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Financial Sector Regulation and Reforms in Emerging Markets: An Overview

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The speed and breadth of contagion from the U.S. financial crisis have dramatically demonstrated the degree to which national economies, developed and developing alike, are intertwined. Initially a problem confined to the U.S. housing market, the rapid spillover of the crisis to the rest of the U.S. financial system and then to the global economy left financial institutions in other advanced economies reeling. The crisis has highlighted the need for substantive regulatory reforms geared toward ensuring the integrity and resilience of financial systems in the advanced economies.

The macroeconomic consequences of the crisis have also affected emerging markets and other developing economies, even though these groups have rebounded more quickly and sharply from the crisis.[1] These shared ramifications have brought into even sharper relief the centrality of sound financial systems for emerging markets as well as low-income developing economies. Efficient and stable financial systems are essential for both emerging markets and low-income developing economies to achieve long-term balanced development and to absorb various types of shocks.

It is striking that the crisis emanated from the United States and hit a group of economies particularly hard, including that of the United Kingdom, that were once believed to have the most sophisticated and robust financial systems. These

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1. See Kose and Prasad (2010).

developments have necessitated the reevaluation of basic principles of financial regulation. Clearly, existing regulatory models and frameworks need to be reconfigured and strengthened. The necessary paradigms are still evolving, although there appears to be a general consensus on some key principles that will be central to a major redesign of financial regulation.

Emerging market financial systems, including those in Asia, have generally proven to be more robust and less affected by the global turmoil than their more advanced economy counterparts. It will be important to carefully filter out the right lessons from this outcome. Meanwhile, the imperative of financial development remains as strong as ever in emerging markets, although the focus is more on basic elements, such as strengthening banking systems and widening the scope of the formal financial system, rather than on creating sophisticated instruments and innovations.

Emerging markets face particular challenges in stabilizing their nascent financial systems in the face of shocks, both domestic and external. These challenges occur at a basic level in emerging markets, many of which are at the point of creating sound banking systems, widening inclusion in the formal financial system, and creating and managing a broader set of financial markets (such as corporate bond markets and basic currency derivatives). Thus the regulatory challenges in these economies are more about risks emanating from underdeveloped financial systems rather than risks from sophisticated financial innovations.

New paradigms for financial development and regulation will have to be suitably reframed for emerging markets, which have a number of varying institutional and capacity constraints. Regulation in low-income countries, where the breadth of formal financial systems is severely limited, poses an even greater set of conceptual and practical challenges.

Policymakers in emerging markets will need to grapple with a distinct set of issues once the recovery in the global economy is entrenched and attention can turn to the steps needed to restore financial stability. The following are some of the key issues facing policymakers and regulators in emerging markets:

—What lessons does the crisis offer for the establishment of efficient and flexible regulatory structures? Even advanced economies have had to confront these deep structural questions, which tend to be more complex in emerging markets due to inadequate regulatory capacity and weak legal and public institutions.

—How can the regulatory and financial development agendas be reconciled in a manner that creates regulatory space for the introduction of standardized products and the development of broader financial markets while effectively managing the associated risks? The financial development agenda is an important one in emerging markets where efficient financial intermediation remains a major challenge, with implications for general economic welfare.

—Is broader financial inclusion consistent with financial stability? In general, increasing financial inclusion—extending access to the formal financial system to a greater swath of the population—is a key issue for emerging markets at this critical juncture of their economic development. Financial inclusion has many implications for allowing households to save and diversify their sources of income, enabling entrepreneurs to have access to financing, and creating a more efficient system of intermediating domestic savings into investment.

—What avenues should be pursued to enable effective regulation of financial institutions with large operations in multiple countries? Foreign banks and other financial institutions have become key players in many emerging markets and have provided a number of direct and indirect benefits to local financial systems. However, in times of externally induced crises, they may prove to be a source of contagion.

This chapter focuses on evaluating the lessons from the crisis and on designing effective strategies for maintaining the momentum of financial development and inclusion in emerging markets, with a particular focus on Asian emerging markets. It attempts to assess the implications of the financial crisis for the design of regulatory frameworks and models, taking into account the specific constraints in emerging markets. The main areas covered in this paper are:

—Basic principles of financial regulation: synthesizing evolving paradigms on the key characteristics of optimal regulatory structures to promote financial stability.

—Financial regulatory reforms in emerging markets, with a focus on emerging Asia: dealing with the challenges of limited institutional development and regulatory capacity.

—The financial development agenda: improving financial intermediation and creating space for the development of broader financial markets, including basic derivative products.

—Financial inclusion: how to increase the access of households and entrepreneurs to the formal financial system in emerging markets and considerations of whether greater inclusion is consistent with promoting sound regulation.

—Optimal macroeconomic policy frameworks to enhance financial stability: challenges in designing robust monetary policy frameworks, particularly in light of de facto increasingly open capital accounts.

—Cross-border financial regulation and, more broadly, regulation of financial institutions that have a substantial presence in emerging markets.

