



# What Is to Be Done

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**W**HILE there is enough blame to pass around, one key contributor to the global financial crisis was inadequate regulation—both in its fragmented nature and its lack of enforcement. Regulatory structures must be revamped to prevent another buildup of systemic risks, to provide a sounder footing for connecting global savers and investors (that is, global financial intermediation), and to ensure a clear and consistent method of dealing with financial instability when it does arise. Central bank methods of providing liquidity to markets must be looked at too.

The IMF has been examining several areas that will require attention to prevent systemic crises:

- *the perimeter of regulation*, or which institutions and practices should be within the purview of regulators;

- *procyclicality*, the tendency for some regulatory and business practices to magnify the business cycle;

- *information gaps* about risk and where it is distributed in the financial system;

- *harmonizing national regulatory policies and legal frameworks* to enhance coordinated supervision and resolution of firms and markets that operate across borders; and

- *providing liquidity to markets* to ensure the smooth flow of funds for investment and the effective transmission of monetary policy.

## The perimeter of regulation

What is clear from the latest crisis is that the perimeter of regulation must be expanded to encompass institutions and markets that were outside the scope of regulation and, in some cases, beyond the detection of regulators and supervisors. Some of these entities were able

**The scope of financial regulation needs to be revamped and the provision of liquidity improved. Here's how**

to obtain short-term debt to invest in longer-term assets and increased their leverage (the use of debt to purchase assets) to a degree that threatened the stability of the financial system when those short-term lenders recalled their funds. However, coverage of all financial intermediaries is unnecessary and would limit the benefits some of them provide to the economy—such as innovation and efficient transfer of funds. To avoid overburdening useful markets and institutions it is important to identify carefully the specific weaknesses that wider regulation would seek to address (so-called market failures). This could be achieved by a two-perimeter approach. Many financial institutions and activities would be in the outer perimeter and subject to disclosure requirements. Those that pose systemic risks would be moved to the inner perimeter and be subject to prudential regulations.

At a first cut, unregulated activities or entities that should be placed within the new perimeter include:

- Institutions that are counterparties to risk transfers from the regulated sectors: new regulation should target off-balance-sheet entities such as structured investment vehicles that could be used to acquire risky assets from banks and other regulated firms.
- Investment firms that use leverage and are apt to amplify downward spirals of asset prices when they need to deleverage, that is to sell assets prematurely to reduce their reliance on debt when leverage is deemed to be excessive.

Making a clean distinction between entities that are systemically important and those that are not will be difficult, but ideally institutions that take on less leverage and are less interconnected should be less burdened by regulation. Still, regulators must be able to collect enough information about institutions to be able to decide whether they contribute to systemic risk.

### Procyclical practices

Economic cycles are to be expected, but some regulatory and institutional practices can accentuate cyclical movements. These practices can range from capital regulations and provisioning rules for banks to the risk management and compensation practices in many financial institutions.

The challenge to prudential regulation is to remove procyclical elements without negating risk-based decision making within financial institutions. Moreover, any movement to add regulations that require additional capital should be gradual to avoid more damage to a weakened financial system.

One of the main items on the agenda to mitigate procyclicality would be regulation of capital—the funds institutions are required to maintain to absorb losses. (For instance, “core” capital is considered to be equity capital from stock issuance and disclosed reserves set aside from profits.) Incentives should be introduced to encourage firms to accumulate additional capital buffers during upturns and let them run down during downturns. There are several ways of doing this, but a simple one would be to make capital requirements countercyclical—the amount of capital required to support a given level of assets would rise during booms and fall during

busts. Ideally, these countercyclical capital regulations would not be discretionary, but built into regulations, becoming an automatic stabilizer that during upturns would enable supervisors to resist pressures from either firms or politicians to let things continue on their upward trajectory.

The crisis has highlighted the role of leverage. In principle, risk-weighted capital requirements, which require more capital for riskier assets than for less risky ones, should control excess leverage. But it would also be helpful to apply a maximum leverage ratio—such as high-quality capital divided by total assets—including off-balance-sheet entities, as a relatively simple tool to limit overall leverage in financial institutions during an upswing.

Although fair value accounting methods, requiring institutions to value assets using current market prices, serve as a good benchmark in most situations, the crisis made it apparent that in periods of deleveraging, they can accentuate downward price spirals. If a firm has to sell an asset at a low price, other firms may have to value similar assets at the new low price, which may encourage the other firms to sell, especially if they have rules against holding low-valued assets. Thus, accounting rules should allow financial firms with traded assets to allocate “valuation reserves,” which grow to reflect overvaluations during upswings and serve as a buffer against any reversions to lower values during downturns. Similarly, values of assets used as collateral, such as houses, also tend to move with the cycle. More room is needed in the accounting rule book to allow the reporting of more conservative valuations, based on forward-looking and measurable indicators.

