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Rethinking Financial Sector Regulation in the Aftermath of the Global Economic Crisis

Introduction

The repercussions of the 2008 global financial crisis, originating from high-income countries, particularly the United States and the United Kingdom, are still being widely felt. On 12 July 2010, the International Monetary Fund (IMF) Managing Director cautioned that policy-makers in Asia need to be prepared for possible shocks arising out of increased downside risks to global growth. Since the financial sector behaviour and its social and economic consequences have been at the centre of the global economic crisis, there has been considerable debate on the existing regulatory and other aspects which impact the incentive structures and behaviour of the financial sector participants.

Ben Bernanke, Chairman, Federal Reserve Board of the United States, has argued:¹

“One crucial lesson from both that crisis (Asian Financial Crisis, 1997–98)² and the recent one is that financial institutions must be carefully regulated, transparent, and sufficiently well capitalized and liquid to withstand large shocks.”

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¹ “Asia and the Global Financial Crisis.” Speech by Ben S. Bernanke at the Federal Reserve Bank of San Francisco’s Conference on Asia and the Global Financial Crisis, Santa Barbara, California, 19 October 2009. Available online at <http://www.federalreserve.gov/newsevents/speech/bernanke20091019a.htm>.

² Text in parentheses added by the authors.

Several policy reviews to enhance the resilience of the global financial system have been undertaken since 2008. At their 2009 London summit, the G-20 countries declared that major failures in the financial sector and in financial regulation and supervision were the fundamental causes of the crisis.³ The G-20 (2009), therefore, resolved to ensure that their domestic regulatory systems were strong.

The Financial Stability Board (FSB), set up in June 2009 at the initiative of the G-20 countries, stated that its "... objective is to create a more disciplined and less procyclical financial system that better supports balanced sustainable economic growth (FSB, 2009)."

The Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System⁴ has highlighted that uncritical commitment to theories such as the one that advocated that markets are self-correcting and that regulation accordingly is unnecessary has contributed to the crisis. The *Turner Review* observed that the theory of efficient and rational markets is now subjected to extensive challenge (Turner, 2009). The report on the "Structure of Financial Supervision: Approaches and Challenges in a Global Market Place", by the Group of Thirty, chaired by Paul Volker, recommended avoiding regulatory gaps and overlaps so that regulatory arbitrages are substantially mitigated (http://www.group30.org/pubs/GRP30_FRS_ExecSumm.pdf). The 11th Geneva Report on the World Economy, *The Fundamental Principles of Financial Regulation* (Brunnermeier et al., 2009), also made a number of recommendations relating to the strengthening of financial sector regulation.

Rakesh Mohan, former Deputy Governor of Reserve Bank of India and Co-Chair of the G-20 (2009) report on strengthening financial regulation, has succinctly summarized the essence of these reports as follows:

What is common among all these reports is the acknowledgement that regulation and supervision in the advanced economies was clearly too lax in recent times and that there needs to be considerable rethinking leading to much strengthened, and perhaps, intrusive regulation and supervision in the financial sector (Mohan, 2009).

³ See <http://www.londonsummit.gov.uk/en/summit-aims/summit-communique/>.

⁴ Full report available at: http://www.un.org/ga/econcrisissummit/docsFinalReport_CoE.pdf.

Strong regulation of the inherent incentives built into the capitalist system is essential if the benefits of efficient use and allocation of capital by the markets are to be sustainably realized (Rajan, 2010). But, as the financial crisis has demonstrated, even normally well-functioning markets can fail during episodes of manias, panics and crises. Indeed, significantly large market failures are not a new phenomenon. There have been more than 10 incidents of market turbulence and financial crisis since 1992, even if the current global crisis is not included (Schinasi, 2005: 13). The regularity of the crises necessitates a deep-seated change in the current approach to financial regulation.