Basic Principles of Financial Regulation

Before the financial crisis, the debate about optimal regulatory structures was focused narrowly on a few issues. One aspect of the debate was whether the United Kingdom's single regulator model, as embodied in the Financial Services

Authority, was better than the multiple regulator framework of the United States, where different agencies have varying jurisdictions. The crisis has exposed gaping weaknesses in both models. The Financial Services Authority was responsible for overall financial stability but appears to have regulated with a "light touch," allowing large levels of systemic risk to build up in the system. In the United States, regulatory failures were compounded by gaps in the overall framework for supervision and regulation that left some products and markets relatively unregulated and created large opportunities for regulatory arbitrage.

A different angle to this issue is the contrast between rules-based and principles-based regulation. Rules-based regulation, which emphasizes getting the regulated to obey the letter of the regulation, typically involves more direct control by the regulatory authority and has been the preferred mode in emerging markets. It had been argued that principles-based regulation, which emphasizes getting the regulated to adhere to the spirit of the regulation, is more appropriate for advanced financial markets. But it also may be relevant for emerging markets looking to develop their financial markets by opening them up to more innovation and risk taking. The crisis has shown that both approaches, which tend to be based on microprudential regulation of individual financial institutions, may be insufficient for dealing with systemic risk.

A reconsideration of basic principles is needed for designing an effective and flexible regulatory mechanism that is capable of dealing with financial innovations and systemic risks. In the wake of the financial crisis, a number of reports have been commissioned from various bodies to look into regulatory reforms. These reports generally agree on some core principles that will have to be emphasized in any set of reforms.[2]

Higher Capital Requirements

One clear impact of the crisis has been to increase the desirable levels of capital buffers held by financial institutions. The U.S. Treasury has enunciated a set of core principles for capital and liquidity requirements for financial institutions, including the following three principles:

2. In the discussion in this section, I mainly draw upon the following reports: the *Report of the High-Level Group on Financial Supervision in the EU* (de Larosière Group 2009), the Group of Thirty report on financial sector reforms (Group of Thirty 2009), *The Turner Review* from the United Kingdom (Financial Services Authority 2009), the report on "Enhancing Sound Regulation and Strengthening Financial Transparency" (G20 Working Group 1 2009), the report on "Reinforcing International Cooperation and Promoting Integrity in Financial Markets" (G20 Working Group 2 2009), and the U.S. Treasury white paper on financial regulatory reform (U.S. Treasury 2009). Other relevant reports and papers are listed in "Additional Sources" at the end of this chapter.

—Capital requirements should be designed to protect the stability of the financial system, not just the solvency of individual banking firms.

—Capital requirements for all banks should be increased from present levels and should be even higher for financial firms that pose a threat to overall financial stability.

—Banking firms should be subject to a simple, non-risk-based leverage constraint and also to a conservative, explicit liquidity standard.[3]

Major advanced economies are considering a reevaluation of assets that can be counted as tier one capital as well as the use of an equity capital standard. Higher-quality forms of capital that enable banking firms to absorb losses and continue as going concerns should provide for a more effective first line of defense for those institutions and limit systemic spillovers. The Treasury report also notes that stricter capital and liquidity requirements for the banking system should not be allowed to result in the reemergence of an underregulated nonbank financial sector that poses a threat to financial stability. Determining appropriate capital adequacy standards for the shadow banking system will be a key challenge in an effective redesign of the regulatory system.

Indeed, another key challenge is to ensure that capital requirements for banks and other highly regulated entities do not result in their simply shifting activity to less regulated areas, including off-balance-sheet activities such as structured investment vehicles. This would simply encourage more risk-taking and raise systemic risk as well, since many off-balance-sheet activities could end up being effectively on-balance-sheet in times of crises.

Countercyclical Provisioning and Acyclical Accounting Standards

In addition to higher capital requirements, the nature of capital requirements will have to be reevaluated to ensure that they do not intensify systemic financial distress. Existing risk-weighted capital requirements can sometimes exacerbate financial panics by requiring financial institutions to raise capital by selling assets into falling markets.[4] The alternative of a countercyclical capital requirement, however, creates complications in terms of defining and measuring the business

3. U.S. Treasury (2009).

4. Brunnermeier and others (2009) contend that countercyclical capital charges are essential and avoid inefficiencies related to higher capital requirements. They argue that regulators should adjust capital adequacy requirements over the cycle by two multiples: the first related to above average growth of credit expansion and leverage, the second related to the mismatch in the maturity of assets and liabilities. Kashyap, Rajan, and Stein (2008) suggest the creation of contingent capital that could be infused into an institution when it is in distress and facing higher capital needs. This contingent capital could take the form of debt issued by banks that could be automatically converted to equity when the system as a whole is in crisis and when the bank's capital ratio falls below a predetermined threshold.

cycle. Even in relatively calm periods, it is not easy in real time to distinguish between trends and cyclical movements in output, and this becomes even more difficult as a practical matter in emerging market economies where business cycles tend to be more persistent.[5]

On the other hand, the dynamic provisioning approach adopted in Spain appears to have had some success as it facilitates earlier detection and coverage of credit losses in loan portfolios. This enables banks to build up buffers against cyclical downturns, thereby increasing the resilience of individual banks as well as the banking system as a whole, a consideration that is particularly relevant for emerging market economies with bank-dominated financial systems.[6] In addition to some form of countercyclical capital requirements, accounting standards will have to be reconsidered so that they do not further intensify systemic problems. But it will be equally important to preserve some notion of forward-looking fair market value in developing new accounting standards.

