

# International Regulatory Cooperation on the Resolution of Financial Institutions

Where Does India Stand?





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Renuka Sane



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## About the New Thinking and the New G20 Project

The project aims to promote policy and institutional innovation in global economic governance in two key areas: governance of international monetary and financial relations and international collaboration in financial regulation. Sponsored by CIGI and the Institute for New Economic Thinking, the project taps new research and next-generation scholars in the emerging economies, linking them to established networks of researchers in the industrialized world. The objective over the longer run is to create a more permanent and self-sustaining research network that will provide a continuing stream of new ideas, sustain international collaboration and integrate researchers from the emerging economies into global policy discussions.

Miles Kahler and Barry Eichengreen (principals in the original project) recruited C. Randall Henning (new principal, American University) and Andrew Walter (University of Melbourne) to lead two research teams devoted to macroeconomic and financial cooperation and to international financial regulation. Gathering authors from eight countries, the project consists of 11 CIGI papers that add to existing knowledge and offer original recommendations for international policy cooperation and institutional innovation. CIGI will also publish the final papers as an edited volume that addresses the global agenda in these issue-areas.

## About the Author



Renuka Sane is a visiting scientist at the Indian Statistical Institute, Delhi. Her research interests include pensions, household finance, public policy and consumer protection in finance. Renuka has been published in *Macroeconomic Dynamics*, *Journal of Economic Policy Reform*, and *The Journal of Development Studies* (forthcoming). She holds a Ph.D. in economics from the University of New South Wales, Australia.

## Acronyms

BBVA	Banco Bilbao Vizcaya Argentaria
BCBS	Basel Committee on Banking Supervision
BoE	Bank of England
BRRD	Bank Recovery and Resolution Directive
CMG	crisis management group
EBA	European Banking Authority
FDIC	Federal Deposit Insurance Corporation
FSDC	Financial Stability and Development Council
FSB	Financial Stability Board
FSLRC	Financial Sector Legislative Reforms Commission
G20	Group of Twenty
G-SIB	global systemically important bank
G-SIFI	global systemically important financial institution
HM	Her Majesty's (Treasury)
ICICI	Industrial Credit and Investment Corporation of India
IFC	Indian Financial Code
IMF	International Monetary Fund
INR	Indian rupee
ISDA	International Swaps and Derivatives Association
NPA	non-performing asset
RC	resolution corporation
RBI	Reserve Bank of India
SIFI	systemically important financial institution
SRR	special resolution regime

## Executive Summary

This paper provides a brief description of the principles of cross-border resolution that have emerged after the 2008 global financial crisis, and the progress that has been achieved. The paper then provides an overview of developments on resolution of financial firms in India. It finds that while there is cognizance of the need for international cooperation on resolution, the focus is on first developing institutional capacity on domestic

resolution that can interact with the international community in the future. The policy choices of India may be reflective of the thinking in a large number of emerging markets, which considerably lag behind the more developed markets, partly due to lower interconnectedness and partly due to limited experience in domestic resolution.

## Introduction

The 2008 financial crisis led to the renewed realization that close linkages between financial firms, which make possible the benefits of financial integration, can also cause large-scale disruption when financial firms fail.<sup>1</sup> The costs of failures of entities such as Lehman Brothers, the Icelandic banks and Dexia, among others, were largely borne by taxpayers through bailout programs designed by governments in moments of crisis. For example, the gross fiscal cost in advanced economies that experienced a systemic crisis was almost six percent of GDP. While emerging economies were not the locus of the crisis, growing internationalization of finance led to gross fiscal costs of about five percent of GDP in those economies as well (Claessens, Herring and Schoemaker 2010).

The diagnosis of this failure suggests that governments did not have the necessary tools for resolution of financial firms domestically. Cross-border burden-sharing agreements, which could have facilitated a cooperative solution, were also non-existent. In the absence of any protocols or precedents, policy makers in each economy ended up minimizing costs to their taxpayers without taking into account the externalities their policies might impose on global financial stability. The consequences of such actions have led to a consensus on the need to establish resolution frameworks that operate effectively across national borders.

This paper begins with a brief description of the principles of cross-border resolution that have emerged from the resolution debate, and the progress that has been achieved. While many advances have been made in designing tool kits, their implementation has been limited. The United States, the United Kingdom and the European Union, which were at the centre of the crisis and are the most interconnected in their financial markets, are at the forefront of designing resolution frameworks consistent with international cooperation. The process of harmonization in these jurisdictions, however, is also a work in progress. Emerging economies have made even less progress.

The paper then turns its attention to India, a large emerging economy in the Group of Twenty (G20), even though limited in its financial integration with the rest of the world. The financial sector in India is dominated by state-owned banks. Problems in the banking sector continue to be solved using capital

<sup>1</sup> Herring (2007) provides a history of bank failures and the problems of supervisory coordination before the 2008 global financial crisis.

infusions from government. India does not have a history of clear insolvency laws for both real-sector and financial firms, and therefore no experience in either orderly liquidation or restructuring. Low internationalization of finance and limited experience in insolvency make the prospect of regulatory coordination doubly challenging.

However, India has taken the first step toward establishing a domestic resolution regime. A task force has been set up by the Ministry of Finance to build a resolution corporation (RC) in line with the recommendations of the proposed Indian Financial Code (IFC).<sup>2</sup> Several of the recommendations of the IFC are consistent with the principles of good resolution frameworks discussed internationally. The single-minded focus in India at the moment is the development of a domestic resolution capacity. There is cognizance of the need for international cooperation, but the focus is on first developing institutional capacity that can interact with the international community in the future.

The policy choices of India may be reflective of the thinking in a large number of emerging markets, which lag considerably behind more developed markets, partly due to lower interconnectedness and partly due to limited experience in domestic resolution. The challenge before emerging economies is to build domestic resolution capacity in order that commitments to the international community can be meaningfully realized. The international debate on resolution needs to focus more on developing the building blocks in such economies before moving ahead with cooperative agreements. At the same time, emerging economies such as India, which may be hosts to global systemically important financial institutions (G-SIFIs) organized either as subsidiaries or branches, need to pay more attention to the international developments and build capacity to support measures taken by home authorities of the G-SIFIs, or enter into contractual agreements before statutory changes take effect.