The adequacy of existing internationally agreed frameworks for banking regulation has been extensively debated. The revised Basel guidelines, or the Basel II guidelines introduced in 2005, have been implemented by a majority of the countries to strengthen their banking regulation. These regulations have come under greater scrutiny following the contamination of a few major banks' balance sheets due to the sub-prime crisis, thus highlighting the limitations of Basel II. Tarullo (2008: 282–83) has argued that simpler international rules may frequently be more valuable than a comprehensive scheme in achieving specified regulatory ends, even where the activities regulated are themselves complex. He has also observed that "...its (Basel II)⁵ ultimate lesson is that something different must be tried, not that sustained and structured cooperative efforts should be abandoned (ibid.: 284)."

The inadequacy in the existing arrangements for financial sector regulation and cooperation has been recognized by the various committees noted earlier and by economists and policy analysts (Rajan, 2010; Eichengreen, 2010). Many useful recommendations have emerged from their research that could strengthen financial regulation.

The present paper, however, argues that in rethinking financial sector regulation, greater focus is needed on implementation integrity, i.e., regulatory provisions need to be implemented not just to satisfy their letter but also their spirit to the maximum extent possible. Such integrity is needed among all the stakeholders involved—market participants, as it is their incentive structures and behaviour that the regulation seeks to influence; governments, as they need to set the appropriate objectives of regulation; and supervisors, as their quality of supervision and their motivations have an impact on the assessment of substantive compliance by individual institutions. The paper

⁵ Text in parentheses added by the authors.

thus recognizes that in rethinking financial sector regulation and its implementation, all these sets of entities must be considered.

The rest of the paper is structured as follows. Section 2 discusses the roles and responsibilities of the market participants in observing self-regulation norms and in supporting the regulatory policies. Section 3 discusses the need for reorientation of the fundamental principles of financial regulation. Section 4 identifies the areas for improving the practices of regulatory agencies for greater effectiveness. The final section provides concluding remarks.

Pillars of Regulation

Regulation, to be effective, should aim to strengthen its four supporting pillars at the level of regulated entities over a period of time. These are governance, risk, audit and compliance. The global financial crisis has highlighted that institutions that had weak governance structures; which pursued compliance more to satisfy the regulators than to meet the spirit of regulations; institutions which used audit systems with little sensitivity to risk; and those that had risk management systems that mechanically relied on quantitative models have been disproportionately and adversely affected.

Pillar 1: Governance

One of the issues raised by the crisis is the need to strengthen governance at the individual institutions. The board of directors and other internal mechanisms that are designed to protect the interests of the stakeholders should monitor the overall risks of the organization and compliance with regulations. The current global economic crisis strongly suggests, in hindsight, that the governance mechanisms at several institutions in some of the developed and developing countries did not seriously challenge the management assumptions about their risk appetite and risk management. Systemic vulnerability was further accentuated due to the tendency on part of a few regulators in major economies to become progressively lax in enforcing prudential norms and accounting practices.

A useful way to strengthen the governance function is to more systematically address the principal-agent (or agency) problem.⁶ Management, who are the

⁶Addressing this problem involves creating an environment in which an agent of a principal acts in the interests of the principal rather than in his or her own interest. In the case of the financial crisis, the incentive structures for the officials of banks and other financial institutions permitted them to take risks not commensurate with social utility or with long-term shareholder interests.

agents, has better knowledge about the true financial health and operations of the company. The board, the representative body of the principals, in practice necessarily relies on the information provided by the agents. Agents have strong incentives to maximize their interests, often at the expense of the owners.

The structure of bonuses and other rewards based on short-term reported performance, even if it is inimical to long-term competitiveness, may increase the complexity of addressing this problem. One of the options in structuring bonuses is to defer actual payment of bonuses to the future and tie it with the sustainability of profits and increase in the net worth of the business. The European Union has introduced norms, in July 2010, essentially making bonus payments on a deferred basis (up to 70 per cent) contingent upon company performance. Retained bonuses will be treated as “contingent capital” for the companies, to be used in the event of any unexpected losses.

The governance function should also strengthen the enterprise’s capacity to manage various key risks. This is achieved by establishing transparent policies; defining the risk limits; monitoring the risks; overseeing audit function; monitoring compliance; and checking the preparedness for adverse catastrophic events. Effective governance, however, requires competent and qualified professionals as board members, who are paid adequate compensation and are held to high standards of ‘deserved trust’, i.e., competency combined with integrity. Appropriate organizational culture and ethics are required to achieve and sustain deserved trust.

