



## **Initiative for Policy Dialogue Working Paper Series**

**April 2009**

### **Regulation of Financial Sector in Developing Countries: Lessons From the 2008 Financial Crisis**

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#### **Financial Markets Reform**

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**REGULATION OF FINANCIAL SECTOR IN DEVELOPING COUNTRIES:  
LESSONS FROM THE 2008 FINNACIAL CRISIS<sup>1</sup>**

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This chapter aims to draw some practical lessons and raises some issues from the 2008 financial crisis for regulation of financial sectors in developing countries. At the time of writing, the crisis is far from over and the aftermath is still unclear. The chapter is divided into five sections. The first section gives an overview of considerations that are important in drawing lessons from the crisis, especially from the point of view of developing economies. The second section addresses the major issues of scope for, and limits to, counter-cyclicality in regulation, in view of the widely perceived need for such an approach to avoid similar crisis in the future. The third section addresses an issue, which has been in focus since late 2008—the idea of comprehensiveness in the regulatory scope of the financial sector. The fourth section explores possible improvements in regulatory structures that are provoked by the recent crisis. The concluding section lists several broader issues that need to be kept in view while considering improvements in regulation of financial sectors for the future.

The observations made in this chapter are essentially from a practitioner's perspective. Furthermore, several comments are based on the author's experience as Governor of the Reserve Bank of India (RBI), which is the Central Bank in India. Consequently, such comments have an advantage of pragmatism but may not necessarily carry universal validity.

## **Drawing Lessons**

There are extensive analyses on the origins and the evolution of the current financial crisis that are valuable for drawing lessons. At the same time, several aspects of the crisis

are yet to be fully comprehended. Hence, all lessons from the current crisis should be recognized as very valuable, but subject to possible modifications as greater insights into the events are gained. Moreover, while some generalizations about the crisis are possible, they have to be contextualized to the particular economy under consideration, as developing economies are very diverse and at various stages of development regarding their financial sectors and their integration into the global economy. It is equally important to recognize that the financial sectors in various economies have been impacted with different degrees of intensity. For example, the extent to which the crisis has gripped the United States is in contrast to its neighbor Canada, which has been considerably less impacted despite having a fairly developed financial system and an open economy; this seems to be linked to better regulation of the Canadian Financial System. In other words, lessons need to be drawn not only from the experience of those countries that are seriously affected and hence under intense scrutiny as this chapter goes to press, but also from those advanced and developing economies, which are less intensely affected.

It is noteworthy that in terms of first-order effect, at the time of writing, the financial institutions in developing economies are less affected than in advanced economies. This could partly be attributed to the fact that the financial sectors in the developing economies are dominated by banks that still conduct traditional banking business and do not host complex financial products that could be riskier. The credit crunch and volatility in equity markets in the advanced economies have certainly impacted institutions in developing countries, but this is essentially in the nature of contagion, especially if such markets or institutions happen to be over-leveraged. The

contagion is, in any case, being transmitted through liquidity and credit crunch. To the extent that money and credit markets in the developed world cause a squeeze on the credit available for cross border trade, there is a similar squeeze on the availability of trade credit to exporters and importers in the developing countries. In addition, this poses greater pressure on the domestic money and spot foreign exchange (forex) markets as importers seek to borrow domestic currencies to purchase foreign exchange to honor their obligations. The banks in developing countries may be sound and well-functioning, but financing import-export trade with advanced economies requires similar well-functioning banks at their end too. For example, opening and honoring a letter of credit requires cooperation among the two relevant banks. In some developing economies, the weakening of local investor confidence in bonds and equities may be severe. However, in economies where there is a high presence of foreign banks, the contagion through the financial sector can be more intense.

The second-order effect, which has been very evident since late 2008 and is currently high on the agenda of developing economies, was caused by the volatility in capital flows that seriously impacts exchange rates. The third-order effect, which is already influencing the level of confidence in developed and developing economies, is via linkages with the real sector, especially linkages in trade. At the same time, there is extraordinary volatility in several commodity prices with severe impacts on many developing economies. In this regard it might be better to distinguish between oil and non-oil commodities. Moreover, the impact would vary depending on whether a country is a commodity exporter or importer. No doubt, the impact would also differ depending on the movements in the exchange rates of the countries. These have the potential to

generate non-performing assets on the balance sheets of banks in developing economies. Furthermore, non-performing loans could also arise from the wealth effect- channel of market risk being translated into credit risk. It is also likely that remittances from non-resident workers to developing economies may diminish in due course, and hence, economies heavily dependent on such remittances may experience pressures on exchange rates, especially if this is accompanied by outflows of capital. Similarly, there could be lowering of aid and donor flows to low-income countries. All of these developments have consequences for the real sector. In brief, the causes and the cross-border transmission of the crisis may significantly differ between developed and developing economies, as well as among developing economies. Appreciation of these differences is critical for drawing appropriate lessons from the crisis by developed and developing economies.