International cooperation on resolution is at best a difficult task. Stijn Claessens, Richard J. Herring and Dirk Schoenmaker (2010) highlight the financial trilemma facing economies in the 21st century: the conflict between the goals of preserving national sovereignty, fostering cross-border banking and maintaining global financial stability. Most countries fall within the extremes of complete sovereignty with no financial integration and no sovereignty with complete financial integration. This implies that resolution regimes across all countries will have to be robust and compatible with each other. There continues to be uncertainty about whether developed countries will actually keep up with their voluntary promises on coordination and surrender self-interest. Ultimately, only the presence of binding

agreements may prevent countries from reverting to policies that are exclusively in their domestic interests.

This paper is organized as follows. Section 2 describes the state of the art on cross-border resolution, and section 3 offers a progress report. The Indian situation is described in section 4, while the proposed reforms are discussed in section 5. The paper concludes with section 6.

## The State of the Art on Cross-border Resolution

The Cross-border Bank Resolution Group was the first attempt after the crisis to address the issue of cross-border resolution.<sup>3</sup> The report pointed out that “an effective resolution regime would allow the authorities to act quickly to maintain financial stability, preserve continuity in critical functions and protect depositors. It would also maintain market discipline by holding to account, where appropriate, senior managers and directors and imposing losses on shareholders and, where appropriate, other creditors” (Basel Committee on Banking Supervision [BCBS] 2010). The report recognized that, ultimately, each national authority is likely to prioritize the pursuit of its own national interest and what was required was a multinational framework for sharing of fiscal burdens.

### Key Attributes of Effective Resolution Regimes

An important landmark in the development of cross-border resolution has been the Financial Stability Board’s (FSB’s) Key Attributes of Effective Resolution Regimes for Financial Institutions (FSB 2011).<sup>4</sup> These were endorsed by the G20 heads of state in November 2011 as “new international standards for resolution regimes” (*ibid.*, 1).

The Key Attributes specify features that should be part of domestic resolution regimes. These include a resolution tool kit that provides national authorities the power to make resolution feasible without systemic disruption; provides mechanisms for cross-border cooperation; and provides recovery and resolution planning processes.

The three main powers for domestic resolution relate to: transfer of ownership; transfer of assets; and restructuring of debt through bail-in.

Most importantly, the Key Attributes emphasize that these powers should be exercised without the need to obtain consent of relevant stakeholders, including shareholders or creditors.

<sup>2</sup> The IFC is a result of the recommendations of the Financial Sector Legislative Reforms Commission (FSLRC), a committee that was set up to review and revise all financial sector laws in the country.

<sup>3</sup> The recommendation categories are listed in Appendix I.

<sup>4</sup> The Key Attributes are summarized in Appendix II.



From a cross-border resolution perspective, the Key Attributes require that the following be enshrined in the domestic framework:

- a statutory mandate to achieve a cooperative solution with foreign resolution authorities;
- no discrimination against creditors based on nationality or location;
- powers over local branches of foreign institutions, either to support measures taken by the foreign authority or to take measures itself;
- no provisions that trigger automatic action in that jurisdiction as a result of official intervention or the initiation of resolution proceedings in another jurisdiction;
- give effect to foreign resolution measures;
- the legal capacity to share information with relevant foreign authorities, subject to confidentiality requirements; and
- provide for protection of the resolution authority and its staff against liability for actions taken or omissions made in good faith domestically as well as in support of foreign resolution proceedings.

Two other components of the Key Attributes are important from the point of view of cross-border resolution. The first are the crisis management groups that need to be set up in G-SIFIs in home and host countries. The objective of these is to enhance preparedness for, and facilitate the management of, a crisis affecting the financial institutions. The second are recovery and resolution plans (also known as living wills) to be followed in a wind-down situation. Firms are required to develop recovery plans that identify options for restoring financial strength and viability when in distress. Resolution authorities are required to develop resolution plans based on information submitted by firms to take swift action in the event of failure.

Finally, as suggested in the report, for resolution to be feasible, it is important that the concerned authorities have the necessary legal powers and the capacity to implement them. For resolution to be credible, the application of those resolution tools should not itself give rise to unacceptably adverse broader consequences for the financial system and the real economy.

The FSB published a revised series of Key Attributes in October 2014 that set out how the Key Attributes should be applied for insurers, financial market infrastructures and the protection of client assets in resolution (FSB 2014c).

### Guidance on Resolution

The FSB's Key Attributes were followed by a consultative document on making the Key Attributes requirements operational (FSB 2012). The guidance focused on the design and nature of triggers (qualitative and quantitative) that lead to the implementation of recovery measures, and the design of stress-test scenarios to help firms identify and update scenarios

most likely to cause the business to become non-viable. The document also focused on the design of resolution strategies, including the following:

- **Single point of entry:** In this case, resolution action is taken at the parent-company level by a single resolution authority, mostly in the jurisdiction responsible for the global consolidated supervision of a group. In this approach the subsidiaries are preserved on a going-concern basis, and application of resolution at lower levels can be avoided. This requires host countries to take measures to support the resolution led by home authorities. The single-point-of-entry approach is more suited to globally integrated wholesale institutions.
- **Multiple point of entry:** In this case, resolution action is taken by two or more authorities to multiple parts of the group. In this approach, the home authority needs to play a role in ensuring that the resolution is coordinated, such that all authorities are informed of proposed actions. The multiple point of entry is more suited to decentralized retail banks structured as subsidiaries serving a large retail client base, with capital and liquidity located in host countries (Banco Bilbao Vizcaya Argentaria [BBVA] 2014).