Another procyclical feature of the financial system is funding liquidity—that is, the ability of financial firms to obtain funds to lend. Funds tend to be more abundant during upswings and less so during downturns. The first line of defense in ensuring steady availability of funds is strengthened liquidity risk management techniques in financial firms. Firms should be encouraged to rely on less volatile forms of funding such as retail deposits rather than short-term wholesale funding. Setting additional risk-based capital requirements or imposing some type of levy might be efficient methods of repricing liquidity to mitigate a portion of systemic risks. A blunter tool, requiring banks to hold a minimum quantity of high-quality liquid assets, might also be considered.

### Plugging information gaps

One of the most troubling aspects of the crisis has been the inability to see what risks were distributed to various holders and who those holders were. Many of the new structured credit products were supposed to distribute risk to those who, in theory, were best able to manage it. But in many cases, supervisors and other market participants could not see where various risks were located. What’s more, risks often were sliced and diced in ways that prevented the packagers of the risks and the purchasers from thoroughly understanding what risks they had sold or acquired. Moreover, the underlying information used to price such complex securities was not

easily available or able to be interpreted.

Serious analysis of systemic risk and how to prevent it requires filling information gaps. Probably most needed are data on the risk exposures of systemically important banks and nonbank financial institutions. Levels and concentrations of their exposures (which would be collected but not published by the authorities) and the linkages among the institutions across borders and markets are the most important for observing systemic risks and vulnerabilities.

More public information about asset valuation techniques and the underlying data and assumptions would allow better pricing and give participants greater ability to see correlations and, potentially, tail risks (unlikely outcomes that are

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devastating when they occur). Data on prices, volumes, and overall concentration in over-the-counter markets also need attention because they are typically not recorded in ways that allow others to see transaction information, limiting liquidity in periods of stress. A clearing system can be used to collect (and to net) trades, allowing participants and others to see how much total risk is being undertaken.

More emphasis should be placed on collecting information that could permit construction of indicators that warn of impending problems. Analysts must think carefully about the kind of information that could give forward-looking assessments of risk both in the system and in individual institutions or markets. Intuitively, indicators that incorporate risks—such as those based on options prices—are better at this than those that do not. But because these indicators use market prices, they are likely to reflect only current perceptions of future risk and may not be able to predict when risks will become systemic.

Better disclosure rules covering financial institutions are also warranted, to make information more specific and consistent. In particular, reporting should cover both on- and off-balance-sheet items because much risk was kept off the balance sheet—hidden from investors and supervisors alike. Basic measures of leverage and exposure would also be required of nonbank financial institutions, in part to judge their systemic importance. Models and valuation techniques should be disclosed to allow investors to better judge the risks of what they are buying. These types of disclosures aim to give market discipline a chance to work.

On another level, markets will function better if prices, transaction amounts, and other information regarding over-the-counter (OTC) derivative markets are more readily available. Markets lacking consistent reporting of information have been the most problematic and were associated with the most uncertainty. Some OTC data are already collected and could be

disclosed more often with more information provided about geographic location and instrument coverage, counterparty type, and overall market concentration. This would shift the focus of data collection from information on volume to risk exposure. There must be better information on credit default swaps (CDS) because these “insurance policies” are held by so many interconnected parties that it is difficult to discern who is exposed to the default of various firms. Centralized clearing facilities for CDS contracts, as are currently under construction, would help reduce counterparty risks and provide a central place for information collection.

### **Improving cross-border coordination**

Supervision of globally and regionally significant financial firms was not executed in a way that allowed for the smooth handling of the systemic and global risks associated with this crisis. Regulators are not solely to blame. The bankruptcy of the international investment bank Lehman Brothers, the insolvency of three Icelandic banks, and the meltdown of international insurance giant AIG are all episodes of miscoordination that have damaged confidence and the functioning of financial markets. The difficulties of ceding national interests—and other structural, political, cultural, and legal constraints—have undermined effective supervision of financial groups.

Policymakers and politicians from countries where financial conglomerates operate must now act together to address inconsistencies in national legal frameworks that have become apparent in recent bank failures. Ensuring that bank insolvency frameworks are compatible across home and host countries on a number of fundamental fronts is important. For instance, it would be useful to have consistent criteria to initiate insolvency procedures if approved by the home regulator or relevant supervisors in countries where the institution does business. A consistent set of guidelines to initiate bank resolutions—including triggers, time frames, and procedures—could help preserve a firm’s franchise value. Depositor and investor protection schemes across jurisdictions should avoid triggering destabilizing flows of deposits from one place to another during periods of uncertainty. Finally, an arrangement based on some objective criteria, such as proportionate size and quality of assets across countries, should ensure an equitable distribution of losses so that better-supervised jurisdictions bear less of the cost. These arrangements could also lead to the reduction of a firm’s operations abroad if the home country does not have the capacity to contribute to resolution costs.