The impact on developing countries of the volatility in capital flows may be particularly severe by the mere fact that their economies are still nascent. However, the soundness of the regulatory structures, policies or economic fundamentals should also be factored in. There may be several reasons for this. For example, developing economies have limited access to international currency reserves (see chapter by Ocampo in this book). Furthermore, the scope for coordinated intervention akin to that by the Group of Seven (G7) economies, is limited for developing economies. Moreover, international financial markets view the risk-reward frontier in developing economies differently than those in developed economies.

In terms of policy responses to the current crises, there are several features common to *all* economies: a focus on fiscal stimulus to growth, injection of liquidity and

reduction in policy interest rates. But there are differences among them too. The most visible is the magnitude of the injection of capital into banks and other financial intermediaries. The most affected advanced economies took recourse to coordinate action by major central banks and their governments while the seriously affected developing economies approached multilateral agencies, in particular the International Monetary Fund (IMF), for support. It is noteworthy that some other developing countries have command over significant amounts of foreign exchange reserves.

In order to draw the appropriate lessons from this crisis for future regulations of financial sectors, it is essential to look beyond the financial sector, not only because the crisis is now no longer solely a financial problem—it is in fact now an economic crisis—but also because the crisis itself reflects the prevalence of several macroeconomic imbalances and political economy considerations. However, despite these complexities, for the purpose of this chapter it is necessary to focus on factors directly relevant to the financial sectors while drawing lessons from the crisis.

The prevailing standards of capital regulation for financial intermediaries, with some degree of acceptance at the global level, are the Basel II standards. It has been argued that the crisis is in some ways a reflection of the inadequacy of the Basel II framework, though it has been developed by the regulators of developed economies working over several years. It is also worth noting that the origin and the initial intensity of the crisis in the financial sector have been substantially concentrated in the two leading international financial centers. Hence, the current problems may not be significantly reflective of financial regulation in many other economies. In other words, it can be held that an incentive for softer regulation may exist when there is competition among a few

countries to attract the financial services industry. The regulators' willingness to tolerate savings in risk-capital employed by the regulated entities, and excessive reliance on self-regulation may be considered mechanisms adopted by some regulators for attracting the activity to the jurisdiction concerned. In this process, the regulators may have underestimated the risks to the system and the costs of a bailout. In theory, over a long period, markets should be able to perceive the risks emanating from self-regulation in a particular country, though in practice, the incentives and the relevant time horizons may lead to underestimation of such risks by market participants for a prolonged period. The reliance on self-regulation by market participants—the principle-based approach to regulation involving limited use of prescription or rules, and the tolerance of shadow banking systems, as well as rapid innovations—may also be reflective of the attitudes of regulators, the incentive for the regulated, and the stakes for public policy. The associated entities, such as Credit Rating Agencies (CRAs), may also have vested interests in a framework that is conducive to their expansion as well as continued dominance.

In this regard, it is essential to recognize that the eagerness to have a thriving international financial center is often, explicitly or implicitly, a decision of broader public policy. In the normal course, the regulatory framework may have to align itself to such a stance of public policy, thus attracting several political economy considerations. In India, a committee was appointed by the government to recommend measures to develop Mumbai (Bombay) as a regional financial center. The recommendations were far reaching and involved the whole gamut of fiscal, monetary and prudential measures for the country as a whole. There is an implicit assumption that the financial center in India



will not only provide employment and generate output, but also lead real sector development throughout the entire country. No doubt, development of the financial sector plays a critical role, but not necessarily a leading role, in facilitating growth with stability; hence, there is a need to persevere with reforms in the financial sector along sound lines, including sufficient and effective regulation that serves the main goals of the real economy. In this regard, the 2008 financial crisis has generated debates on several fronts, but with regards to this chapter, the three important areas specific to regulation of the financial sector include the following: the relevance of counter-cyclical regulation, the need to make regulation more comprehensive, and the scope to refashion the regulatory structures.