Resolution through either a single-point or multiple-point-of-entry mechanism requires legal certainty that actions regarding assets or liabilities will be acted upon promptly. Toward this end, the FSB developed a consultative document on the statutory frameworks as well as contractual approaches for recognition of cross-border resolution with respect to stays on early termination rights in financial contracts and bail-in of debt instruments that are governed by the laws of a jurisdiction other than that of the issuing entity (FSB 2014b). In November 2014, the FSB released another consultative document seeking comments on policy proposals to enhance the loss-absorbing capacity of global systemically important banks (G-SIBs) in resolution (FSB 2014a). The idea is to divide the G-SIB into a holding company and operating subsidiaries. The holding company will need sufficient loss-absorbing capital. If any part of the group suffers a major loss, this capital can be written down, the holding company liquidated and the subsidiary capitalized.<sup>5</sup>

The FSB (2013a) laid out policy actions to be taken by the end of 2015. The policy actions relating to resolution include:

- developing recommendations for consistent and comparable firm-specific information for resolution-planning purposes;

5 Comments on the process for this proposal were closed in February 2015.

Table 1: Asymmetries of Resolution

Host Country Entity	Home Country or Parent Bank	
	Systemic	Non-systemic
Systemic	Potential for coordination	Conflicts of interest and potential coordination problems
Non-systemic	Conflicts of interest Potential coordination problems	No significant issues

Source: Claessens, Herring and Schoenmaker (2010).

- developing proposals on how to strengthen information sharing within crisis management groups (CMGs) and in consultation with standard setting bodies, within core supervisory colleges<sup>6</sup>;
- developing recommendations for cooperation and sharing information with authorities in G-SIFI host jurisdictions that are not represented in the CMG, but where a G-SIFI's local operations have systemic impacts;
- preparing proposals for consideration on the nature, amount and location within the group structure of gone-concern loss-absorbing capacity, and possible disclosure of such capacity; and
- developing proposals for contractual or statutory approaches to prevent large-scale early termination of financial contracts in resolution.

## The Reality of International Coordination

When national interests converge, there may be hope for coordination and consistent resolution across borders. However, when national interests diverge, the incentive for cooperation breaks down. Richard J. Herring (2007) outlines the possibility for a successful cooperation by the relative size and role of the financial institution in the home and host economies. Table 1 describes the classification. Coordination is difficult when the financial institution is systemically important in either the home or the host country, but not systemically important in the other (Claessens, Herring and Schoenmaker 2010).

Not surprisingly, actual progress on resolution has been limited. What progress there is, has been achieved by regulatory authorities in the United States, the United Kingdom and the European Union. This is consistent with the fact that conglomerates in Europe and the United States are more interconnected than their counterparts in Asia.

The United States has two mechanisms: a process for insured depository institutions, and the Orderly Liquidation Authority to resolve systemically important firms. The Federal Deposit Insurance Corporation (FDIC) is developing an SPE resolution strategy that will execute a bail-in through a bridge financial firm. The FDIC may be appointed as a receiver for a US financial company. Foreign systemically important financial institutions (SIFIs) are required to develop a resolution plan for their US subsidiaries under Section 165(d) of Title I of the Dodd-Frank Wall Street Reform and Consumer Protection Act.<sup>7</sup>

In the United Kingdom, the Banking Act (2009) created a special resolution regime (SRR) which gives the UK authorities a permanent framework providing tools for dealing with failing UK banks, building societies, investment firms and central counter-parties. The Prudential Regulation Authority, in consultation with the Bank of England (BoE) and Her Majesty's (HM) Treasury, makes the decision to put a bank into the SRR. HM Treasury decides whether to put a bank into temporary public ownership; otherwise, the BoE, in consultation with the other authorities, decides which of the tools to use and implements the resolution. The UK plan officially recognizes the need for cooperation and commits itself to the same (BoE 2014).

The European Union Bank Recovery and Resolution Directive (BRRD) set out "a common procedure for the 28-EU countries to preempt bank crises and resolve any financial institution in an orderly manner in the event of failure, whilst preserving essential bank operations and minimising the cost to taxpayers" (BBVA 2014, 13). The BRRD has been in force since January 2015, with the exception of the bail-in tool, which will be applied from January 2016. The BRRD will be implemented through a unique resolution authority and resolution fund that will mutualize losses among all euro-zone banks.

<sup>6</sup> The European Banking Authority (EBA) has launched its own consultative document on regulatory technical standards, specifying the operational functioning of the resolution colleges that are to be established for those banking groups that operate on a cross-border basis within the European Economic Area (EBA 2014).

<sup>7</sup> The Tailored Resolution Plan by Banco do Brasil is one example of such a plan (Banco do Brasil 2013).

Some progress has come from banks themselves. Eighteen major global banks<sup>8</sup> have agreed to sign a new International Swaps and Derivatives Association (ISDA) Resolution Stay Protocol, developed in coordination with the FSB (*Automated Trader* 2014). The protocol is designed to impose a stay on cross-default and early termination rights within standard ISDA derivatives contracts among these 18 firms in the event that one of them is subject to resolution action in its jurisdiction. The stay is intended to give regulators time to facilitate an orderly resolution of a troubled bank.

In the case of emerging economies, the progress is far slower. A thematic review on resolution regimes by the FSB shows that such regimes were better developed for banks relative to other financial institutions. Even in the case of banks, they fell short of providing important powers such as bail-in, or the ability to temporarily suspend early termination rights under financial contracts. On the issue of cross-border resolution, progress was even more limited. Few jurisdictions are equipped to recognize and enforce actions taken by foreign authorities. As well, most countries do not have statutory provisions to share confidential information with foreign authorities (FSB 2013b).

Similar concerns were also reported by the Institute of International Finance. *Achieving Bank Resolution in Practice: Are We Nearly There Yet?* (2014) provides a progress report on cross-border bank resolution and finds that:

- Several jurisdictions lack comprehensive domestic resolution regimes. This makes the recognition of foreign resolution measures and cross-border cooperation difficult.
- Legal impediments to cross-border cooperation and complexities of firms' operational structures have made it difficult for home and host countries to reach agreements on how to deal with crisis situations.
- There continues to be a lack of clarity on where different creditors stand in different jurisdictions in a resolution scenario.
- Agreement on the location of buffers and loss allocation during resolution has also proven difficult.