During the crisis, cross-border information flows and cooperation among regulators have been inconsistent—sometimes inhibiting solutions. Information about cross-border risk exposure was incomplete, and systemic connections among financial institutions were underappreciated. Regulators and supervisors must decide what information is essential to collect and communicate, taking into account its relevance for systemic stability.

There are a number of ways to enhance cooperation across jurisdictions. For example, a college of supervisors from countries in which a firm does business could oversee that



firm. The head of that college, the lead supervisor (typically from the country where the bank is domiciled), would be responsible for drawing a clear picture of risk concentration across the firm as well as its major strengths and weaknesses. A firm's permissible activities would be decided by the lead supervisor and other appropriate supervisors. The college would examine the firm's activities and make ad hoc requests for information as the need arises. Broadly, making minimization of systemic risk an explicit goal of financial supervision would help align various dimensions of the regulation of global and domestic financial firms.

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The fragmented nature of some domestic regulation also requires more coordination and cooperation. An approach similar to the international college of supervisors could be instituted at the domestic level if there are multiple supervisors. Domestic regulatory entities' ability to better mitigate systemic risk depends not on the institutional structure (that is, whether they are housed in one institution or in several, or inside or outside the central bank), but on close cooperation and coordination among responsible regulators.

### **Providing liquidity to markets**

The crisis has spawned a plethora of ways to provide liquidity to markets. Central banks have expanded the number of counterparties, broadened the types of collateral they will accept, and lengthened the maturity of liquidity support. In some cases, new facilities have been introduced. But even though these actions have helped meet increased demand for liquidity, they have failed to keep markets functioning—in part because they do not remove the counterparty uncertainty pervading financial markets. Central banks' ability to use interest rates to govern the intermediation process has become more complex. Central banks must consider which market rates they can influence, taking into account how those rates translate to the borrowing rates paid by end users. In emerging markets, central banks also have to struggle with the trade-off between providing needed liquidity and the risk of facilitating capital flight.

Because transmission mechanisms of monetary policy have been less reliable, central banks must devote attention to determining how they can directly support intermediation during a period of bank balance sheet adjustment. Activities such as asset swaps to free up bank balance sheets temporarily to allow them to make other loans can support markets directly. Quasi-fiscal measures—such as using the central

bank's balance sheet to provide credit to specific borrowers—help keep credit markets functioning but could have deleterious effects if used for long periods of time. Specifically, they may muddy the signaling aspect of the central bank's policy interest rate, exclude nonpreferential borrowers (potentially crowding out funds to them), and increase the size of the central bank's balance sheet to a degree that may begin to strain its credibility as a well-managed institution.

Most important, the new methods used to supply emergency liquidity and provide intermediation to needy borrowers should include some notion of how to discontinue those methods as conditions normalize. The timing of such an exit must be coordinated to avoid abrupt movement of liquidity and credit. Exit strategies with incentives that gradually wean market participants from central banks back to normal liquidity providers are least likely to incur such bumps. For instance, central banks could gradually alter posting policies to make riskier collateral less attractive to post. Adjusting rates on central bank instruments to increase incentives to use market channels would serve a similar purpose.

### **The future of regulation**

Discussions on the redesign of the regulatory framework to avert future crises are taking place in many international forums. While reiterating the imperative of restructuring regulation, it is also important to keep in mind the need to strengthen the ability and willingness of supervisors to enforce these regulations in a timely and credible manner. No amount of regulatory redesign will be effective unless enforcement is improved, and this in turn will require ensuring the operational independence and adequacy of resources available to supervisory agencies.

Restructuring regulation will take time, but the impetus to move in the directions just discussed is strong. The sooner markets can discern the direction new regulations are taking, the sooner investors can consider the new environment. Because many investors expect heavy-handed regulatory reforms, they are waiting before deploying their funds in various institutions and financial markets. The uncertain regulatory landscape makes it difficult to gauge which business lines will be productive and which may be regulated out of existence. Thus, moving to provide consistency in the regulations across a number of areas—both across borders and within domestic jurisdictions—could help restore some desperately needed certainty in the financial system. ■

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*This article is based on “Lessons of the Financial Crisis for Future Regulation of Financial Institutions and Markets and for Liquidity Management,” written by the IMF's Monetary and Capital Markets Department. Other supervising authors include Luis Cortezarria-Checkley, Simon Gray, Barry Johnston, and Ian Tower. The “Lessons” paper and the papers on which it was based as well as a complete list of contributing authors can be found at [www.imf.org/fandd](http://www.imf.org/fandd).*