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## The Perimeter of Financial Regulation

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**The Perimeter of Financial Regulation<sup>1</sup>**

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<sup>1</sup> The views expressed herein are those of the authors and should not be attributed to the IMF, its Executive Board, or its management.

**GLOSSARY**

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| IAIS  | International Association of Insurance Supervisors   |
| IOSCO | International Organization of Securities Commissions |
| LTCM  | Long-Term Capital Management                         |
| OTC   | Over the Counter                                     |
| SIV   | Structured Investment Vehicle                        |
| SPV   | Special Purpose Vehicle                              |

## I. INTRODUCTION AND OVERVIEW

The G-20 has called for a review of the scope of financial regulation. The November 15 communiqué referred to “a special emphasis on institutions, instruments and markets that are currently unregulated, along with ensuring that all systemically important institutions are appropriately regulated.”

This call reflects concern that the coverage of prudential regulation has been too narrow. Prudential regulation typically aims at minimizing the risk of failure by institutions (and settlement systems) that are viewed as critical to maintaining stability. Instruments of prudential regulation typically include minimum capital and liquidity requirements, supervisory inspection, mechanisms to require early intervention by regulators, deposit insurance, and similar safety nets, as well as special insolvency and resolution mechanisms.

The scale of relevant activities outside the regulatory perimeter depends on the definition of regulation. For the United States, it has been estimated that the total assets of the “shadow banking system”—i.e., bank-like entities not subject to bank-like prudential regulation—were roughly US\$10 trillion in late 2007, about the same size as those of the banking system. However, it is important to recognize that this total includes the assets of entities such as investment banks, which were subject to a degree of regulation, although this was often focused mainly on ensuring investor protection and appropriate business conduct.

Explicit public policy considerations were used to argue for limiting the scope of prudential regulation. It was argued that

- market discipline and self-regulation would provide an effective brake on risk taking by lightly regulated and unregulated institutions;
- only certain types of institutions could create systemic risk—in particular, banks should be seen as core because of their deposit-taking function and role in payment systems;
- regulation of the banks would provide an adequate instrument for ensuring that lending outside the core would capture systemic risks; and
- applying regulation to a wider range of nonbanks (and new financial instruments) would be too costly, reduce innovation, and potentially increase systemic vulnerabilities by inhibiting the ability of markets to transfer risk.

A discussion of extending the regulatory perimeter should, therefore, weigh carefully the experience of the past two years against these considerations. It will also be important to understand whether the assumptions underlying the existing regulatory model for banks are fatally flawed, or whether better regulation and supervision of the banks would be adequate. In addition, if a widening of the perimeter is called for, then care will be needed to weigh the

compliance and economic efficiency costs, as well as the risk that new regulation may create fresh arbitrage opportunities and add to moral hazard.

The experience of the crisis suggests that prevailing policy considerations were flawed in important respects:

- Market discipline was apparently ineffective in constraining risk taking outside the banking sector. Some unregulated companies and vehicles, for example, were able to assume both credit risks and significant liquidity risks, funding poor-quality, long-term securities by short-term borrowings with high degrees of leverage. In these cases, market expectations of support from sponsoring banks might have played a role in limiting the effectiveness of market discipline.
- The failure of some nonbanks had systemic repercussions by disrupting key financial markets and contributing to a widespread loss of confidence—for example, the failure of Lehman Brothers and the insolvency event early in the crisis of two Bear Stearns managed hedge funds that were excessively exposed to the U.S. housing market.
- Regulation failed to take account of the systemic risks that can emerge from the interaction between regulated and unregulated institutions, activities, and markets. For example, bank regulation did not reflect risks from off-balance-sheet vehicles, monoline insurance companies, or loan originators with weak underwriting standards.
- The limited scope of regulation, combined with ineffective market discipline, appears to have helped foster innovation; for example, in the securitization process, but at a high cost when the risks on poorly understood products became apparent.

Steps are being taken to strengthen regulation of institutions already within the perimeter.