## Example: The FDIC and BoE Initiative

One example of cross-border cooperation is the initiative between the FDIC in the United States and the BoE, together with the board of governors of the Federal Reserve System, the Federal Reserve Bank of New York and the Financial Services

8 Bank of America Merrill Lynch, Bank of Tokyo-Mitsubishi UFJ, Barclays, BNP Paribas, Citigroup, Crédit Agricole, Crédit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JP Morgan Chase, Mizuho Financial Group, Morgan Stanley, Nomura, Royal Bank of Scotland, Societe Generale, Sumitomo Mitsui Financial Group and Union Bank of Switzerland.

Authority. The aim is to produce resolution strategies that could be implemented for the failure of one or more of the largest financial institutions with extensive activities in their respective jurisdictions (FDIC and BoE 2012).

In the United States, the appointment of the receiver (or administrator) will be made by the FDIC after being given the go-ahead by the Financial Stability Oversight Council, the Federal Reserve Board and the Secretary of the Treasury. In the United Kingdom this will come from the Prudential Regulation Authority operating under the BoE, in consultation with HM Treasury.

Resolution intervention would be at the top of the group. In the case of the United States, the FDIC will serve as the receiver and most likely charter a new bridge corporation of which it is the sole shareholder.

Culpable senior management of the parent and operating businesses would be removed, and losses apportioned to shareholders and unsecured creditors. After the write-down, unsecured debt will be exchanged for equity or subordinated debt either in a bridge institution or the original institution. Under both the US and UK approaches, legal safeguards will ensure that creditors recover no less than they would under insolvency.

In the United States, the new equity would become capital in one or more newly formed operating entities. In the United Kingdom, the same approach could be used, or the equity could be used to recapitalize the failing financial company itself. Thus, the highest layer of surviving bailed-in creditors would become the owners of the resolved firm.

Throughout this process, subsidiaries (domestic and foreign) carrying out critical activities would be kept open and operating, thereby limiting contagion effects. The financing for the subsidiaries could come from private capital markets, or arranged from the FDIC or the BoE.

It is hoped that such a resolution strategy would ensure market discipline and maintain financial stability without cost to taxpayers. More recently the US and UK authorities have completed a simulation on bank failure. The results, however, are not yet known to the public (Robb 2014).

## The Indian Setting

This paper now turns its focus to India, as India is one of the largest economies in the G20. Banks dominate the Indian financial system, with 63 percent of total assets (Reserve Bank of India [RBI] 2014a, 33–71).

The Indian banking system includes commercial banks (a large fraction of which are in the public sector), regional rural banks

and cooperative banks. Banks (except some cooperative banks<sup>9</sup>) are regulated by the RBI. The assets of the six largest banks are about one-third of GDP, much lower than the banking presence in more developed economies.

Other large components of the financial sector include mutual funds regulated by the Securities and Exchange Board of India, insurance companies regulated by the Insurance Regulatory and Development Authority, pension funds regulated by the Pension Fund Regulatory and Development Authority and commodity markets regulated by the Forward Markets Commission. The Indian financial system is supplemented by financial market infrastructures (payment systems, clearing houses, central counterparties, securities settlement systems, securities depositories, etc.).

From a systemic risk point of view, it is the domestic banks that are the most important. Natasha Agarwal et al. (2013) identify SIFIs and systemically important non-financial institutions in India by combining multiple measures of systemic risk into an index of systemically important firms. They find that during the crisis period, three out of the top five systemically important firms were banks and one was a non-bank financial firm. Even in the recovery period of 2011–2012, four out of the top five systemically important firms were banks. The authors present the marginal expected shortfall for each of these firms, i.e., the amount of market capitalization a firm stands to lose on the worst days of the market. For the period 2011–2013, the four most systemically important banks could lose about INR 108 billion (US\$2 billion) in market capitalization. The analysis finds that interconnectedness among banks, and among banks and firms in the real economy, tends to be high. However, this connectedness does not seem to have the potential for international contagion.

The prospects for resolution in India have to contend with three important features: limited internationalization of finance; repeated difficulties in microprudential regulation of banks; and repeated difficulties in bank bailouts.

### Limited Internationalization of Finance

India ranks higher on trade openness relative to financial openness. Rudrani Bhattacharya, Ila Patnaik and Madhavi Pundit (2013) report that India is 0.61 times more open with regard to trade flows compared to financial flows.

A complex structure of legal and administrative controls has been designed to restrict capital flows.<sup>10</sup> Net capital flows in India were roughly at two percent of GDP until 1990. In the 2006–2010 period, net capital flows increased to an average of 4.55 percent of GDP. In terms of de jure capital controls, India appears closed and has the lowest measure of openness among

9 Cooperative banks in India are governed by state legislation and are subject to a dual regulatory framework by the RBI and the Registrar of Cooperative Societies of the states in which the banks are located.

10 Shah and Patnaik (2011a) describe the process of financial globalization in India.

emerging economies. While the de facto measures suggest an accelerated pace of capital account integration since the 2000s, cross-border financial flows are small and India's financial integration with the world is limited (ibid.).

Capital account integration in India is dominated by two sources. The first is portfolio flows, followed by FDI flows from foreign private equity funds. The second is internationalization at the firm level, that is, the process of domestic firms accessing foreign capital through both portfolio investment into listed equity and investments into unlisted firms by private equity funds (Shah and Patnaik 2011b).

The Indian banking sector has a limited presence internationally. Similarly, international banks have a small presence in India. About 15 out of 29 G-SIBs have operational presence in India in the form of branches. Failure of these firms may have a contagion effect on India. However, given that internationalization is more prevalent in the case of real-sector firms accessing financial markets, the effects are likely to be through Indian macroeconomics and not the connectedness of financial firms, as was the case in the 2008 crisis.