Pillar 2: Risk Management

Perceptions about the robustness of private sector risk management have been re-evaluated following the financial crisis. Essentially, risk management is perceived to have been used more for compliance with regulatory guidelines rather than for controlling excessive risk taking and build-up of leveraged positions by business units.

Systemic risks could come from several sources, and they may build up during good times. Risk management techniques that relied heavily on quantitative and mechanical aspects ignored the soft nature of risks and thus resulted in counter-productive results. Such models, in particular, fail to effectively capture the change in correlations and volatilities. Hence, the parametric methods of estimating risk may underestimate the risk and result in the under-pricing of risk. This was one of the main reasons for the turmoil

in the credit and derivatives markets during 2007–08. Risk managers should, therefore, continuously reassess the distributional parameters that vary through time.

The processes involved in complex securitization with global distribution channels delink the direct relationship between the lenders and borrowers—so vital in credit risk analysis and management.

It needs to be emphasized that some of the models used by the private sector players indeed recognize the time-varying nature of volatilities and correlations. Some of models incorporate mean reversion of the prices.⁷ However, sharp movements in asset returns do occur in the globalized market, resulting in markets being inefficient, at least in the short run. Unstable correlations of the various asset classes during such episodes of manias, bubbles and crises make the job of risk models difficult. This is where stress testing and scenario analysis could be useful for risk management.

The limitation of efficient portfolios and risk-return optimization strategies is that the historical or observed correlations do not hold to the extent essential for policy formulation during panics. The correlations also undergo a change, necessitating a re-examination of the portfolio risk. More often, the positive correlations during a market panic result in a higher risk of the portfolio. In an effort to reduce the portfolio risk, portfolio managers resort to selling the risky asset classes to start with. Coupled with the stringent cut-loss limits most traders have, sharp, repeated falls in asset prices could get triggered once the cut-loss limits are breached, resulting in system-generated sell orders. In such an environment, taking a balanced view (often contrarian), rather than merely following the system triggers, might help. Singala and Asher (2008) highlighted the importance of having institutions with different balance sheet objectives and horizons to promote diversity of views that impart stability to the system during such episodes of panic selling.

The importance of managing liquidity risk is another important lesson for risk managers from the global financial crisis. In the absence of a leverage limit, the dependence of traders and investments on ‘purchased’⁸ liquidity is

⁷ Mean reversion theory suggest that prices and returns eventually move back towards the mean or average. This mean or average can be the historical average of the price or return or another relevant average, such as the growth in the economy or the average return of an industry.

⁸ A major liquidity source is on the borrowing side of liabilities in the form of money market borrowing, repos and inter-bank borrowing.

likely to be high. Such highly leveraged positions are difficult to be rolled over in a panic situation. This leads to lack of market liquidity. In an effort to shore up their liquidity, the traders may be forced to sell their investments, in turn aggravating the illiquidity. Indeed, the crisis has highlighted the importance of setting leverage limits and of stored liquidity.⁹

This suggests that risk management in future will need to enforce leverage limits, focus less on the mechanical use of quantitative modelling, make better use of back testing and stress testing wherever models are used, manage liquidity risk, and adequately reorganize the dynamic nature of correlations and the time-varying nature of return distributions.

Pillar 3: Internal Audit

The accepted role of audit is to ensure that the business is conducted as per the 'rules' set by the regulators and the board of directors. Risk management policy prescribes several internal guidelines.¹⁰ The audit function needs to check adherence to these rules by the various business units. It provides feedback on adherence to the various risk limits by the business units. Risk management involves regularly fine-tuning the guidelines based on audit feedback. The audit focus is constantly influenced by the feedback from the risk function. Audit and risk management are therefore two complementary aspects of governance and need to be coordinated. In recognition of this, many companies are now moving towards greater integration of these two functions. The regulatory focus on risk-based audit is also justified from this perspective. For risk-based audits to be effective, knowledgeable persons with the necessary background, aptitude and integrity need to be nurtured and retained.