- Clearer and more stringent rules on the consolidation, coupled with more effective supervision of the activities, entities, and risks of groups will bring a wider range of risks within bank regulation, particularly bank-sponsored, off-balance-sheet activities.
- Ensuring there is an effective framework of both solo and consolidated prudential supervision of regulated securities and insurance companies is also required, given the systemic repercussions that have been experienced from failures in these sectors.
- It may be possible to strengthen further the oversight of counterparty risk management in regulated institutions, so as to contain their exposure to unregulated companies and, indirectly, those companies' leverage and risk—the approach adopted regarding risks in hedge funds after the LTCM problems of 1998.

However, the crisis suggests that these steps will be insufficient and that an extension to the perimeter is required. Considerations in this regard include the following:

- The key objective should be to ensure that all financial activities that may pose systemic risks are appropriately overseen. The understanding of systemic significance should be broadened to ensure it addresses to what extent failure could cause disruption to key financial markets and loss of confidence, as well as interconnectedness and size, and should take account of leverage and funding mismatches.
- All institutions that fall into a broad expanded perimeter would be subject to disclosure obligations to allow the authorities to determine potential systemic risk. Institutions recognized as of systemic importance, based on agreed and disclosed parameters, would be subject to higher levels of prudential oversight. Because this group would consist of nonbanks as well as banks, the authorities would need to decide whether access to liquidity facilities should remain limited to banks. Should access be expanded, haircuts and pricing of liquidity facilities will be crucial in minimizing moral hazard.
- Prudential requirements themselves should differ based on the type of institution or activity, but should allow for rapid corrective action in order to contain an unacceptable buildup in systemic risk. They should use incentives for behavior to be consistent with systemic stability. Capital charges can be used, for example, to favor safer exchange-trading environments or use of robust clearing systems.

Extensions to the regulation of products and markets should be considered within a similar framework. For example, regulation could be considered for financial products that may be particularly complex and prone to information asymmetries.

## **II. RECONSIDERING THE PERIMETER OF REGULATION—CRISIS LESSONS**

The crisis has shown how significant credit risks, often highly concentrated, have accumulated in unregulated entities. These then generated and amplified losses and liquidity pressures in the regulated sector through off-balance-sheet vehicles, unregulated entities within financial groups, leveraged funds, and other unregulated intermediaries. The process of risk transfer from regulated to unregulated entities provided the regulated sector with the means to enhance its leverage but failed to insulate the regulated entities from credit losses.<sup>2</sup>

Regulators had limited appreciation of the risks or powers to contain them. In most cases, regulators were aware of the risks beyond the regulatory perimeter and had taken some steps to address them (e.g., through consolidated supervision of relevant groups, steps toward

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<sup>2</sup> Brunnermeier et al. (2009) offer a lucid discussion, noting that any regulatory regime that is effective will tend to create incentives for arbitrage. This, in turn, necessitates a continued review and policing of the regulatory boundary.

oversight of fund managers (e.g., for hedge funds), or by supporting self-regulatory approaches (e.g., codes of conduct for private equity). However, the scale of the risks, their contribution to systemic stress, the extent to which they were driven by regulatory arbitrage, and the predominance of short-term, profit-maximizing objectives were not fully appreciated. Because the current regulatory framework hinges on self-regulation to provide oversight to the unregulated sector, regulators had limited powers to constrain the buildup of such risks.<sup>3</sup>

Regulatory arbitrage was a key driver of the proliferation of securitization and derivatives within the regulated sector. In particular, within risk-based capital frameworks, some risks were addressed inconsistently across business lines or markets. A lighter touch was adopted for certain activities and institutions to reflect the emphasis on market discipline to limit excessive risk-taking behavior (e.g., assets held in the trading book, treatment of credit insurance, and off-balance-sheet exposures).