### The Impact of Lehman Brothers on Indian Markets

The Lehman Brothers bankruptcy on the weekend of September 13, 2008, caused stress on the Indian call money market on September 15, 2008, and led to the breakdown of the operating procedures of monetary policy. Table 2 describes the turmoil in the money markets in India. By September 17, 2008, the quantity borrowed by banks from the RBI had jumped to INR 594 billion.

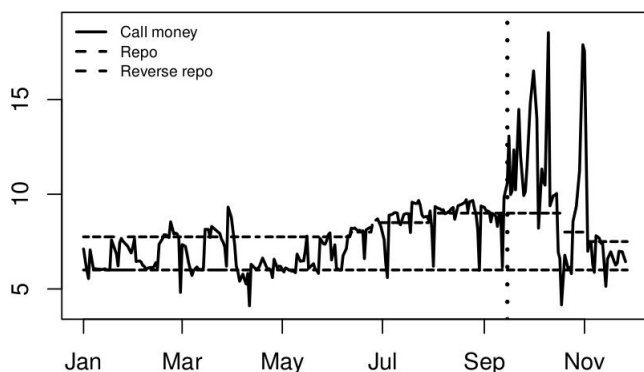
Figure 1 shows the time-series of the call money rate juxtaposed against the “corridor” defined by the RBI's repo and reverse repo rates. For a while, the call money rate was closer to the top of the corridor. In the weeks following the Lehman bankruptcy, the call money rate consistently breached the ceiling of nine percent, often attaining values of above 15 percent. The operating procedure of monetary policy broke down in unprecedented fashion.

Table 2: Turmoil in the Money Market  
after the Lehman Crisis (2008)

Date	TED Spread	Call Rate	Money	RBI Repo (INR billion)
Monday, September 8	1.13	8.83		10.25
Sept 9	1.19	8.30		30.25
Sept 10	1.20	8.94		129.85
Sept 11	1.24	8.88		151.95
Sept 12	1.36	6.15		144.00
<b>Monday, September 15</b>	<b>1.79</b>	<b>9.84</b>		<b>518.15</b>
Sept 16	2.04	10.59		575.65
Sept 17	3.03	13.07		594.80

Source: Patnaik and Shah (2010).

Figure 1: The Call Money Rate vs. RBI's "Corridor"



Source: Patnaik and Shah (2010).

In an analysis of the event, Ila Patnaik and Ajay Shah (2010) suggest that in an environment where the RBI enforced quantitative restrictions upon overseas access to debt capital for firms operating in India, Indian multinationals were borrowing in their offshore subsidiaries and were short of dollars on September 15. Their analysis shows that while the number of multinationals may be small, sales of these firms work out to 11.7 percent of GDP, and their total assets work out to 35.2 percent of GDP. These are large numbers and matter to Indian macroeconomics.

Financial contagion was less severe. Around 2008, it was widely reported that there was a significant shift of deposits from India's largest private-sector bank, Industrial Credit and Investment Corporation of India (known as ICICI Bank), to its largest public-sector bank, the State Bank of India. Though ICICI Bank's exposure to Lehman Brothers or AIG was minuscule, customers rushed to withdraw money due to rumours that the bank was in trouble. Foreign institutional investors, facing a liquidity squeeze from abroad, started pulling out capital from India, resulting in a sharp decline in the stock market. In 2008-2009, foreign institutional investors withdrew nearly INR 433 billion (approximately US\$7 billion).

### Repeated Difficulties in Microprudential Regulation

The response to the 2008 crisis by the Government of India came in the form of three fiscal stimulus packages during December 2008 and February 2009. It recapitalized state-run banks and infused nearly INR 31 billion in 2008-2009 as Tier-1 capital in four public-sector banks. In 2010-2011, it promised an additional INR 165 billion (US\$2.7 billion) of capital infusion to help public sector banks maintain the Tier-1 capital ratio of eight percent (Acharya and Kulkarni 2012).

This is not the first time that problems in the banking sector have been resolved by capital infusions. The history of bank failures in India is replete with examples of forbearance and support of failing firms by the RBI and the government (Patnaik and Shah 2014). In the 1990s, large financial institutions in India such as the Industrial Development Bank of India and

the Industrial Finance Corporation of India saw large-scale defaults on corporate loans. These problems were sorted out through bailouts using taxpayer funds. Caprio and Klingebiel (1996) document evidence of major bank insolvencies in India in the 1994-1995 period, and also found the restructuring exercise a failure.

Large non-performing assets (NPAs) have once again become a problem for Indian banks. Peter Lindner and Sung Eun Jung (2014) studied financial stability metrics of Indian corporates and found that corporate vulnerabilities explain a large part of bank NPAs. The weaknesses in the corporate sector are likely to exacerbate the current NPA crisis, and the government's share of the recapitalization cost could amount to between two and five percent of GDP. Concerns about deterioration in asset quality, and the possibility of public-sector banks requiring substantial capital to meet regulatory requirements, were also reported by the latest financial stability report of the RBI (2014b).

Problems in Indian banking are a result of both poor lending and poor risk management frameworks. Given the state-owned nature of most Indian banking, loans are often made to suit political objectives (Cole 2009). The policy of directed lending that requires banks to lend 40 percent of net bank credit to "priority sectors," which includes agriculture and small and medium enterprises, often leads to poor credit decisions. Banks are able to show accounting profits while giving out loans at low prices, as microprudential regulation in India does not require valuing loans at market prices. This has led to banks holding a large inventory of loans where the book value is in excess of the market value and a consequent failure to recognize and provide for bad loans. Risk management in Indian banks is usually just mechanical adherence to RBI regulations.<sup>11</sup> In addition, all banks suffer from high levels of loss given default, owing to the absence of an overall bankruptcy code.

