integrated model (all types of supervision under one roof entitled Financial Supervision Authority).(UK, Japan, Germany)

- One of the most remarkable developments of recent years has been a trend from traditional three pillar model toward either the two-pillar model or the integrated model.
- During the global financial crisis, some of the two pillar model (particularly Australia and Canada) have been relatively unaffected, while the United States, with a sector approach to supervision, has been at the crisis epicenter.

## Accounting Standards

- financial industry executives pointed out that fair value accounting had been a major aggravating factor in the initial phase of the crisis, in late 2007 and early 2008.
- But the challenges related to the International Financial Reporting Standard are unprecedented because these standards are set at the global level.

- The crisis has increased the need for public oversight of financial rules, but it is not yet clear how this can be done effectively and consistently.
- A monitoring board of public entities was created in 2009 to oversee the International Financial Reporting Standard Foundation, but its construction is awkward and raises concerns about its legitimacy and future effectiveness.
- For the foreseeable future we will have to rely on trial-and-error experimentation for international financial regulatory bodies, which in most cases cannot take existing national arrangements as a direct model.
- The International Financial Reporting Standard Foundation is registered in the United States; its staff is in London; its monitoring board gives permanent seats only to the United States, European Union, and Japan; and it still caters largely to audiences in the developed world, even as large emerging economies represent a rapidly increasing share of global finance.

- Incentive Audits: A new approach to financial regulation;
- The global financial crisis has highlighted the crucial role that incentives play in finance.
- If economic agents in the financial system face a bad structure of incentives, this tends to lead to a build-up of systemic risk. These incentives include bank managers' incentives to boost short-term profits and create banks that are "too big to fail", credit rating agencies' incentives to keep issuing high ratings for subprime assets, regulators' incentives to forebear and withhold information from other regulators in stressful times, and policymakers' incentives to keep bailing out weak financial institutions rather than allowing timely exit from the financial sector.
- the main elements of incentive audit would include:
- Ownership and control structure of financial and non financial firms, including financial system infrastructure. This analysis should include unregulated activities where financial activity is significant. It should examine group structures and important interconnections and channels of control;
- Institutional framework for oversight of financial systems, including the responsibilities, independence, resources and accountability of the supervisory and regulatory bodies; and the role, liability and funding sources of self regulatory bodies and agencies responsible for due diligence in financial systems (credit rating agencies, accounting firms) -- to help identify conflicts of interest and potential moral hazard;



- Adequacy of financial statistical data and information disclosures on the risk exposures of financial institutions, and the adequacy of the analysis and early warnings based on financial information -- to identify significant information gaps that would weaken market discipline or effective surveillance of financial systems.
- Role of implicit and explicit guarantees in the financial system and the role and effectiveness of crisis management, resolution and bankruptcy provisions, including potential systemically important and too-big-to-fail financial institutions to identify potential moral hazard.
- Corporate governance culture, risk management and compensation practices especially in systemically important financial firms to identify the role of internal procedures in promoting and mitigating risk taking
- Incentive compatibility of financial regulations and their potential role in contributing to or reducing systemic risk.
- Incentive and monitoring issues posed by financial innovation.

- A 2010 report by a parliamentary commission examining the roots of the 2007 financial crisis in Iceland, notes the overly rapid growth of the three major Icelandic banks as a major contributor of the crisis, and documents the underlying “strong incentives for growth,” which included the banks’ incentive schemes as well as the high leverage of the major owners.
- Calomiris (2011), uses an incentive-based approach to propose a reform of the U.S. regulatory framework.
- Cihak, Demirguc-Kunt, and Johnston (2012) provide a more detailed description of the audit, going from a top-level examination of the key elements of the financial environment in an economy—market structure and financial instruments, government safety net, legal framework, and quality of enforcement—to a more detailed and prioritized assessment of incentives, mindful of the likely effect on the behavior of the main agents in the system.
- The checklist of incentive audits would have to be performed regularly, and their outcome used to address incentive issues by adapting regulation, supervision, and other measures.

# How they addressed the problem?

1. Micro prudential tools ( capital and liquidity requirements, provisioning and collateral policies)
  1. To address externalities that are not internalized in the risk assessments of financial firms and markets and create systemic risk, including risks from size, interconnections, and lack of substitutability;
  2. As second best response to deal with residual moral hazard associated with too-big-to-fail or other implicit or explicit guarantees. Instruments should be designed to be incentive compatible and to minimize complexity and incentives for circumvention.
2. Disclosure requirements that would be graduated depending on the threat to systemic risk and which would cover both regulated and unregulated entities
  1. To identify information asymmetries that prevent market and agency monitoring of risks in individual institutions and risk transfers that could have systemic consequences.

3. Conduct of business rules, to be applied to all financial firms, agents, auditors and rating agencies. ( To identify conflicts of interest that would interfere with effective market and agency monitoring.)
4. Compensation practices in financial firms; ( To identify incentives for risk taking within financial firms that could pose a threat to systemic stability)
5. Competition policy, and mergers and acquisitions involving financial firms;( To limit the risks associated with having systemically important financial institutions)
6. Cease and desist orders covering both regulated and unregulated entities ( To prevent the materialization of threats to systemic stability)
7. Resolution regimes for financial firms. ( To limit risks of contagion from failures of financial firms and moral hazard associated with too big to fail)
8. Analysis and dissemination of assessments and warning of risks to financial stability; ( To enhance the quality of private risk assessment and reduce the risks of herding)
9. Authority to gather information from unregulated firms engaged in financial transactions;( To identify risks to systemic stability posed by firms that are outside the regulatory perimeter)
10. Authority to designate systemically important financial institutions; ( To identify firms that would require more intensive supervision or disclosure practices.)