Liquidity Risk and Leverage

Following the crisis, these are concepts that will need to be given careful consideration in the regulatory process. Regulators will need to establish parameters for financial firms to manage liquidity risk and limit leverage, especially as the latter can heighten counterparty risk in the financial system. It is important in this context to note that it is not just banks but other financial institutions that—because of their interconnectedness or size—will need to have their liquidity risk carefully monitored. Constraining leverage at both the institution-specific and aggregate levels is necessary to ensure that excessive leverage at either of these levels does not create systemic breakdowns. Regulatory oversight of payment, clearing, and settlement systems can help ensure that they are not subject to failure as a result of the failure of one or two institutions with large counterparty exposures. Central counterparty clearing of large-scale transactions, rather than having all settlements take place between individual firms, could add further stability to these systems.

In assessing capital requirements on the basis of risk, it will be important to consider the broader relationship among credit, liquidity, and market risks. At times of crises, these risks can interact with and amplify each other. For instance, during the recent crisis, credit and market risks surged when liquidity dried up in financial markets. To deal with the impact of such feedback effects, capital requirements should take a broader view of risk and the relationships (and potential feedback mechanisms) among different sources of risk in the financial system. This implies that different aspects of risk must first be carefully

5. Aguiar and Gopinath (2007).
6. See Saurina (2009).

considered at the level of the individual institution and then also analyzed at a broader systemic level.

Increasing Transparency

This is a broad concept that includes substantive issues such as bringing more derivative products onto exchanges where they can be traded in a more transparent setting and thereby can be monitored and regulated more effectively. Large over-the-counter (OTC) derivatives contracts that raise counterparty exposure can elevate the level of systemic risk. Steps should be taken to standardize derivative products to the extent possible and improve the technical trading infrastructure in order to increase the incentives for financial firms and corporations to hedge various kinds of exposures on these exchanges rather than via OTC instruments. There could still be a place for certain types of OTC products, but these also should be brought into the regulatory net, and financial firms that are involved in these products should be subject to high capital requirements.

Macroprudential Approach to Regulation

The crisis has created a clear recognition of the need to evaluate and manage financial risks at the systemic level rather than at the level of individual institutions. In complex financial systems, where there is a high level of interconnectedness among financial institutions, institution-specific risk can quickly get transformed into aggregate-level risk. The solution is, in principle, to monitor institution-specific as well as aggregate risk. But a lot of work needs to be done on how to evaluate aggregate risk, especially in determining what sort of reporting requirements are needed to make proper assessments of the level of interconnectedness among different institutions within a system. The ultimate goal is to enable a systemwide approach for regulating systemically important institutions (based on their size, extent of leverage, interconnectedness with other institutions, and degree to which they provide financial services critical to the operation of key markets).

Coordination among Regulators

Following from the previous point, it is clear that closer coordination among different regulatory agencies as well as a careful analysis to close gaps that exist in the regulatory framework are essential. Many financial institutions are now complex and operate under multiple jurisdictions, including in some areas where regulatory oversight might be minimal. There is an increasing impetus in different economies to put in place an institutional setup to coordinate the work of different regulatory agencies and to provide oversight of the agencies themselves. For instance, the U.S. Treasury has recently mooted the idea of a Financial Services Oversight Council while the Rajan Committee made a similar recommendation to set up a Financial Sector Oversight Agency in India, a proposal that has recently been implemented by the government.[7] There are some challenges in determining the authority of such an institution, particularly if it is subsumed under an existing regulatory institution.

As discussed in the context of capital requirements, it is important to ensure that tighter regulation in one area does not lead to regulatory arbitrage in the form of financial institutions shifting the regulated activity to less tightly regulated areas. The financial crisis has shown that operations of unregulated entities have the potential to contaminate markets and infect even highly regulated sectors in times of crises. Thus the systemic consequences of the operations of lightly regulated and unregulated entities will have to be taken into account as part of the process of overall regulatory coordination.

There are also basic conceptual and practical questions that need to be addressed in the context of setting up the broad regulatory framework, including, for instance, whether it is appropriate for the central bank to have responsibility not just for overall financial stability but also for bank regulation. Even in the United States, which ostensibly had an efficient regulatory system, there were clearly flaws in the multiple-regulator approach that allowed large and complex financial institutions to engage in regulatory arbitrage. The proposal to give the Federal Reserve Board regulatory authority over large, systemically important ("too big to fail") institutions met enormous resistance because of fears of concentration of power with the Fed as well as concerns about diluting its primary objective of ensuring price stability.