Some important risks to regulated firms, such as business strategy risks, were recognized by regulators but not formally captured by regulatory requirements. For example, regulation did not address the risk that market liquidity may not support all the asset sales following loan originations or the sales of assets held for hedging purposes. The risks from certain remuneration practices were also underestimated—remuneration schemes favored business strategies that created high rewards in good or normal times, while exposing institutions to large tail risks that ultimately threatened their viability.

Innovation in financial products contributed to informational asymmetries. Not only did consumers take out innovative mortgages, but investors, while focusing on short-term performance benchmarks, bought new complex securities. Because current product regulation focuses mainly on retail investor protection (restricting access to certain products and setting market conduct standards), regulators' powers and capacity to address the lack of risk awareness outside the retail segment was limited.<sup>4</sup> In addition, rating agencies, which perform a central role in reducing informational asymmetries for the unregulated sector, failed to deliver independent evaluations of the risk characteristics of securities.

Key lessons from the experience, in relation to a reconsideration of the regulatory perimeter, appear to be as follows:

- Market discipline was ineffective in constraining risk taking outside the banking sector. Some unregulated companies and vehicles, for example, were able to assume both credit risks and significant liquidity risks, funding poor-quality, long-term

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<sup>3</sup> For example, although regulators were concerned about the leverage in certain vehicles, they had no power to require higher capital for the company-issued structured securities marketed to the general public.

<sup>4</sup> It was not only structured products that were poorly understood. There was also a failure to understand how some relatively simple products would perform under stressed conditions (auction-rate securities, for example).

securities by short-term borrowings with high degrees of leverage. Market discipline may have been weakened by expectations of support. Moreover, since private incentives are unlikely fully to internalize systemwide externalities, market discipline on its own is insufficient to constrain the buildup of systemic risk.

- The failure of some nonbanks had systemic repercussions by disrupting key financial markets and contributing to a widespread loss of confidence—for example, the failure of Lehman Brothers and the insolvency event early in the crisis of two Bear Stearns managed hedge funds that were excessively exposed to the U.S. housing market. Systemic shock was transmitted through adverse confidence effects as well as by the direct contagion associated with systemic risk in the banking sector.
- Regulation failed to take account of the risks that can emerge from the interaction between regulated and unregulated institutions, activities, and markets. For example, bank regulation did not reflect risks from off-balance-sheet vehicles, monoline insurance companies, or loan originators with weak underwriting standards. Tighter regulation of the regulated sector could create even stronger incentives for new forms of risk transfer and/or origination and holding of risks outside the regulated sector and is unlikely to be sufficient to prevent a buildup of potentially excessive risks in the system as a whole.
- The limited scope of regulation, combined with ineffective market discipline, appears to have fostered innovation, for example, in securitization, but at a high cost when the risks on poorly understood products became apparent. Even more sophisticated investors, including banks, supported by third-party analysis (i.e., rating agencies) cannot be relied on to assess risk accurately on more complex financial products.

Although an extension of regulation is necessary to reduce the likelihood of future crises, this needs also to take account of potential costs. Extending the perimeter is not costless and may create its own risks. There are compliance costs and opportunity costs related to business lost because of regulatory constraints. There are costs to the economy in terms of output losses. New regulation may also create fresh opportunities for arbitrage and add to moral hazard, particularly when seen as extending the scope of public safety nets.

Any extension of regulation needs therefore to be supported by a clear articulation of its objectives. New regulation needs to be implemented through requirements and tools that are proportionate to its objectives—it is important, for example, that the regulatory framework for banks is not simply extended to particular types of nonbanks without careful consideration of its relevance. Regulation needs to be supplemented by close monitoring of the potential arbitrage opportunities it creates. There needs to be clarity as regards the limits of the safety net and it need not coincide with the perimeter of regulation. And, finally, the costs of any extension to regulation should demonstrably be outweighed by the benefits.