### **Counter-cyclical Regulation**

Several arguments have been advanced in favor of injecting elements of counter-cyclicity into regulation. In particular, senior officials at the Bank for International Settlements (BIS) have in recent years been advocating for greater attention to the rapid growth of credit, deterioration in the quality of credit and steep acceleration in the prices of assets. The RBI and a few others, such as the Central Bank of Spain, have taken recourse to various instruments of counter-cyclical prudential regulation. RBI had adopted neutral or tight monetary policy in an uninterrupted fashion, from 2004 up until the third quarter of 2008, using both direct and indirect instruments of monetary policy. Similarly, the RBI had been using prudential measures relating to foreign currency exposures of all financial intermediaries under its jurisdiction as part of the management

of the capital account. Furthermore, a range of monetary, prudential and fiscal instruments have been used to influence the overall liquidity in the markets. On the basis of this limited experience (described more below), it can be held, that operationally it may be feasible to design instruments for counter-cyclical regulations, and use them effectively, consistent with objectives regarding growth in output, inflation and overall stability of the financial sector.

The case for counter-cyclical policies in regard to developing economies is stronger than others, owing to the fact that higher weight has to be accorded to stability in these economies. Growth is essential for the eradication of poverty in such economies, but the gains from growth typically occur to the poor with a time lag. However, the pains of high inflation, as well as financial instability, affect the poor instantly. Furthermore, there is empirical evidence that costs in terms of increases in poverty are higher if output falls, than the reduction of poverty for an equivalent rise in output. Moreover, the poor have marginal capabilities and resources to manage or mitigate risks, while most governments in developing economies have very few mechanisms for social safety nets. At the same time, designing and implementing a counter-cyclical policy is more complex in developing economies. The cycles are not easily identifiable, especially if a significant structural transformation is underway in the economy. In some countries with persistent fiscal deficits, like India, the wriggle room for expansionary fiscal policy may be limited. The transmission of monetary policy is constrained by several factors, in particular the development of financial markets. The environment of public policies, especially through administered interest rates and directed credit, makes the transmission more complex. The effectiveness of prudential measures depends on the standards of

governance in financial institutions operating in that country. Above all, a relatively open capital account makes transmission of monetary policy muted. There is, therefore, in developing countries, a special case for harmonized counter-cyclical policies in the three spheres of policies: monetary, prudential regulation and fiscal.

It is well recognized that identifying the construction of asset bubbles is difficult. But the issue of operational purposes is where the judgment should tilt when there are doubts. Perhaps in all developing economies, the tilt may have to be to protect, at a minimum what may be considered critical financial institutions, namely banks, from the serious ill effects of the bubble, if it were to build up and burst. Banks stand out as most critical, since a common person, particularly in developing economies, seeks an institution,, traditionally banks,, where his personal savings are safe. It is essential for public policy to assure such a facility, and recent events have shown that the governments would be obliged to make such a facility available even ex-post crisis. In brief, there is a strong case, based on the experience of the 2008 events, to ensure that bank depositors are protected from the ill effects of volatile business cycles. In response to rapid growth of credit and asset prices, RBI took temporary measures that included generally increasing the risk weights, seeking additional provisioning, imposing quantitative limits and engaging in supervisory review of select banks to protect them to the extent possible, from the possibility of a serious downturn in asset prices. The quantitative limits on exposures and a few other prescriptions were flexible with regard to any specific institution, provided its risk containment policies were to the satisfaction of the regulator.

### **Comprehensiveness in regulatory scope**

There is a plea for greater comprehensiveness in the institutions that are subject to regulation. First, while the regulators focused their attention on the commercial banks, the crisis essentially originated from non-banks, especially investment banks, and in some ways the non-regulated parts of commercial banks, as well as hedge funds or private-equity funds. Second, the relationships between banks and non-banks were not adequately regulated, with the result that the assurance of liquidity support from banks implicit in such relationships was not properly monitored. The consequences of the originate and distribute model partly reflected this weakness. Third, while regulating the commercial banks, their excessive dependence on resources other than deposits was not monitored. Fourth, large corporate magnates have emerged as big players in financial markets, but financial regulators have failed to regulate them. Some of the players operated in a way that their operations became too big to fail. Fifth, the risk of individual financial institutions could have been assessed by each institution, to the satisfaction of the regulator. But the exposures of institutions to each other within the financial sector might have been largely ignored. It may be noted that this phenomenon is different from consolidated supervision of conglomerates, in the sense that it relates to exposures of conglomerates to each other collectively. Sixth, financial innovations appeared to spread the risk widely, and often away from regulated entities like banks and institutional companies. In reality however, such innovations removed the risks from regulators' radar, while substantively reverting to the banking system under stressful conditions. Correspondingly, the off-balance sheet obligations of financial institutions might have been seriously underestimated by the regulators.