An important aspect of strengthening the audit function is to ensure that audit findings are integrated with the business processes. Banks and financial institutions usually undergo several audits, viz., concurrent audit, statutory audit, systems audit, management audit, government audit and regulatory audit. Though each audit has a separate focus, often these multiple audits raise concerns about their effectiveness and transaction costs. Key questions to be addressed in such audits are the following: What should be the focus in

⁹ Usually, this is done through keeping liquid assets, such as government securities, on the balance sheet.

¹⁰ The pre-crisis risk management policies and guidelines of several banks and financial institutions will need to be revised to reflect the post-crisis business environment.

each of the audits without having duplication? How should the findings of different audits be reconciled? Should the different audits be conducted by different auditors?

In addition, audit functions should have clarity on the following aspects to further strengthen their effectiveness:

- Relative merits and demerits of internal versus external or outsourced audits
- Complementary nature of transaction focus, and systemic focus of audits
- Quality of compliance with audit observations and its sustenance
- Regulatory audit or other systems for checking the efficacy of the internal audit function
- Is the composition and role of the audit committee of the board well defined? Does an independent director head it? Is the chief executive a member of the audit committee of the board?
- Ensuring independence of the audit, since business heads, whose functioning could also be subjected to audit, are de facto appointing authorities of external auditors
- System of periodic rotation of auditors

Pillar 4: Compliance

Compliance is an integral and vital element of risk management. Effective compliance improves the quality of systems and controls, and facilitates a culture in which the substance and purpose of compliance are respected. Besides such a structural improvement, compliance improves the perception of the organization's credibility and reputation among the various stakeholders, particularly the regulators and the lenders, and reduces the organization's vulnerability during a market panic or liquidity crunch. It is not uncommon to find several financial institutions maintaining different sets of internal guidelines to meet the regulatory requirements and to economize on the capital. In that sense, one of the major requirements of risk management is to be perceived to be complying with not only the letter but also the spirit of the regulatory guidelines. However, if the regulations are too costly, or if they are too inconsistent with business practices, compliance with the letter rather than in spirit will be rational from an individual institution's perspective, though such behaviour could create systemic risk.

The attempt to merge regulatory capital and economic capital under Basel II is, therefore, a welcome approach. Where it erred, though, is in leaving out the leverage limits (now included in the Basel guidelines) and the reliance on internal models of the regulated entities. Several financial institutions are now attempting to have designated compliance officers. A crucial issue to note in this context is the support from the management and the willingness to bear the costs of compliance. The head of the compliance division should be of sufficient seniority in the hierarchy, known for integrity, and independently report to the chief executive of the company. Compliance can only be as effective as the support from business units and, therefore, requires a bottom-up approach to comply with risk measurement, management and mitigating measures. This is because the field-level units are in the best position to judge the various risks and how best to manage them.

Objectives of Regulation

A review of the policies relating to financial regulation needs to address both the acute policy dilemmas in the short run and initiate a fundamental rethink on the broader frameworks of financial and economic policies over the medium term (Reddy, 2008).

The need for fundamental rethinking on broader aspects of regulation is evident from the FSB (2009: 1) report, which argues that: “Our objective is to create a more disciplined and less procyclical financial system that better supports balanced sustainable economic growth. This system will not allow leverage to increase to the extent that it did. Nor will we allow risks to be taken where profits accrue to individual actors but ultimate losses are borne by governments and the wider public.”

The 11th Geneva Report suggests that financial regulation should be focused, primarily rule-based (because discretion will be hard to use during periods of boom/euphoria), varying with the state of the economy, particularly the financial sector, and time- and state-varying (light during normal periods, increasing as systemic threats build up). In the wake of the global financial crisis, the objectives of financial regulation need to be clearly prioritized for more effective implementation of regulatory policies.

Safeguarding financial stability: Regulation is at the core of financial stability policies. Contributing to financial stability is therefore the most important

objective of regulatory policies.¹¹ Dealing with bubbles and asset price inflation is gaining increasing regulatory focus. Bubbles and crises can significantly inhibit stable growth in national output, employment and welfare. This is an area where regulation and monetary policy coordination is crucial.