### III. EXPANDING THE SCOPE OF REGULATION OF INSTITUTIONS

#### A. Objectives of Regulation

The key objective should be to ensure that all financial activities that may pose systemic risks are appropriately overseen. The understanding of systemic significance should be broadened to ensure it addresses to what extent failure could cause disruption to key financial markets and loss of confidence as well as interconnectedness and size, and should take account of leverage and funding mismatches. Specifically, entities engaged in financial activities on a leveraged basis should be regulated regardless of the legal status of the institution—to capture all entities that contribute to systemic risk on a significant scale.<sup>5</sup> In particular,

- Most SPVs, SIVs, and leasing and nonbank mortgage and finance companies would be captured.
- Entities taking the legal form of a fund, as well as companies, would be covered—so the approach would capture some entities that are already regulated (for a very different purpose) as collective investment schemes.
- Some of the leveraged vehicles used by private equity for buyouts and other investments could also be captured.

Adopting this approach would translate into an extension of current regulatory oversight to some hedge funds. This is an option that was discussed extensively in the aftermath of the LTCM failure in 1998. At the time, the notion prevailed that prime brokers would be exercising control in hedge fund leverage via their counterparty risk management, while regulators would concentrate on close supervision of the prime brokers.<sup>6</sup> However, this approach appears not to have limited risk taking by the funds, as it allowed many to accumulate significant leverage. While no incident similar to the LTCM failure has occurred so far, the deleveraging taking place through hedge funds is amplifying downward spirals on asset prices and mark-to-market valuations, thus imposing a wider fallout from the current crisis. In this respect, controlling leverage in large hedge funds would help contain financial market distress.<sup>7</sup>

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<sup>5</sup> There would need to be some de minimis exemption.

<sup>6</sup> The pre-crisis debate on this issue is well summarized in a speech by Jean-Pierre Roth, Swiss National Bank chairman, on June 29, 2007: “Highly-leveraged institutions and financial stability—a case for regulation.”

<sup>7</sup> Although it did not generate a systemic crisis on its own, the trigger for the current crisis was the insolvency event of two Bear Stearns hedge funds greatly exposed to the U.S. housing market. The event undermined investor confidence in a number of similar funds in the summer of 2007, triggering widespread asset sales. The cost to Bear Stearns of supporting and, ultimately, liquidating the funds was more than US\$2.7 billion, an

(continued...)

This extension of regulation would have the following objectives:

- providing regulators with the widest possible view of the development of regulation in the financial system—and enabling them to set enforceable regulatory requirements that would improve reporting of exposures and, if necessary, constrain the development of leverage (through, e.g., capital requirements or other measures);
- enabling regulators to monitor and respond to risks better in the currently regulated sector—regulators need to be better placed to measure and monitor both sides of the risk transfer process, reducing the chances of new types of entities (such as SPVs or SIVs) again developing undetected by regulators of the sponsoring bank or insurance company; and
- giving regulators early warning of the development of potentially large and systemically important entities—so that they can ensure these are subject to appropriate regulatory requirements (see below).<sup>8</sup>

The exact definition of the extended perimeter needs careful consideration. In principle, all institutions that individually or collectively have the potential to contribute to systemic risk need to be caught. One option is to extend coverage to all institutions that provide financial services on a significant scale. Another is to recognize that *leveraged* financial institutions are most likely to contribute to systemic risk, since leveraged institutions are more likely both to contribute to aggregate deleveraging processes and to fail individually in a disorderly way.

Whatever the extended perimeter for prudential regulation, all financial institutions need to continue to be subject to appropriate conduct of business regulation. It is important that all institutions that have a significant role in financial markets—including unleveraged funds and brokers as well as rating agencies—are subject to conduct of business regulation, so as to protect investors and to ensure the fair and efficient functioning of markets (see farther below). Moreover, providers of clearing and settlement infrastructure need to continue to be subject to appropriate oversight.

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amount comparable to the LTCM bailout that, ultimately, weakened Bear Stearns's liquidity positions and balance sheet.

<sup>8</sup> The recent report by the de Larosière Group on Financial Supervision in the EU recommends a similar approach.