There are several issues of costs and benefits associated with more comprehensive regulation, but the financial crisis of 2008 has *de facto* enlarged the scope of central banking in terms of institutions dealt with and instruments used by them, especially in regards to their function as lender of last resort. In a way, therefore, comprehensiveness in financial regulation has perhaps come to stay. But what is needed is a well thought out redrawing of the boundaries and intensity of financial regulation across financial institutions and their activities.

The RBI had attempted to address these issues in several ways even as the problems were building up in the global financial sector. The RBI retained its jurisdiction to regulate approximately 30,000 non-banking financial companies (NBFCs), but operationally it focused only on the deposit taking institutions, and systemically important ones, defined on the basis of the size of the balance sheet. The regular monitoring of systemically important NBFCs ensured that corrective measures were undertaken in a timely manner, particularly in terms of enhancing capital requirements in 2006. Furthermore, the extent of direct and indirect exposures of the banking system to such NBFCs was also regulated. The NBFCs themselves were divided into several categories and regulatory regimes were fine-tuned to suit each category. Noticing tendencies of banks to hold each others' equities on their books, a limit of 5 percent of total equity was placed on any bank holding in any other single bank. The guidelines on securitization issued in 2006 provide a conservative treatment of securitization, exposures for capital adequacy purposes, especially in regards to the credit enhancement and liquidity facilities. In order to reduce the extent of concentration of banks' liabilities, guidelines were issued. placing prudential limits on the extent of their inter-bank liability.

In addition, guidelines were issued in order to contain risks arising out of banks' investment portfolio, in particular non-government securities. Banks were specifically advised not to be solely guided by the ratings assigned to these securities by the credit rating agencies, which was in the nature of moral suasion only. Articulation of issues relating to financial stability in the public domain, moral suasion, supervisory review of over extended individual banks, and emphasis on regulatory comfort rather than mere regulatory compliance were some important instruments used in regard to several areas of regulatory concern. In brief, the experience of RBI indicates that it is possible to dynamically define boundaries of regulation depending on evolving conditions in the financial sectors provided that the regulators have the mandate, skills, and above all, real operational freedom. A comprehensive coverage, as per mandate with operational freedom, executed in terms of exhaustive monitoring, but with selectivity in prescriptions and intervention, appears to add to the capacity of the regulators to dynamically redefine the boundaries of their activities.

### **Regulatory Structures**

There is a view that the current crisis was essentially caused by regulators' inability to cope with the pace of financial innovation and partly on account of weaknesses in regulatory structures at the national and international level. In this regard, it is useful to note that the most seriously affected financial institutions are those which were reputed to have the best capabilities in risk-assessment and risk-management. Similarly, the reportedly high regulatory standards of the most seriously affected countries were not

adequate to avert a crisis. Consequently, it is held that the fault may be with the structures of regulation, and hence a case is made for improvements in regulatory structures. At a very general level, it can be argued that there is no convincing evidence of serious shortcomings in the regulatory environment of developing economies as far as the current crisis is concerned. Therefore, the focus should be on the issues of regulation in advanced economies and on global regulatory structures, in view of the globalization of finance that has also contributed to the crisis.

The current debates on appropriate national-level regulatory parameters are also of interest to the developing economies due to their goals of aligning with internationally set standards of globalization of finance. First, it is suggested that a single regulator for the financial sector would avoid regulatory arbitrage and add to stability, while the central bank would be responsible for monetary policy and financial stability. Another view is that, ideally, the central bank itself could assume the responsibility of a single regulator, combining the monetary and regulatory functions. Yet another view, particularly relevant for developing economies, is that the regulation of banking should lie with the central bank, and the regulation of others could be separated. The empirical evidence so far appears very mixed. Hence, it may not be appropriate to take a definite view on the issue of single versus multiple regulators. However, whatever the structure is, close coordination between regulatory functions is critical, irrespective of whether they are located in single or multiple authorities. In India, the RBI, in addition to regulating banks, regulates NBFC's, money, and government securities markets and payment systems. Regulation of other activities in the financial sector is distributed among capital-market, insurance and pension funds regulators. However, to ensure

coordination within the financial sector, a High Level Committee on Capital and Financial Markets (HLCCM) has been constituted. This is presided over by the governor of the RBI, and includes the membership of the heads of the regulatory bodies in the financial sector and the Permanent Secretary of Ministry of Finance. The HLCCM has in turn constituted standing technical committees to ensure coordination on operational issues and provide assistance to the committee. In summary, the Indian experience points to the desirability of establishing standing mechanisms for close and continuous coordination of regulation in the financial sector, irrespective of the fact that statutory compulsions do not exist for new mechanisms.