# Q4: What is the role for the state in supporting financial sector infrastructure?

- The global financial crisis has highlighted the importance of a resilient financial infrastructure. The state can help establish market infrastructure that helps to manage and mitigate counterparty risk. This includes robust large-value payment systems and, support for the development of collateralized interbank markets.
- There is significant scope for state involvement in the development of a robust infrastructure for securities and derivatives settlements. The state can further reduce counterparty and settlement risks by monitoring these transactions and their clearing and settlement arrangements.
- Levine (2011) finds that the design, implementation, and maintenance of financial policies in 1996–2006 were primary causes of the financial system's demise. He rejects the view that the collapse was only due to the popping of the housing bubble and the herding behavior of financiers selling increasingly complex and questionable financial products. (Levine, Ross, 2011, "regulating finance and regulators to promote growth", paper presented for the federal reserve bank of Kansas city's Jackson Hole symposium, August 25-27)

- Payment and securities settlement systems are the infrastructure that enables the transfer of monetary value between parties discharging mutual obligations.
- Performance of OTC derivatives settlement system, is one of the areas in which the crisis highlighted the need for proactive oversight and development support.
- Performance of securities settlement systems, an area in which the crisis highlighted a number of challenges and possibilities for reform and improvement.
- There is no counterparty risk in transactions settled through exchanges, because the exchange acts as the regulator and the counterparty to each transaction.
- OTC markets are prone to counterparty risk because there is no centralized exchange and the parties deal directly with each other.
- As a result, the stability of OTC markets, especially in times of financial crisis, depends strongly on the legal and regulatory framework that governs their operation.

- The global financial crisis emphasized the risks to financial stability that may arise from the lack of transparency and the significant counterparty risk that characterizes many OTC markets.
- The crisis made apparent that risks emanating from OTC transaction can create substantial systemic risks and can significantly exacerbate financial distress.
- First, the G-20, in September 2009, proposed that all standardized OTC derivatives contracts should be centrally cleared and traded on exchanges or electronic platforms, where appropriate, by the end of 2012.
- In addition, transactions in OTC derivatives should be reported to trade repositories to enhance the transparency of the market.
- Second proposal for increasing stability in OTC derivatives transactions is to strengthen the role of central counterparties.(CCPs).

- Clearing transactions through institutions acting as CCPs can contribute to financial stability and standardization of OTC derivatives contracts by mitigating counterparty risk, using multilateral netting, requiring daily or intraday margin calls and clearing fund contributions, and enhancing transparency.
- Should a counterparty of a CCP that is involved in OTC trading become insolvent, it would not create the chain reaction that, for example, the default of Lehman Brothers triggered, because a properly managed and supervised CCP should be able to act as a firewall between the defaulter and other counterparties.
- Therefore, promoting the use of trade repositories in OTC derivatives transactions could further enhance market transparency and reduce counterparty risks.



- A trade repository for OTC derivatives is a centralized registry that maintains an electronic database of open OTC derivatives transaction records.
- In the absence of a trade repository, transaction data are maintained by individual counterparties and possibly other institutions providing services to market participants (for example, prime brokers, CCPs, trading platforms, and custodians), often stored in proprietary systems in various formats with different data fields.
- Enhanced market transparency through trade repositories helps public authorities and market participants monitor the buildup of exposures in relevant markets, thereby supporting sound risk management; market discipline; and effective oversight, regulation, and supervision.
- To better manage risks in the future, the state has to ensure regulatory reforms in OTC markets to increase transparency and encourage supervisors and overseers to effectively monitor the buildup of systemic risk.

- Moving toward increased use of CCPs and trade repositories for OTC derivatives markets is an important step in the right direction.
- A CCP is useful for a market with highly liquid, standardized contracts.
- A CCP would need to comply with high risk management standards and require counterparties to post appropriate collateral in a timely manner.
- The new Principles for Financial Market Infrastructures, released by the Committee on Payment and Settlement Systems and the International Organization of Securities Commissions in April 2012, covers the CCPs and trade repository issues.

- **Principles for financial market infrastructures**
  - General organization**
    - Principle 1: Legal basis*
    - Principle 2: Governance*
    - Principle 3: Framework for the comprehensive management of risks*
  - **Credit and liquidity risk management**
    - Principle 4: Credit risk*
    - Principle 5: Collateral*
    - Principle 6: Margin*
    - Principle 7: Liquidity risk*
  - **Settlement**
    - Principle 8: Settlement finality*
    - Principle 9: Money settlements*
    - Principle 10: Physical deliveries*
  - **Central securities depositories and exchange-of-value settlement systems**
    - Principle 11: Central securities depositories*
    - Principle 12: Exchange-of-value settlement systems*

- **Default management**
  - Principle 13: Participant-default rules and procedures*
  - Principle 14: Segregation and portability*
- **General business and operational risk management**
  - Principle 15: General business risk*
  - Principle 16: Custody and investment risks*
  - Principle 17: Operational risk*
- **Access**
  - Principle 18: Access and participation requirements*
  - Principle 19: Tiered participation arrangements*
  - Principle 20: financial market infrastructure links*
- **Efficiency**
  - Principle 21: Efficiency and effectiveness*
  - Principle 22: Communication procedures and standards*

- **Transparency**  
*Principle 23: Disclosure of rules, key procedures, and market data*  
*Principle 24: Disclosure of market data by trade repositories*
- **Responsibilities of central banks, market regulators, and other relevant authorities for financial market infrastructures**  
*Responsibility A: Regulation, supervision, and oversight of financial market infrastructures*  
*Responsibility B: Regulatory, supervisory, and oversight powers and resources*  
*Responsibility C: Disclosure of policies with respect to FMIs*  
*Responsibility D: Application of the principles for FMIs*  
*Responsibility E: Cooperation with other authorities*