At the macro-level, the volatility in capital flows has led to severe problems in both macro-management and financial regulation in emerging market economies (EMEs) (BIS, 2009). These capital flows have been significantly influenced by the extant monetary policy regimes in developed countries; and hence, their volatility is not necessarily related to economic conditions in the receiving economies. Excess flows, sudden stops and reversals have significant effects on the financial sectors of EMEs, the working of their capital markets, their asset prices, and hence their economies as a whole. Management of this volatility involves taking measures relating to monetary policy, fiscal management, capital account management and also financial market regulation (Mohan, 2009).

Regulation of new players and/or new instruments: Regulation and regulatory institutions are constantly evolving. Emergence of pension funds, hedge funds, micro-finance institutions, private equity funds, government wealth funds, and new instruments like securitization require continuous improvisation in regulation and regulatory policies to minimize regulatory arbitrage. The key is to ensure that market participants measure the risks, provide adequate regulatory capital to manage them and make the necessary disclosures of their risks. This is particularly the case when business is in a boom phase and the risk appetite of market players is higher.

Rajan (2009) has argued that “the current financial crisis can be blamed on many factors and even some particular players in financial markets and regulatory institutions. But in pinning the disaster on specific agents, we could miss the cause that links them all. I argue that this common cause is cyclical euphoria; and, unless we recognize this, our regulatory efforts are likely to fall far short of preventing the next crisis.” The Geneva Report (2009) reinforces this line of argument by favouring counter-cyclical regulation.

¹¹ Reflecting the growing importance of communication on financial stability issues, nearly 50 central banks regularly publish financial stability reports, focusing on their domestic financial systems, while multi-lateral agencies, such as the IMF, publish global financial stability reports from a global perspective.

Regulatory arbitrage: There are justifiable concerns that globalization of finance permitted financial institutions to create regulatory arbitrage, which in turn created systemic risks. A joint report by the US Securities and Exchange Commission (SEC) and the US Commodity Futures Trading Commission (FTC) on “Harmonization of Regulation” (2009) acknowledged that the rapid development of the market in complex financial instruments, known as derivatives, large parts of which neither agency had the authority to regulate, had created significant regulatory gaps.¹² What is important in addressing the concerns of regulatory arbitrage is to remember the dynamic nature of the arbitrage efforts. At the national level, and particularly in countries with multiple regulators, there could be several regulatory gaps or overlaps, leading to inaction by those involved and subsequent turf wars. This may also lead to some of the market participants developing products or pursuing such other strategies aimed at benefiting from the arbitrage opportunities. These issues at the national level, and keeping in view the emerging challenges to financial stability, have led to suggestions for setting up of regulatory councils.¹³

Government wealth funds: The current global economic crisis has led to greater acceptance of the role of government wealth funds (GWFs) as international investors—a new class of investors that has the objective of furthering the commercial and strategic interests of the governments that control them. Sovereign wealth funds (SWFs) are an important component of GWFs. During 2008, the assets of SWFs were equivalent to 6.2 per cent of global GDP, 55 per cent of global reserves, and 11 per cent of global stock market capitalization (Asher, 2009). These figures understate the economic

¹² Available online at <http://www.cftc.gov/ucm/groups/public/@otherif/documents/ifdocs/opacftc-secfinaljointreport101.pdf> (last accessed on 25 November 2009).

¹³ For instance:

- (i) The US Treasury has recommended the setting up of a new Financial Services Oversight Council of Financial Regulators to identify emerging systemic risks and improve inter-agency cooperation. “Financial Regulatory Reform: A New Foundation”, Dept. of Treasury, USA. Available online at: http://www.financialstability.gov/docs/regs/FinalReport_web.pdf.
- (ii) *The Financial Times*, London, has argued (15 July 2010 Editorial) that European financial supervisors need a coordinating body to prevent one country’s misregulation imposing losses on another state. The paper, however, warned that this should not lead to the EU taking over the regulation of the entire financial system.

leverage that can be exercised by SWFs. Indeed, GWFs could emerge as the most intractable part of the “shadow banking system.”¹⁴ Regulating GWFs could, therefore, be an important challenge for national supervisors, considering the implications of GWF investments for future economic issues and strategic options (Asher, 2009).