### Difficulties in Resolution

There is no framework for resolution of financial firms in India.<sup>12</sup> In the case of banking, for example, the RBI's guiding principle has been to prevent the affairs of a bank being conducted in a manner detrimental to the interests of depositors or prejudicial to systemic stability. In the case of a non-performing bank, a moratorium is placed on its activities, while the regulator explores a merger with a stronger bank, or reconstruction.

11 For example, even though an asset becomes non-performing after being overdue for 90 days, provisions for the loss associated with this are spread over a period of four years. This generates a perverse incentive to not sell NPAs. Provisioning for an NPA has a gradual impact on the balance sheet of the bank while sale of the NPA has to be booked as an upfront loss. As a result, banks either hold on to these assets for longer than is economically sensible, or sell assets only when the transaction is at or above book value. For more details, see <http://ajayshahblog.blogspot.in/2014/08/npas-processed-by-asset-reconstruction.html>.

12 RBI (2014a) provides a comprehensive overview of the resolution powers of regulators in India.

The absence of a framework for resolution is part of a larger gap: that is, an overall bankruptcy framework. There is no single law that deals with corporate insolvency.<sup>13</sup> The trigger for filing a petition for bankruptcy differs across different laws. Current policy does not protect the interests of creditors who are unsecured. The fragmentation of the legal framework and the delays in enforcement create incentives for rent-seeking by various participants in the bankruptcy process. In the World Bank's Doing Business Survey 2014, India is ranked much lower than countries such as the United States, the United Kingdom and Singapore on measures that include contract enforcement and resolving insolvency (World Bank 2014). India takes 186 days on average to enforce credit contracts, in comparison to 11 days in the United States, 56 days in the United Kingdom and 12 days in Singapore. Resolving insolvency takes an average of 121 days in India, in comparison to 17 days in the United States, seven days in the United Kingdom and four days in Singapore. Not surprisingly, the recovery rate (cents to the dollar) in India is 25.6, as opposed to 81.5 in the United States, 88.6 in the United Kingdom and 89.4 in Singapore.

Policy makers in India have recognized the need for change, in the form of expert committees studying the absence of a bankruptcy framework and the adverse impact this has on the market. However, it addresses the interests of large Indian businesses as the dominant debtors, or that of the banks and public financial institutions as the dominant creditors. This reflects the debt markets that are in place today, rather than what should be in place. For example, the discussions do not seek measures to protect the interests of creditors other than banks (examples include bond holders, non-banking finance companies and foreign investors), who form a strong emergent class of creditors to a wide range of debtors in India today. The quick-fix approach to reform is also driven by skepticism that government would ever review the entire legislative space governing bankruptcy and propose overarching reforms — including repeal of critical laws and procedural reforms of the courts.

Given the inadequacy of a bankruptcy framework, there are no explicit provisions to deal with cross-border issues. Indian law does not specifically recognize foreign bankruptcy proceedings. However, Indian courts on a reciprocity basis recognize the decrees passed by foreign courts, subject to the exemptions provided in Section 13 of the Code of Civil Procedure (1908).

While India does not have a resolution procedure, it does have a mechanism for deposit insurance. The Deposit Insurance and Credit Guarantee Corporation insures principal and interest up to a maximum amount of INR 100,000 of all commercial

banks, including branches of foreign banks functioning in India, local area banks and regional rural banks.<sup>14</sup> The corporation is a passive payout agency and has no role in early rectification of the problems of the banks or other institutions.

## Interim Measures on Resolution

In January 2014, the Working Group on the Resolution Regime for Financial Institutions set up by the RBI proposed the creation of the Financial Resolution Authority, with a focus on domestic resolution (RBI 2014c). The report recognizes the importance of cross-border issues and recommends that proposed legislation provide the Financial Resolution Authority the powers to achieve cooperative solutions with foreign resolution authorities.

The Government of India institutionalized the Financial Stability and Development Council (FSDC) in December 2010 to strengthen the mechanism for maintaining financial stability, financial sector development and interregulatory coordination. The FSDC, however, does not have the legal powers to resolve a financial group. The RBI also carved out a financial conglomerates monitoring division to institute a system of close and continuous supervision of large and systemically important banking groups. There are currently 12 institutions that fall into this category, accounting for 53 percent of total assets of the banking sector. The RBI has also begun to apply a forward-looking approach by carrying out stress tests under various scenarios as part of a semi-annual financial stability report. The FSDC subcommittee is currently engaged in developing an institutional framework for interregulatory coordination to monitor large financial conglomerates.

The RBI has also signed 19 memoranda of understanding with various central banks to promote greater cooperation and sharing of supervisory information. In January 2015, the RBI concluded a statement of cooperation entitled "Supervisory Cooperation and Exchange of Supervisory Information," along with the FDIC, the board of governors of the Federal Reserve System and the Office of the Comptroller of Currency in the United States (RBI 2015). Similarly, the Insurance Regulatory and Development Authority is a signatory to the Multilateral Memorandum of Understanding of the International Association of Insurance Supervisors, which provides an international platform for cooperation and sharing of information. These, however, are not legally binding.

Difficulties in resolution have led India to debate on whether to require compulsory local incorporation of foreign banks. Under a branch mode, it may be difficult to determine the

13 The Companies Act (1965 and 2013), which governs all aspects of the functioning of companies, has a section on dissolving a company. Some firms are eligible for reorganization by the Board for Industrial Financial Reconstruction under the Sick Industrial Companies (Special Provisions) Act (1985). Those that are ineligible for such reorganization have recourse only to the provisions on winding up through the Companies Act.

14 Some states have amended the local Co-operative Societies Act and empowered the RBI to order the Registrar of Co-operative Societies of the State to wind up a cooperative bank, or to wind up only after sanction from the RBI. Such banks are covered under the deposit insurance scheme.

availability of assets to satisfy local creditors' claims. Greater regulatory control is provided under the subsidiary framework, including smoothing the resolution process. In crisis situations, the distinction between the branch and the rest of the bank, and the legal location of assets and liabilities, can be very important. The RBI will be issuing guidelines for the presence of foreign banks in India based on the discussion paper that was released in January 2014.