## B. Content of the New Prudential Regulation

It will be important to develop an approach to the regulation of funds and financial companies that reflects the objectives of bringing them into regulation. One approach would be to apply the same or similar requirements as those applying to banks. This would respond well to some of the recent problems affecting, particularly, SIVs, where the mismatch between short-term funding and long-term assets was clearly akin to the maturity transformation performed by banks and exposed them to severe liquidity pressures. However, the funds and companies coming within the widened scope also differ significantly from banks. They do not take deposits. They have different liability structures (especially funds), which can reduce the liquidity risks to which they are subject. They are not involved in payment systems and are otherwise not core to the wider economy in the same way as banks.

Most important, the objectives of the extended regulation overlap with, but also differ from, those applying to banking regulation. The emphasis would be more on enabling authorities to monitor and constrain total leverage in the system than (except for the largest firms) preventing failures or cushioning their impact. The key elements of the regulatory approach would therefore comprise the following:

- information and disclosure requirements, with as much public reporting (within a consistent framework) as possible—to enhance market discipline as well as to enable effective monitoring by regulatory agencies;
- an approach to leverage that would constrain the degree to which entities could expand their balance sheets and take on risk (In this case, the approach to constraining leverage, if not its calibration, could relate to any approach that is applied in the future to banks, taking into account the distinct liability structure of funds.);
- liquidity requirements to constrain maturity transformation and liquidity risks arising from business models such as “originate-to-distribute” that are predicated on the assumption of continued high levels of market liquidity;
- requirements relating to governance, risk management (including the management of reputation risk), and remuneration schemes; and
- supervisory arrangements—here a full risk-based approach could apply, with only the larger firms subject to regular supervisory contact and on-site work. The aim of the oversight would be as much to gather intelligence as to monitor compliance.<sup>9</sup>

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<sup>9</sup> For relevant funds, there would continue to be oversight of the fund manager and service providers (e.g., custodians), where already regulated.

A tiered approach to the application of these requirements should be taken when applying these requirements. It is worth considering whether the above requirements should apply to all firms brought within the scope of regulation. Collectively, all such entities, regardless of scale, contribute to the total leverage in the financial system. However a tiered approach that increases the degree and intensity of regulation according to the systemic importance of an entity seems preferable to ensure that regulation does not become unduly burdensome:

- *All* institutions within the expanded perimeter would be subject to information and disclosure obligations to allow the authorities to determine the potential of the institution and its activities to contribute to systemic risk.
- *Only* institutions that are recognized as being of systemic importance, based on broadly agreed and disclosed parameters, would be subject to higher levels of prudential oversight—capital, liquidity, and supervisory arrangements.

The first key element to achieve this would be the extension of the *licensing regime* to cover all institutions within the extended perimeter.

- Firms could be required to report simple measures of total leverage, as well as their largest exposures to other leveraged financial institutions. Regulators may also need to be given powers to tighten the regime, if necessary, by setting limits on these measures.
- The establishment of this regime would not be meant to imply the extension of the safety net. Regulators would need to take care to clarify this to firms and market participants.

The second element is a *mechanism* to identify and apply tighter regulation to systemically important firms. This would be designed to ensure that as and when any particular institution within the broader set becomes systemically important, it would be brought into a regime of heightened regulation and supervision.

- The mechanism should work dynamically, such that when a business ceases to be systemically important, it would be released from the enhanced regime and that when a firm grew (or changed its business) and became systemic it would be brought in.
- The enhanced regime needs to include elements that reduce the likelihood of systemic failure. For example, systemically important firms could be subject to enhanced capital requirements, relative to nonsystemic institutions.
- There is a need also for an early resolution framework: this would seem desirable for all systemically important firms, so as to reduce the impact of failure and to enhance market discipline.