Resolution Mechanisms for Failing Financial Institutions

Massive government bailouts of distressed financial institutions were undertaken in many advanced economies during the throes of the crisis. This has meant that even if the government now exits from direct support of these institutions, the system has become infected with enormous moral hazard, as the market will now regard every major financial institution as having implicit government backing. The problem of moral hazard is an important one that will have to be dealt with carefully as it can create perverse incentives and stifle competition.

One solution to this problem is to create a resolution mechanism whereby even a large financial institution can be allowed to fail but in an orderly manner that does not involve systemic spillovers of that institution's distress. This mechanism will need to allow for orderly unwinding of counterparty positions, disposal of assets, and resolution of creditor and other claims. For this to work effectively, however, it might be necessary to impose capital requirements on individual units of financial conglomerates (rather than just on the conglomerate as a whole).

7. See, respectively, U.S. Treasury (2009) and Planning Commission (2009).

There are a number of additional issues that are under active consideration as part of the Group of Twenty (G20) process. These include creating adequate statutory protection for consumers (the U.S. Treasury has created a Consumer Financial Protection Agency), monitoring and evaluating the role and performance of credit rating agencies, and restructuring compensation schemes for investment managers in a manner that does not reward excessive short-term risk taking. The regulatory landscape in the advanced economies, including the United States, is in a state of considerable flux, with even basic principles still being reformulated based on lessons learned from the crisis.

Regulation in Emerging Markets

Along with a reconsideration of basic principles, it will be important to think about how to adapt these principles to the particular circumstances of emerging market economies where there are significant institutional and capacity constraints. Although country-specific conditions cannot be ignored, it will still be useful to develop a framework for making progress on this issue.

Many of the basic principles that are being formulated, including higher capital requirements and a focus on liquidity risk management, are as relevant for emerging markets as they are for advanced economies. For emerging markets, it is also a priority to deal with institutional and capacity constraints that limit effective regulation and hinder financial stability. Indeed, even basic microprudential regulation—the effective oversight of individual financial institutions—can be a challenge for many emerging market economies.

A basic priority in emerging markets is to strengthen the institutional framework in order to promote financial stability. This includes instituting comprehensive bankruptcy procedures for corporations and financial firms, and a more robust legal framework to enforce property rights consistently and fairly.

Whatever its benefits in terms of avoiding gaps and regulatory arbitrage, the concept of a single regulator may not be feasible for emerging markets, and, as the U.K. experience shows in a different context, may not even be desirable. A more viable approach would be to create an oversight body that effectively coordinates the work of individual regulatory agencies, ensures the absence of regulatory arbitrage, prevents large gaps from opening up in the regulatory framework, and oversees the regulation of large institutions with operations in multiple markets.

Latin American and Asian experiences show not only how valuable lessons can be extracted from crises but also how these lessons are sometimes forgotten over time. In the debt crises of the 1980s and 1990s, a number of Latin American countries suffered from problems caused by currency mismatches between their external assets and liabilities, particularly in terms of having taken on large amounts of short-term debt denominated in foreign currency. Asian economies faced similar problems during the Asian financial crisis of 1997–98.

Major Latin American and Asian economies have withstood the recent financial crisis reasonably well as a consequence of having substantially reduced their foreign currency borrowing. By contrast, the debt-financed growth of many Eastern European economies left them highly vulnerable to the latest crisis.[8] Maintaining a cautious approach to foreign-currency denominated borrowing is clearly a safe policy but one that has to be balanced against the benefits to financial institutions and corporations of borrowing abroad. A sensible regulatory approach can be used to balance the benefits of foreign-currency denominated debt against the attendant currency risk.

As noted earlier, another key constraint in emerging markets is inadequate regulatory capacity that cannot keep up with fast-evolving markets and products. This constraint is exacerbated by the challenge that competent and knowledgeable staff in regulatory bodies in these countries tend to be absorbed quickly into the private sector. Multilateral institutions can enable capacity building by providing training to country officials, synthesizing and transferring information about international best practices, and providing direct guidance in the formulation of codes and regulations.

The regulatory reform agenda in emerging markets is, in fact, closely tied to their financial development agenda. Financial instability in some of these economies is less a matter of unfettered innovation than it is about incomplete and underdeveloped financial markets. This creates its own set of regulatory challenges, but it is worth turning directly to the relationship between two core priorities—financial development and financial inclusion—to see how they tie in with regulatory issues.

Financial Development in Emerging Markets

The financial crisis makes it imperative to refine rather than retreat from the objectives and avenues of financial development. Mobilizing savings and effectively channeling them into productive investment remains a key challenge for financial systems in emerging markets. In economies like China and India that have high private saving rates, effective financial intermediation is relevant not just for promoting growth but also for improving the welfare impact of that growth.[9]

8. See Kose and Prasad (2010).

9. See (Prasad 2009). These issues are more relevant to middle-income emerging market economies. Among low-income economies, the emphasis may need to be more on getting the basic elements of the institutional framework right, including the legal and regulatory frameworks, corporate governance, and accounting and auditing standards.