Institutional strengthening and moral hazard: Ensuring that financial institutions, particularly banks, are sound and safe is very crucial. As a corollary, strengthening of big institutions and large players is a crucial challenge since market players may work on the assumption that they are too big to fail, and that the government will not allow them to fail. One of the criticisms about the response of authorities to the global financial crisis concerns the serious moral hazard that central banks and governments have created. Public perceptions about regulatory forbearance have strengthened as a result of the liquidity support provided to banks and non-banks. Expectations have increased that in the event of a major financial crisis, public authorities will bail out institutions that pose risks to systemic stability because of their importance in the system.

Entity failure vs. market failure: Avoiding/correcting market failures is the basic rationale for financial regulation. The regulators should draw a clear distinction between the responsibilities of the owners of the banks and those of the regulators. It should be declared that the individual failure of a bank or other types of financial institutions is sought to be controlled through the four pillars of regulation at the level of individual institutions by the governance framework in the interests of the owners; while the government or the regulators will only focus on macro-prudential or systemic stability in the public interest. This can facilitate checks on the too-big-to-fail behaviour. This will also prevent the government from being involved in judgmental positions on whether or not to rescue an individual institution. Investors, depositors and other stakeholders can clearly formulate their risk-return considerations if such a clear distinction is drawn and is binding on the government or regulators.

¹⁴ The term “shadow banking system” refers to financial entities, including SWFs, private equity and hedge funds, which are either unregulated or lightly regulated, and for whom the enforcement of national regulation is difficult. Thus, it would be difficult to prosecute an official of a GWF in the recipient country’s jurisdiction without creating a diplomatic incident.

Macro-prudential supervision: There is a general agreement that the supervisory framework for banks and financial institutions needs to be strengthened if the risks assumed by the market players are to be proactively contained. There are now proposals to make a sharper distinction between micro-based supervision (i.e., supervision of individual institutions, markets and instruments) and macro-prudential supervision (i.e., focus on the stability of the system as a whole by identifying and addressing the systemic challenges). Such a distinction could help in preserving the stability of the system rather than individual institutions.

Borio and White (2004) suggested strengthening the macro-prudential arrangements to prevent episodes of systemic distress that have costs for the real economy rather than preventing the failure of individual institutions. Supervisory agencies are in the process of strengthening their macro-prudential arrangements. What could affect the efficacy of the new arrangement is the ability and motivation of the supervisory staff to convert the findings of individual entities into a macro-supervisory issue and address it. Lack of proper systems or coordination at the level of supervisors could also limit the efficacy of the proposed system.

Market infrastructure: Creating the necessary market infrastructure is essential for the stability and development of financial markets. Payment and settlement systems, trading platforms, market liquidity, etc., are some of the areas that require regulatory focus to ensure that the markets have the necessary infrastructure in place for liquid and efficient operations. This is particularly important for over-the-counter (OTC) derivative markets, which typically have low levels of transparency and risk mitigation. This needs to be done in a coordinated manner by the government authorities and market regulators.

Accounting, disclosures and transparency: These aspects have assumed critical importance in ensuring that the markets are stable, efficient and their risks are made known to the stake-holders. These measures also enable the risks to be reflected in the pricing/cost of funds. One critical aspect that is yet to be widely implemented is auditing of the risks of firms. Disclosures and transparency will substantially mitigate the risks of asymmetric information and moral hazard. More research, however, is needed in this area in terms of understanding the underlying processes and developing regulatory instruments. The ongoing efforts to improve the accounting

standards—for instance, the US-based Financial Accounting Standards Board (FASB) has proposed standards for “Accounting for Financial Instruments and Revisions to the Accounting for Derivative Instruments and Hedging Activities”—need to be implemented in right earnest.