## Proposed Reforms: The IFC

The guiding principle of most financial sector laws in India has been containing and controlling financial markets. After the 1991 liberalization, financial sector laws evolved in response to one problem at a time, without any attempt toward holistic reform (Patnaik and Shah 2014). This changed with the setting up of the FSLRC by the Government of India's Ministry of Finance on March 24, 2011, to review and rewrite the legal-institutional architecture of the Indian financial sector. The FSLRC submitted its draft IFC (IFC 2013b) to the government on March 31, 2013.

India has proposed reforms in the resolution framework through the draft IFC. The IFC is guided by the principle that failure of financial firms is an integral part of the regenerative processes of market economies.<sup>15</sup> However, these failures should not be disruptive. The IFC therefore makes provisions for setting up an RC. The objectives of the RC are described as follows:

- protecting the stability and resilience of the financial system;
- enhancing financial market efficiency through efficient pricing and allocation of risk;
- protecting consumers of covered obligations up to a reasonable limit; and
- protecting public funds.

This corporation would watch all financial firms that have made intense promises to households (including banks, insurance firms, pension funds and payment systems), and intervene when the net worth of the firm is near zero (but not yet negative). It would force the closure or sale of the financial firm and protect small consumers either by transferring them to a solvent firm or by paying them.

The RC would have a staff of examiners to regularly conduct examinations of service providers. In case of unfavourable trends in a risk profile, the RC will call for more specialized examinations. The RC is envisaged to function under a framework of "prompt corrective action," incorporating a series of intervention measures to be undertaken by the microprudential regulator and the RC to restore the financial health of the firms.

As a final step, the framework requires determination of certain measures of risk and identification of certain stages of the financial condition of covered service providers, based on the direction and magnitude of these risk measures. If a financial firm is identified as a firm with moderate risk to viability, it must prepare a restoration plan and have it approved by the regulator. If a financial firm is identified as a firm with material risk to viability, it must prepare a resolution plan and have it approved by the regulator.<sup>16</sup>

Once the risk stage is identified and plans are submitted by firms, the microprudential regulator and the RC will seek to address the concerns of firms through their supervisory and regulatory tools. Failure to implement corrective action by the financial firm will lead to the receivership domain of the RC.

The draft code envisages three types of resolution tools:

- *Resolution by purchase:* This involves merging a failing financial firm with another firm(s) or transferring some of its assets and liabilities to another firm.
- *Resolution by bridge service provider:* This involves creating a wholly-owned bridge institution to which some or all of the assets and liabilities of the failing financial firm may be transferred.
- *Resolution by temporary public ownership:* This involves acquiring temporary public ownership of a failing financial firm. This tool is to be used as a last resort.

In the case of liquidation of a financial firm, the draft code requires that:

- the process be carried out in accordance with the law of incorporation of the financial firm;
- the RC be appointed as the official liquidator by the court concerned; and
- the RC be the creditor of the first priority if the RC has utilized proceeds from the fund toward meeting the expenses of liquidation.

The proposals of the draft IFC are largely consistent with the features of domestic resolution laid down in the FSB's *Key Attributes of Effective Resolution Regimes for Financial Institutions*. The RC is designed with adequate tool kits to allow it to take actions toward resolution of all financial firms without systemic disruption.

The draft IFC recognizes the need for India to participate in emerging global arrangements on cross-border resolution. However, in contrast to the FSB, it recommends setting up a committee in 2018 to review consensus in the field and to suggest amendments in the legal framework accordingly. This is driven by the view that, with India's limited capacity, building domestic capacity needs to be the first priority.

15 The policy debate leading up to the law is described in IFC 2013a.

16 The draft law provides an outline for the structure of the resolution plan.

On September 30, 2014, India's Ministry of Finance announced the setting up of a task force to build the institutional machinery of the proposed RC (Ministry of Finance 2014). Some of the important terms of reference for the task force include: review international best practices on resolution; develop the organizational design for the RC that would implement the IFC; develop process manuals for the RC, including detailed processes to be followed for each function of the RC; develop a plan for transition of the deposit insurance function from the Deposit Insurance and Credit Guarantee Corporation to the RC. The task force marks the beginning of the development of the RC in India. It will only be operational, however, once the draft IFC becomes law.

The IFC is a domestic project that has not yet touched on issues of international cooperation on resolution. It is important to remember that international cooperation can only take place in an environment of transparent laws and procedures that define the resolution process in a domestic environment first. The establishment of the RC, as suggested by the draft IFC, will be the starting point for India to engage in international conversations in a more meaningful manner. It also sets a template for other, smaller emerging economies to establish an RC.

At the same time, the task force under the IFC should consider paying more attention to international developments and building capacity to support measures taken by home authorities of the G-SIFIs, or enter into contractual agreements before statutory changes take effect.

## Conclusion

The central question in the event of firm failure is, "Who bears the burden of the loss?" When firms are organized along national lines, it is reasonably simple to restructure or liquidate firms within national jurisdictions. While financial firms have moved beyond national boundaries, resolution schemes have not caught up. In a restructuring of a financial conglomerate, the incentive of local authorities continues to be to minimize costs to domestic taxpayers. Countries have an incentive to understate their share of the problem in order to have a smaller share in the costs. This can often have ramifications for global financial stability when the firm concerned is a global conglomerate, as was the experience in the 2008 financial crisis.

Cross-border resolution becomes further complicated because of asymmetries of resources and asymmetries of financial infrastructures in the countries dealing with the failure of a financial firm (Herring 2007). The asymmetries of resources, especially of human capital and regulatory experience in resolution, are exacerbated in the case of emerging economies, as has been the case with India. The differences between the home and host countries in their deposit insurance systems, central bank liquidity assistance, regulatory and legal infrastructure, financial transparency and the effectiveness of their insolvency

systems for banks all directly affect how financial burdens will be shared among countries. These uncertainties, and the potential for "ring fencing" by the host country, make successful crisis management and crisis resolution much more difficult for the home country as well.