The crisis will shift the emphasis of the financial development agenda toward the basics of strengthening banking systems, developing plain vanilla derivative markets such as currency derivatives, and increasing the depth and diversity of corporate and government bond markets. The challenge is to create a regulatory environment that facilitates innovation in these areas without allowing financial innovation to get so far ahead of regulatory capacity that it creates systemic risks.

The key priorities related to the financial development agenda in Asian emerging markets are summarized below.

Strengthening and Improving Banking Systems

In major Asian emerging markets, the financial systems remain largely bank-dominated. Moreover, public sector banks (PSBs) still play a dominant role in several key Asian emerging markets, including China and, to a lesser extent, India. Improving the efficiency and governance of both public and private banks is a key priority. Unfortunately, in both of those countries, PSBs are often seen as instruments of social policy, including directing credit toward favored industries. A number of other Asian countries are in a similar position.

Interestingly, the financial crisis has cast public banks in a different light. During periods of extreme financial stress, when the rest of the financial system is frozen up, public banks can obviously serve a useful function by providing credit. But reforms are still necessary to ensure that these banks turn in an adequate performance in normal times as well. While banks in many emerging markets, including China and India, meet or exceed even the higher capital requirements being proposed under the Basel III Accord, the major priority for these banks is actually to improve risk management rather than to strengthen their capital bases.

Corporatizing PSBs, which does not necessarily entail a full-scale one-shot privatization, would be one step toward improving their performance. Indeed, some PSBs have increased their efficiency and, despite their social obligations, are able to compete with private sector banks. The State Bank of India is a good example of a publicly owned bank that has become highly profitable and competes effectively with private banks, both domestic and foreign.

Development of Corporate Bond Markets

This is necessary to broaden the scope of financial markets in order to raise financing for large-scale enterprises. Bond markets also would provide a way of disciplining firms and increasing their transparency. However, the development of well-functioning corporate bond markets is closely tied to the development of government bond markets, since the yield curve on low-risk government bonds serves as a benchmark for pricing corporate risk. In China and India, these markets are small and underdeveloped, partly because of regulatory constraints.[10] The Asian Bond Fund initiative was meant to catalyze the development of regional fixed-income securities markets, particularly bond markets, but has gained only limited traction in this dimension.

Development of Basic Derivatives Markets

Although derivatives products have acquired a negative connotation, there is a range of plain vanilla derivatives and securitized products that have proven to be useful innovations that reduce rather than raise systemic risk when properly regulated. These include commodity derivatives, which can play a key role in many low-income countries where a significant fraction of the workforce is still connected to agriculture, as well as the extraction and processing of primary commodities. Asian countries have become increasingly open to trade, making it valuable for importers and exporters in these countries to have access to exchange rate derivatives for hedging foreign currency risk. Indeed, even during the throes of the crisis, the Asian region made progress in setting up some of these markets. In particular, currency derivatives markets have only recently been set up in both China and India; the size of these markets has expanded substantially over the past year, indicating the strong demand for these derivative products. Indian authorities have recently permitted the introduction of credit default swaps, albeit in a limited and carefully controlled manner. Nevertheless, this development shows that there is a demand for a broader range of securitization products in the large emerging markets, and that regulators are willing to accommodate this demand as long as they are reasonably certain that they can maintain adequate regulatory control over such products so that they do not elevate the level of systemic risk.

Improving Technical Infrastructure for Trading Financial Instruments

In large emerging markets, significant progress has been made in improving the technical infrastructure for trading various financial instruments, including equities, bonds, and derivatives. Moving more securities transactions onto open exchanges and creating a viable alternative for OTC transactions would increase transparency and efficiency in these markets. Extensive oversight of the payment, clearing, and settlement mechanisms will be necessary to maintain confidence in these markets, particularly to prevent any single financial firm from playing a dominant role.

10. Krishnan (2009) provides an interesting overview of the factors that have governed the development of India's financial markets and discusses why Indian equity markets have done well in terms of depth and resilience while corporate bond markets and the commercial paper market have barely gotten off the ground.

Given these financial development priorities, the question is what the right approach should be to building regulatory capacity relative to fostering financial innovation and development. While it is tempting to put financial stability first and focus on minimizing risks and potential losses, there could be costs in terms of reduced growth and welfare that result from underdeveloped financial markets.

This points to a difficult tension that emerging markets face between tight regulation that limits the development of new financial markets and products, and adequate regulation that provides some space for financial innovation. Financial crises can have particularly painful effects on populations living at or near subsistence levels, so relatively poor and even middle-income countries might choose prudence over innovation and the risks that the latter entails. At the same time, holding back financial innovation and development has hidden costs if it stunts growth or makes growth less inclusive.

The solution might lie in broadening the perimeter of regulation and adapting the evolving international principles of regulation to suit the needs of newly emerging financial markets and institutions. Indeed, since nonbank financial intermediaries in Asian emerging markets are typically smaller than those in advanced economies, while also accounting for a relatively smaller share of the financial system, it should be easier for countries in the region to upgrade their regulatory frameworks to encompass all such institutions in a more robust manner.