Role of the Supervisors

A regulatory regime prescribes the general guidelines for all the regulated entities to strengthen the internal pillars of regulation. It is important to differentiate the relative strengths of these pillars at different institutions. This is the primary job of supervision. The ability of the supervisors to assess the strength of the four pillars at different institutions and the areas for strengthening is important. In order to do this, supervisors need to possess the necessary skills, motivation and mandate.

Skills: Reddy (2009: 343) has assessed that financial sector regulators, especially in low- and middle-income countries, did not have the adequate skills to cope with the rapid growth in the variety and complexity of market innovations in financial products. Some of the issues to be addressed in relation to the skills of the supervisory staff could be:

- **Recruitment:** Supervisors’ ability to attract and retain the requisite talent available in the market as also to develop the system to utilize the private sector expertise through lateral entry.
- **Training:** Constantly upgrading the staff skills relating to supervision of new products, markets and players.
- **Exposure:** Providing international exposure and experience to the staff so as to imbibe the best supervisory practices.

Motivation: Considerable debate has taken place on whether the compensation structure of the private sector needs to be reformed. Probably, some marginal changes to the compensation packages at the top level in the private sector may emerge. What is more relevant from the point of view of fortifying regulation is the compensation structure of the supervisors. Since regulation is at the core of systemic stability, the following issues need to be addressed:

- Appropriate monetary and non-monetary incentives for the supervisory staff to constantly identify the vulnerabilities in the system that they supervise.

- Innovations that supervisors need to bring about in their organizational structures so as to encourage a meaningful exchange of information among the key departments and identify macro-prudential issues.
- Implementing international best practices¹⁵ for the recruitment, training, motivation, compensation and retention of supervisory staff.

In addition, the size-structure-strategy linkage is vital for regulators since each country has its own regulatory model (single vs. multiple) or approach (rule vs. principle) or structure (market oriented vs. institution oriented). This requires substantial organizational redesign efforts.

Mandate: The third area in which supervisory reforms are needed is that of mandate. A key issue is whether supervisors receive a clear mandate in their effort to preserve the financial system. First, in countries where government owns a significant number of the financial institutions, it is probably difficult to expect the regulator to have a clear mandate. Intervention from the government as the owner cannot be ruled out in the lending policies and decisions of these banks. The regulatory effectiveness might be weakened in such cases. This issue can be addressed through an enhanced share of non-government ownership (but not necessarily giving up of the controlling stake by the government), including public ownership, and listing on the stock exchanges. These measures could bring about improved disclosures and professionalization of the boards.

The second issue relates to regulatory gaps and/or overlaps. In countries with multiple regulators, this could be an important issue, weakening the regulatory effectiveness and providing an opportunity for arbitrage. In such cases, the formal mandate may be unclear to regulators in respect of some of the products/markets/institutions that they supervise.

To strengthen regulatory coordination and minimize arbitrage opportunities in India, which has multiple regulators, Mr. M. Narasimham, former Governor of RBI, has advocated setting up of a council comprising the relevant financial sector regulators (RBI, 2009: 2). This is important considering that the High Level Coordination Committee (HLCC) on Financial Markets—comprising RBI, SEBI, IRDA and PFRDA, the major regulators of the financial sector—is not a statutory body and has not sometimes been able to resolve differences among the regulators (Patil, 2010).

¹⁵ It is important to keep the dynamic nature of the ‘best’ practices in mind while attempting to follow them.

The 2010–11 Indian Union Budget proposed a Financial Stability and Development Council (FSDC), *inter alia*, to settle inter-regulatory disputes. However, the envisioned role of FSDC is still evolving. It is desirable that FSDC focuses on facilitating coordination among the various regulators for effective exchange of information; and be proactive in minimizing any opportunities for regulatory arbitrage, given the increasing fungibility among financial products and institutions (Reddy, 2010).

It is, however, essential to guard against the tendency on the part of FSDC or the Ministry of Finance to become a *de facto* super-regulator. The decision by the United Kingdom to do away with the concept of a super-regulator in the form of the Financial Services Authority (FSA), after only a little over a decade of experience, holds cautionary lessons in moving in this direction.