There is also a view that regulation of the financial sector has often been left to experts in finance, money or economics, and that such an approach encourages an inward looking view of regulation, which potentially ignores the implications and externalities for other stakeholders, including depositors, borrowers or consumers of financial services. On the other hand, it is also recognized that regulation of the financial sector is highly specialized and technical in nature. In India, the Board for Financial Supervision (BFS) within the RBI has been established to make regulation and supervision somewhat autonomous within the RBI. The Board advises and guides the RBI in all matters relating to the regulation and supervision of banks and NBFCs. The Board, which meets at least once a month, is presided over by the Governor-RBI, and in addition to the Deputy, Governors have four non-official, part-time independent members. These members are eminent individuals who are from such diverse fields as accounting, macro-economics, the corporate sector, and civil-society associated with non-governmental organizations. It is interesting to note that the BFS identifies any bank whose operations give rise to



regulatory discomfort, and puts it under what is described as monthly monitoring of its functioning. Yet another set of institutions are the Technical Advisory Committees, which address issues relating to regulation, and whose members comprise of academics, representatives from self-regulatory organizations, industry-associations and select representatives of the regulated entities. These committees meet less frequently than the BFS, and unlike the BFS, have no statutory backing. While the BFS has been very effective, the contributions of Technical Advisory Committees have been mixed, depending on the nature of the subject. For example, the committees on monetary policy and financial markets were more active than the ones on financial regulation.

Finally, there is a view that it is desirable for central banks to have a formal mandate for ensuring financial stability. In India, the RBI has no formal mandate for financial stability, but it has interpreted its mandate on monetary stability to include operational purposes—both price and financial stability in addition to growth. The general approach has been to pursue multiple objectives with explicit statements of relative priorities, from time to time, depending on the circumstances evidenced by multiple indicators. In fact, the regulation of banks is one of the multiple instruments used for operational purposes of RBI's policy objectives.

### **Some Broader Issues**

There are several broader issues which need to be kept in view while considering changes in the regulatory structures of regimes within developing economies, especially the Anglo-Saxon ones, in light of the recent financial crisis. During the crisis, whatever has

to be done must be done promptly, comprehensively and effectively to bring stability; but in rewriting regulatory structures, some broader issues need to be considered. Most developing economies recognize the continuing need for reforms in their financial sector. However, the crisis of 2008 raises doubts as to the efficacy of known and existing models of financial sectors in advanced economies. Thus, in the future, reforms in the financial sector may have to be cognizant of the evolving understanding of the subject, and hence, gradualism commends itself. Furthermore, the fundamental changes in regulatory regimes do require acceptance by political authorities and indeed legislative actions.

In this regard, it is necessary to avoid drawing misleading lessons from the crisis. Some observers think that the experience with subprime lending in the United States shows that providing finance to those who cannot afford it is not desirable. Financial inclusion should mean ensuring access to all relevant financial services, to all sections of the populace, and it should not be equated with aggressive lending or simple provisions of microcredit with profit motives driving the process. In fact, the 2008 crisis shows that banks with a significant retail base tended to be more resilient.

Recent debates on the 2008 crisis have focused on the role of tax havens, and in this regard, developing economies have a high stake in view of the large share of capital flows through such tax havens. Some of them are brought about by bilateral agreements among countries, often as part of Free Trade Agreements. In addition, enforcement of financial regulation is made particularly difficult by the inadequate attention to “Know Your Investor” in some jurisdictions, and tax regimes that encourage cross border round tripping of funds by residents.

The role of CRAs has also received considerable adverse attention. The relevant issues for regulators in developing economies are: the appropriate regulatory frameworks governing them, use of credit ratings by the regulators, and more importantly, the desirability of encouraging domestic CRAs that could serve the growing needs of the developing economies. Such domestic credit rating agencies could have the potential to compete with the existing international agencies.

One of the most important lessons from the crisis is the need to recognize linkages between the financial sector and the real sector. In view of the recent experience with what may be termed as “excessive financialization of economies,” should there be a review of the sequencing and pacing of reforms in the financial sector relative to the fiscal and the real sectors in developing economies? In light of the observed volatility in capital flows and also of commodity prices, how should the policies relating to the financial sector in the developing economies provide cushions against such shocks? Similarly, should there be a review of sequencing various elements in the development of domestic financial systems in the developing economies, and their integration into the global financial system? Finally, is it inevitable that the relationships between government, central banks and financial regulators will be redrawn in view of the very serious consequences of the present crisis?

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<sup>1</sup> Chapter presented at the Conference on “The Global Financial Crisis: Regulatory Implications,” co-sponsored by the Initiative for Policy Dialogue, held in Columbia University, November 13, 2008.