The basis for defining the threshold for the application of the additional requirements should be more than simply size. While size will be an important consideration, additional criteria should be brought to bear to determine the degree to which an institution's failure has the potential to disrupt broader financial markets, e.g., interconnectedness and the degree of substitutability of services offered by a particular firm. That means it may be necessary to treat certain businesses as systemic, even where they are not large. (Monoline insurance companies are an example of such a critical business). Exchanges, clearing houses, and major settlement systems would continue to be regarded as systemically significant and subject to appropriate oversight.

For the systemically important firms, there is also a need to consider the following:

- Access to liquidity facilities. Because systemically important firms would include nonbanks as well as banks, the authorities would need to decide whether access to liquidity facilities should remain limited to banks. Should access be expanded, the haircuts and pricing of liquidity facilities will be crucial in minimizing moral hazard. If access is denied, expectations to the contrary that would be caused by the extension of regulation would need to be managed firmly, by making this point explicit in amended laws and regulations.
- Protection for liability holders. Although existing protections (such as investor compensation schemes) that apply to institutions currently regulated mainly for business conduct purposes would continue to apply, protection for liability holders in the event of failure (akin to deposit insurance in respect to banks) does not seem appropriate, given the objective is systemic risk reduction. Again, this would have to be transparent.

The design of the requirements should incorporate incentives for behavior to be consistent with systemic stability. Capital charges may be used, for example, to favor safer exchange-trading environments or use of robust clearing systems—by taking into account the greater risks arising when trading occurs in markets that lack adequate arrangements for clearing and settlement. This approach would support wider efforts to improve the infrastructure of markets, particularly the extension of clearing arrangements to a wider range of instruments.

Any business falling within the expanded scope of regulation would be required to separate financial from nonfinancial activities. This would ensure that regulatory requirements could be applied in practice. So, for example, a primarily manufacturing entity that wanted also to engage in proprietary trading using debt finance and/or derivatives such that it came within the extended perimeter of regulation would be required to locate financial activities in a separately capitalized company. Similar requirements apply to existing regulated activities.

The organization and governance of regulation of the expanded perimeter would need to be considered. There is no reason for a specialized regulatory authority for institutions coming

within the perimeter for the first time and many reasons for their regulation to be undertaken by authorities already responsible for prudential regulation, at least where the entities are not already regulated for other purposes. However, it may be appropriate to develop a new set of regulatory core principles to address the particular issues in businesses coming into the scope of prudential regulation for the first time, drawing on Basel and IOSCO core principles where appropriate. This would also help to ensure consistent implementation across countries—including in offshore centers, where many funds are registered.

#### IV. PRODUCT AND MARKET REGULATION

Extensions to the regulation of products and markets should be considered within a similar framework. For example, regulation could be considered for financial products that may be particularly complex and prone to information asymmetries, especially if they have systemic importance or the users of these instruments are so dispersed as to fall outside the existing perimeter. Examples of such products are collateralized debt instruments and credit default swaps.

The nature of such regulation should include the following:

- broader disclosure requirements for all types of marketed securities, taking account of administrative and procedural costs to issuers to avoid excessive compliance burdens;<sup>10</sup> and
- supervisory access to information on the structure of more complex securities and the nature of the underlying risks.

Direct product regulation could be considered, but costs are likely to outweigh benefits. It is no longer clear that market participants on their own can be relied on to identify and act on the risks of complex products. However, product regulation generally contributes to increased transaction and compliance costs, particularly for those who promote more than one product at a time. It can restrict innovation, for example, where product standardization is required or there are restrictions on the sale of the assets. The extension of regulatory oversight to the credit-rating process for products should help achieve a better balance between addressing the informational asymmetries and avoiding intrusive oversight.

Product sales and distribution also need more extensive regulation. While extending the scope of prudential regulation is the priority, the crisis exposed the impact that informational asymmetries can have on the distribution of mortgages—with adverse impacts, in some cases, on credit quality at the banks. Regulation of sales and distribution varies by country.

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<sup>10</sup> The expectation should be that even after this proposed extension of product regulation, there should continue to be differentiation in the extent of regulation applying to investors according to their levels of expertise, i.e., expert investors should still be subject to less protection than retail investors.