The third issue concerns the conflict between regulation of the financial sector and debt management. In countries where the regulation and debt management functions are vested with the central bank, it could be difficult to pursue regulation objectives disregarding the debt management concerns. From a macro-economic stability perspective, fiscal consolidation has become an even more pressing concern as a result of the sovereign debt crisis in the Euro zone.

However, a more urgent issue relates to supervisors in some countries developing cozy relations with the entities being regulated (RBI, 2009: 6). This may have weakened the mandate of the supervisory staff. A deeper understanding of the issues leading to such regulatory capture by the private sector, and putting in place appropriate ways and means of enabling regulatory agencies to pursue their responsibilities, merits serious consideration. In many cases, the reason for such capture may be mere lack of awareness of the business processes of the private sector and the inability of regulators to identify risky or unacceptable practices.

Information asymmetry affecting regulators can be mitigated if the above-cited issues—skills of the supervisory staff, their motivation issues, and giving them a free and clear mandate—are addressed. Through enhanced skills and motivation, supervisory staff can strive to demystify the complexity surrounding the investments and working of financial institutions. The most important benefit of having skilled and motivated supervisory staff is that the quality of compliance, audit, risk management and governance can be checked at the level of individual entities, thus controlling the risks assumed by these entities. This is particularly true in the case of financial conglomerates

and institutions that may be engaged in too-big-to-fail kind of behaviour. This can directly contribute to a high quality of macro-prudential regulation.

Concluding Remarks

There is considerable rethinking globally about the objectives and nature of financial sector regulation. Several high-level committees and individual scholars have examined the issue and provided valuable suggestions to ensure competent and robust financial sector regulation in the future. Rethinking does presuppose that there is humility among regulators, market participants, academic and other experts, indeed all stakeholders, concerning their 'expertise' or knowledge base (Gawande, 2010).

Strong regulation of the inherent incentives built into the capitalist system is essential if the benefits of efficient use and allocation of capital by the markets are to be sustainably realized. The paper has argued that a durable solution to address this issue is unlikely without rethinking the purpose, scope and methods of financial sector regulation.¹⁶ The responsibilities of the regulators in this endeavour should go beyond the established ways. They should influence the organizational culture, ethics and deserved trust to enhance social outcomes.

The paper has discussed several initiatives at the level of regulated entities to strengthen their governance, risk management, audit and compliance functions. It has also suggested a clear prioritization of the objectives of regulation; and bolstering of the supervisors' skill, motivation and mandate areas. The areas identified for focus and reform in the paper in each of these will facilitate enhanced regulatory effectiveness.

The paper has suggested that there is merit in finding ways to move towards risk-based regulation and giving higher priority to macro-prudential and overall financial stability. In some countries, however, the central banks have

¹⁶ In some cases, this may involve a shift towards re-regulating some of the activities of the financial sector firms. Proposals put forth by United States President Barak Obama on 21 January 2010 illustrate this tendency. The proposals call for deposit-taking banks to be banned from trading (so-called proprietary trading) on their own account; and from owning and sponsoring hedge funds or private equity groups. These proposals will be debated and perhaps modified. Whether or not financial ingenuity, regulatory arbitrage by financial centres in Asia and elsewhere, and creeping regulatory forbearance will undermine the objectives of these proposals, for limiting the size of banks and lessening systemic risks, will only become clearer in the future.

not received the mandate for preserving financing stability. This needs to be addressed.

As individual countries, regions and the world cope with the aftermath of the current global crisis, and rethink financial sector regulation, the implementation issues discussed in this paper merit serious consideration by all the stakeholders. Rethinking financial sector regulation will yield desirable results only if the divergence between desirable economic choices and political considerations is minimized. This is essential, as the global economic crisis has once again underscored the importance of viewing financial sector regulation from the political economy perspective.

Emerging economies, including India, need to be even more conscious of ensuring that an appropriate balance is achieved between greater efficiency in financial intermediation and engineering, on the one hand, and the probable downside institutional and systemic risks, on the other. They should also re-examine their current regulatory objectives, and how they are being fulfilled to better attain the above balance.

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