Financial Inclusion

This is a critical part of the financial development agenda for emerging markets. Indeed, the G20 has highlighted the importance of the need for greater "financial access" in both advanced and emerging market economies. In the latter group of economies, a significant fraction of the population lacks access to the formal financial system. This affects economic growth and welfare by limiting access to credit (for households and entrepreneurs), making it harder to share risks, and limiting diversification of financial savings.

Broadening financial inclusion is sometimes seen by regulators as increasing risks to the financial system, but in fact, it could be a key component of increasing rather than diminishing financial and macroeconomic stability. Indeed, lack of adequate access to credit for small and medium-size enterprises as well as small-scale entrepreneurs in the services sector has adverse effects on overall employment growth, since these enterprises tend to be much more labor-intensive in their operations than large scale industries.

Financial inclusion often has been seen as a social priority that should be subsidized by the government. For instance, the Indian government requires banks to dedicate a certain proportion of their lending to "priority" sectors such as agriculture. Similarly, despite the purported absence of "directed lending," Chinese banks continue to play an important role in providing financing to agriculture (and to large state-owned enterprises). Unfortunately, this makes the financial inclusion process much less effective and also reduces the overall efficiency of the financial system.

The key issue is to see financial inclusion not just as a social priority but as one that the private financial institutions should be incentivized to take up. There is a large demand for even basic financial services in underserved segments of the population in many Asian countries, particularly in rural areas. The constraint lies in achieving scale efficiencies that make it worthwhile for the private sector to reach these markets.

Technology can play a useful role here. Innovative approaches such as mobile banking (using mobile phones, which have proliferated even in rural areas in most Asian developing countries) could be used to increase inclusion in an easy manner. Automated teller machines (ATMs) can reduce the costs of setting up bank branches that may not achieve adequate scale economies to be individually profitable. Other approaches, like using retail grocers to provide small-scale retail banking services, are also being considered in many countries, including India.

In some developing economies, however, such initiatives often come up against regulatory constraints. For instance, the Reserve Bank of India has insisted that Indian banks must maintain the "know your customer" principle in all transactions, making it difficult to implement some of the approaches mentioned above. Until recently, the Reserve Bank also required each ATM installation to go through a cumbersome licensing and regulatory approval process. Such measures highlight the inherent tension that exists in regulators' minds between instituting effective regulatory oversight and broadening financial inclusion through nontraditional means. Analytical work and field experiments are needed to evaluate different approaches to broadening inclusion as well as their implications for financial stability.

A lot more work also needs to be done to harness the informal financial system that still plays an important role in low-income countries and even in some middle-income countries. There is a difficult set of issues about whether informal financial systems still have a viable and useful role, and whether they can be brought into the regulatory net in a manner that makes them compatible with overall financial stability. But the role of the informal financial sector, and the potential problems with instability associated with it, will tend to endogenously diminish in size as the formal financial system takes its place in delivering basic financial services to a broader segment of the population. Thus the financial inclusion agenda is not only compatible with but could also promote overall financial stability.

Macroeconomic Frameworks to Support Financial Stability

The financial crisis has highlighted the intricate interplay between macroeconomic and financial policies at both the national and global levels. Without stable macroeconomic policies, financial development can be difficult. On the flip side, weakly supervised and inefficient financial systems can hamper the effectiveness of policy transmission mechanisms and make it harder to manage macroeconomic policies. Approaches to monetary policy frameworks, capital account liberalization, and related issues are being reconsidered in light of the crisis.

Monetary Policy

Over the last two decades, many emerging markets have started adopting some form of inflation targeting in order to anchor monetary policy and move away from exchange rate targets, which have become increasingly untenable given that capital accounts are becoming more open.[11] A key issue is whether monetary policy should explicitly strive to manage asset prices. This debate has particular resonance in light of the criticism directed at central banks that targeted inflation either explicitly (Bank of England) or implicitly (Federal Reserve) and overlooked the asset market bubbles, especially in the housing market, that have come back to haunt policymakers.

There is a fundamental tension between increasing the mandates of the central bank and the independence that the central bank needs in order to adequately meet its objectives.[12] The hierarchy of complexity related to central banking in an emerging market economy can be broadly characterized as follows.

Attaining the basic objective of price stability is already a difficult challenge in emerging markets. Financial underdevelopment, weaknesses in the monetary transmission mechanism, and often profligate fiscal policies (creating fiscal dominance over monetary policy in determining aggregate price dynamics) make it difficult to consistently attain a low inflation objective with the interest rate instrument.

Adding an exchange rate objective, which many emerging market central bankers are under pressure to do, makes this yet more difficult operationally. In principle, capital controls provide a degree of freedom that insulates domestic monetary policy from the stance of monetary policy in major partner countries. But capital accounts are becoming more open in virtually every country. Even in economies like China and India where there are still many capital controls, de facto capital account openness has increased, and it has become harder to limit inflows or outflows when the incentives to bring money into or take it out of the country are large enough.