Gaps should be filled to ensure that business conduct regulation covers the ways in which risk products are sold or transferred, if necessary bringing them within the scope of regulation agents; brokers; advisers; and originators of all types of financial products, including mortgages.

Many OTC markets for securities and derivatives have been subject to relatively limited regulation. For certain securities issues, even basic requirements on issuer disclosure have not been applied. Post-trade transparency, i.e., reporting and publication of the details of trades in the market, has been limited, and clearing and settlement arrangements have been lacking for some products, as evidenced by confirmation delays and settlements backlogs. Although fears of counterparty risks and risks on underlying instruments have been major causes of the drying up of liquidity in some of the OTC markets, light regulation appears also to have contributed to the problems.

Regulatory changes should be considered that would

- extend issuer disclosure requirements to the widest range of securities;<sup>11</sup>
- enhance post-trade transparency in OTC markets; and
- reduce counterparty credit risk arising from inadequate clearing and settlement processes.

One way of delivering the regulatory change would be to extend certain of the core IOSCO principles on the promotion of trading transparency (pre- and post-trade), as well as the proper management of large exposures, default risk, and market disruption to OTC markets.

Consideration could also be given to extending market-maker obligations in markets—i.e., requiring dealers to quote continuous two-way prices within a certain maximum spread as a way to improve liquidity. It is not clear that such requirements could deal with underlying liquidity problems of the severity experienced recently. There would also be challenges in designing such requirements, especially for markets in relatively less commoditized instruments, in ways that do not create such onerous obligations as to deter most entrants to the market. However, it is clear that where particular products or markets are explicitly marketed on the premise of ready liquidity, e.g., auction-rate securities, sponsors should be subject to regulatory requirements mandating liquidity support.

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<sup>11</sup> There would need to be some de minimis exemption for essentially private offerings—i.e., securities issues offered only to small numbers of expert investors.

## V. IS THERE A NEED FOR A NEW OBJECTIVE FOR REGULATORS?

There may be a need to review responsibilities for systemic risk reduction. A key feature of the current crisis is the extent to which aggregate risks were underestimated. Prudential regulators' objectives, while they vary by country, already focus on delivering safety and soundness of individual firms, particularly banks, as a means of promoting systemwide stability. In some countries, financial stability or systemic risk reduction is the responsibility of the central bank.

It may be appropriate for regulators to have a specific objective relating to financial stability. This may help ensure that regulators focus not only on safety and soundness of individual firms, but on systemwide risks. It could reinforce the powers of regulators to enforce prudential requirements aimed mainly at safeguarding systemwide stability. Where the central bank is not also the primary regulator, further steps would be needed to ensure that its assessment of systemic risk is taken into account appropriately.

## VI. CONCLUSION

This set of proposals would represent a major increase in the scope of regulation of institutions, products, and markets. The proposals would best be taken forward as part of a broad program of financial sector reform, including the development of a macroprudential framework for assessing and managing systemwide risk. Since the G-20 communiqué raised the prospects of such change, other commentators have made recommendations similar to the changes to the regulatory perimeter proposed here.<sup>12</sup>

These proposals to extend the regulatory perimeter seek to extend the application of existing regulatory standards, thereby avoiding potential conflict. However, there clearly are implications for existing standards, and the Basel Committee, IAIS, and IOSCO would all have an interest. There are also a number of relevant private sector codes of practices; for example, for hedge funds and private equity, and sponsors of these codes would have a particular interest in proposed regulatory perimeter extensions.

Even if new regulation is carefully designed to be proportionate to the risks in each new area, there will clearly be increased costs to the system. There would be an increased regulatory burden, which would also carry risks of unintended consequences. The current crisis has clearly shown that the cost of the alternative is also high.

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<sup>12</sup> See in particular the G-30 report "Financial Reform: A Framework for Financial Stability" (January 2009), Part II.

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