There is some optimism about having developed the tool kit for international cooperation in resolution (Institute of International Finance 2014). However, the progress of emerging economies in even setting up RCs that encompass all financial sector intermediaries has been weak (FSB 2013b). With limited experience of domestic resolution, the prospects of engaging with cross-border resolution appear bleak.

One approach, suggested by Charles Goodhart and Dirk Schoenmaker (2009) in the context of recapitalization of banks, is to create a burden-sharing mechanism where countries contribute to a fund according to the geographical spread of the financial entity's business. This makes possible better alignment of a country's costs and benefits, and might result in better coordination. Such an approach can be extended to emerging economies in the case of resolution as well. Another, more pragmatic, approach may be to undertake an analysis of the possibility of harmonization on various elements of resolution. If this is unlikely, national authorities should gain a clear understanding of the applicable laws and processes, and their limitations, in key jurisdictions. This will allow more effective cross-border planning by eliminating, where possible, uncertainties and misunderstandings (Krimminger 2008).

The BCBS has made remarkable progress since 1975 in establishing protocols for international cooperation between home and host supervisory authorities and in harmonizing regulatory frameworks, concepts and even minimum capital standards (BCBS 1975). This has been, however, a 30-year process. Resolution coordination may similarly take a long time.



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## Appendix I

The Cross-border Bank Resolution Group has made recommendations for cross-border resolution in the following categories (BCBS 2010):

- effective national resolution powers;
- frameworks for a coordinated resolution of financial groups;
- convergence of national resolution measures;
- cross-border effects of national resolution measures;
- reduction of complexity and interconnectedness of group structures and operations;
- planning in advance for orderly resolution;
- cross-border cooperation and information sharing;
- strengthening risk mitigation mechanisms;
- transfer of contractual relationships;
- exit strategies and market discipline.

## Appendix II

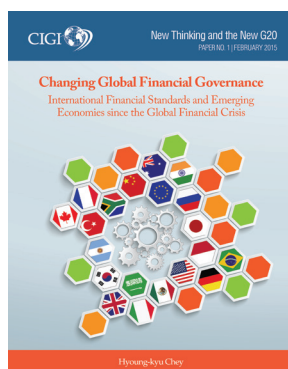
The FSB's Key Attributes of Effective Resolution Regimes for Financial Institutions (FSB 2011) are as follows:

- The regime should cover any financial institution that could be systemically significant.
- Resolution authorities should be independent and have clear mandates, roles and responsibilities.
- Resolution authorities should have broad resolution powers.
- Set-off netting, collateralization and segregation of client asset arrangements should be preserved, although the authorities should also be able to suspend their operation, subject to adequate safeguards.
- While resolution authorities may depart from the hierarchy of claims, they may have to offer compensation to creditors, and their decisions must be subject to judicial review.
- Authorities should minimize the use of public funds to resolve firms.
- Resolution authorities should be empowered and encouraged to achieve cooperative solutions with foreign resolution authorities.
- Home and key host authorities should maintain CMGs that actively review and report on resolvability and on the recovery and resolution planning process for G-SIFIs.
- Institution-specific cross-border cooperation agreements should be in place among relevant authorities to manage the sharing of information and specify responsibilities in respect of all G-SIFIs.
- Resolution authorities should regularly undertake resolvability assessments for all G-SIFIs, and should be able to require changes to business practices, structure or organization.
- Jurisdictions must require planning for the recovery and resolution of firms that could be systemically significant.
- Jurisdictions should eliminate impediments to the domestic and cross-border exchange of information among authorities, both in normal times and during a crisis.

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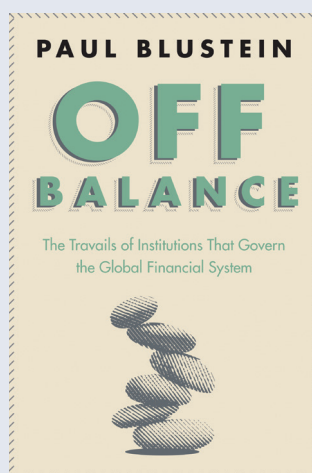
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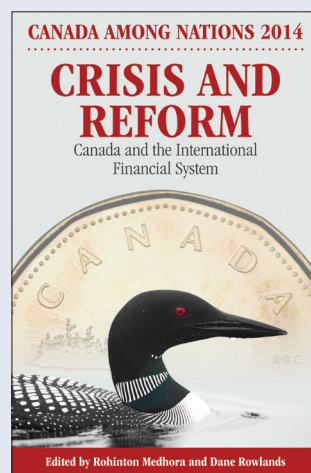
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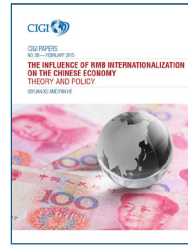
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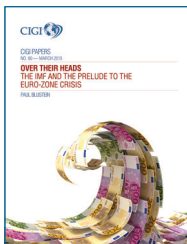
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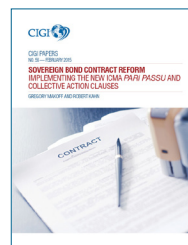
Over-the-counter (OTC) derivatives played an important role in the buildup of systemic risk in financial markets before 2007 and in spreading volatility throughout global financial markets during the crisis. In recognition of the financial and economic benefits of derivatives products, the Group of Twenty moved to regulate the use of OTC derivatives. Attention has been drawn to the detrimental effects of the United States and the European Union to coordinate OTC reform, but this overlooks an important aspect of the post-crisis process: the exemption of non-financial operators from OTC derivative regulatory requirements.



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The International Capital Market Association (ICMA) has recently published proposed standard terms for new, aggregated collective action clauses. Concurrently, the ICMA released new model wording for the *pari passu* clause typically included in international sovereign bond contracts. These announcements and the commencement of issuance of bonds with these clauses are an important turning point in the evolution of sovereign bond markets.

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