11. Hammond, Kanbur, and Prasad (2009).
12. See Prasad (2010).

Furthermore, in light of the crisis, central bankers around the world are now being asked to pay more attention to asset price bubbles. As in advanced economies, in emerging markets it also is difficult to identify incipient asset price bubbles. Trying to deflate them once they have grown large and are more easily identifiable engenders large social and political costs, since the collateral damage can be much greater at that point. In any event, the traditional monetary policy instrument—a short-term policy interest rate—may not be the most effective tool to deal with asset price bubbles. An alternative is to use prudential requirements and regulatory policies to deal with bubbles. This is a reasonable approach and would expand the set of instruments that central banks have. In practice, however, central banks have less control in certain asset markets, especially as they grow more sophisticated and as foreign inflows increase in volume and in terms of importance to domestic markets.

As discussed earlier, government ownership of banks can be very helpful in a crisis but creates conflict between monetary policy and regulatory objectives even in normal times. Interest rate changes to maintain price stability may not always be consistent with the stability and profitability of the banking system. This creates another layer of tension within a central bank's mandates.

In short, central banks in emerging markets face myriad challenges in fulfilling their mandates, some of which are mutually inconsistent. At the same time, in many emerging markets, central banks are often the public institutions with the best intellectual and technical capacity and robust institutional structures. So it is not surprising that they are asked to take on multiple mandates.

Such conflicting directives can reduce a central bank's effectiveness in meeting its core mandate of maintaining price stability. Indeed, it could be costly to abandon the hard-won benefits of price stability in emerging markets. Inflation is especially pernicious in these economies as it hits the poor very hard, rendering low inflation a crucial objective of monetary policy. Inflation targeting has a good track record of delivering price stability and anchoring inflation expectations, which is very valuable in emerging markets, especially those with a history of high and volatile inflation.

A key issue, which the crisis also has brought to the fore, is whether adding objectives to a central bank's basic mandate makes it more subject to political pressures and interference, thereby reducing its operational independence. There are also economic efficiency issues to be considered carefully in this context. For instance, directing the central bank to focus on asset price bubbles might prevent meltdowns, but lack of a singular focus on price stability could create smaller boom-bust cycles if inflation expectations are not well anchored by a target.

De Gregorio (2009) has argued forcefully that the best and only realistic approach for emerging market central banks is to focus on an inflation objective, using prudential requirements where possible to manage asset market bubbles (which are, in any case, difficult to identify) and letting the exchange rate serve as the adjustment mechanism. This approach is plausible, but it will not be straightforward to implement in emerging Asia, which is highly open to trade (and therefore greatly affected by large exchange-rate fluctuations) and where memories of the sharp exchange rate fluctuations during the Asian financial crisis are still raw. But it is still an important lesson to be learned from the experiences of Latin American economies. They were wracked by high inflation and crises before they moved to inflation targeting and flexible exchange rates, which have done much to promote macroeconomic stability in the region.

Perhaps this is a trade-off to think about carefully in the context of the institutional and economic environment of each country, and ultimately this is a sociopolitical choice rather than a purely economic one. Further analysis is also needed to determine what additional instruments central banks will require to effectively try to satisfy multiple objectives and to address questions such as what sort of rule can be used to keep asset prices in line, especially when there is a conflict between hitting an inflation objective and dampening asset price bubbles.

Other Macroeconomic Policies

Fiscal policy plays an important role in financial stability. Weak fiscal policies can create a number of distortions in the economy, especially if the scale of government borrowing becomes large. In the first place, it creates monetary instability by making it difficult for the central bank to anchor inflation expectations. If the government borrowing is done through banks, as is the case in India, this can have adverse effects on financial intermediation in the economy. Large fiscal deficits can also reduce fiscal space that is available for responding to financial crises or even normal business cycle downturns. During the global financial crisis, for instance, China was able to effectively ratchet up its fiscal stimulus by a large amount, as it had implemented disciplined fiscal policies for many years, resulting in relatively low levels of explicit budget deficits and public debt.[13]

As discussed earlier, capital controls used to be an important part of developing country central bankers' toolkits, but their effectiveness and durability have eroded significantly over time. With emerging markets' rising trade and financial integration within the global economy and their de facto more open capital accounts, capital controls now simply generate distortions without any commensurate benefits in terms of providing adequate protection from volatility of capital flows or promoting stability in financial markets.

13. However, contingent liabilities in the state-owned banking and pension systems suggest that the implicit public debt could, in fact, be significantly higher.

Cross-Border Regulation

The recent financial crisis is likely to result in a moderation of cross-border capital flows and other aspects of financial globalization, at least in the short run while financial systems around the world stabilize. Nevertheless, capital accounts of emerging markets have become more open over time, and it is unlikely that this trend can be reversed once the incentives for cross-border flows return. Macroeconomic policies and financial regulation in emerging markets will have to deal with this reality. An important question is how to design policy and regulatory frameworks that can deal with complications associated with open capital accounts. It is useful first to review different factors that could affect the trend in emerging markets to financially integrate with the rest of the world. In the discussion below, I focus on the case of Asian emerging markets, but the general principles are relevant for all emerging markets.

Possible Impact of the Crisis on Financial Flows to and from Emerging Asia

For Asia a key aspect of greater financial integration relates to capital flows into or out of the region.

Flows from Advanced Economies

Capital inflows from advanced economies constitute the bulk of gross inflows into emerging markets, including in Asia. These flows are likely to remain at relatively low levels in the short term, as international investors remain wary of taking on risk while the global economic recovery still seems fragile. On the other hand, the relatively stronger growth prospects of emerging markets compared to those of advanced economies should have a positive effect on such flows. As a reflection of international investors' more favorable sentiments toward emerging markets, sovereign bond spreads for the major emerging markets have dropped substantially relative to their peak in November–December 2008.

An important factor that could have a longer-term effect is that many financial intermediaries in advanced economies (such as investment banks) that had specialized in investments in developing countries have been swept away by the financial crisis. This entails a significant loss of information about investment possibilities and financial markets in emerging markets, including Asia. It will take a while for this knowledge to be rebuilt and for new intermediaries to take on the role of channeling funds from advanced economies to emerging markets. Of course, emerging market economies can assist this process by making their financial markets more open and transparent, which would make it easier for foreign investors to evaluate investment possibilities and act on them.

Rising International Exposure of Asian Banks

The size and reach of major Asian banks have continued to expand over time. They have large deposit bases in their home countries and are at a comparative advantage now that many of their international competitors have been hit hard by the crisis while they have remained relatively immune because of their hitherto modest international exposure. Many banks in the region, particularly those headquartered in China and India, are likely to have increasing cross-border exposure and become true international banks.

Asian Households' Demand for Foreign Investments

As income levels in the region rise, the desire for international investments, especially for portfolio diversification purposes, is likely to increase among Asian households and corporations. As financial markets in these countries become deeper and the range of financial intermediaries increases, the quantum of financial flows that will move into foreign investments is likely to increase.

The Role of Institutional Investors

Institutional investors based in the Asian region, including pension funds, could serve as an important channel for private as well as official funds to flow abroad. Sovereign wealth funds that manage a portion of foreign exchange reserves are also likely to aggressively seek investments abroad when asset values remain relatively cheap, and this pattern is likely to be maintained even after global financial markets have stabilized.

Implications for Cross-Border Regulation

All of the factors listed above suggest that cross-border supervision will be of increasing interest to emerging Asia as foreign financial institutions increase their presence in the region and institutions from within the region increase the scale of their foreign operations. An additional factor that is relevant in this context is that with rising trade and financial linkages among Asian countries, the scale of cross-border financial transactions within the region itself will increase rapidly. Hence regulatory authorities in the region will face multiple challenges during the process of greater financial integration both within the region and with the rest of the global financial markets. These trends will require three types of regulatory responses.

Greater Oversight by National Regulators of the International Operations of Their Domestic Financial Institutions

Cross-border operations naturally involve additional risk factors, especially exchange rate risk. These various dimensions of risk that arise from larger cross-border exposures will need to be carefully monitored, both from the perspective of individual institutions and from a systemic perspective. In extending the principle of imposing capital requirements on individual units of financial institutions in order to allow for orderly dissolutions of institutions in financial distress, it may be useful to explicitly impose capital requirements on country-specific operations of each financial institution. This approach should be considered cautiously, however, as it could lead to a reduction in the provision of financial services in countries where the deposit base is weak.

Greater Coordination among Regulators in the Region
This could help promote regional financial stability. The idea mooted by the G20 of having colleges of supervisors that could coordinate, or at least share, information concerning institutions that have large cross-border operations could also be implemented at the regional level. There are a number of practical challenges, however, in terms of coordination among countries with very different levels of financial market development, institutional quality, and regulatory capacity. Regional multilateral institutions like the Asian Development Bank may have a critical role to play in fostering and facilitating this process.

Better Coordination with Regulators from Outside the Region
Exchange of information with other national regulators via international colleges of supervisors would be essential to enhance monitoring of their domestic institutions as well as foreign institutions that have a substantive presence in the region.

In the aftermath of the financial crisis, international regulatory norms and standards are being refashioned by institutions such as the Bank for International Settlements, the International Monetary Fund, and the Financial Stability Board. Emerging market economies would ultimately benefit from the greater financial stability that will be engendered by the steps taken by these institutions. However, these international agencies are standard-setting bodies that can only provide guidance on codes and international best practices; they are unlikely to enforce international standards or to intrude into individual countries' implementation of those standards. Aligning their own regulatory frameworks with these new standards will be the responsibility of the individual national authorities, creating a complex set of challenges.

Final Remarks

This chapter has provided an overview of the complex conceptual and practical challenges that emerging market economies face as they attempt to improve their frameworks for financial regulation. In the aftermath of the global financial crisis, these challenges are not unique to emerging markets but are heightened by the capacity and institutional constraints in these economies. Emerging markets need to balance the quest for financial stability with the imperatives of financial development and broader financial inclusion. I have argued that these objectives are not necessarily inconsistent and can actually reinforce one another. I have also discussed aspects of macroeconomic policies and cross-border regulation that have implications for financial stability and the resilience of the financial sector in emerging markets.

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