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FINANCIAL SERVICES REGULATIONS

Regulatory Reforms around Global Cross-Border Regulations

A look at evolving reforms around global cross-border regulations of financial entities, and the business and technology implications for systemically important financial institutions

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Contents

1 Highlights

Systemic linkages throughout the global financial services industry played an important role in propagating the recent financial crisis across geographical boundaries. Many of the organizations that were worst hit by the crisis also had access to global liquidity pools and cross-border business operations and assets. These, coupled with the global nature of the financial services industry, led to the creation of a contagion effect that traversed national boundaries. A cohesive and globally standardized regulatory response to the financial crisis was handicapped by the jurisdictional fragmentation[1] based on national boundaries.

What was needed was a road map that could address the moral hazard and systemic risk presently posed by the global financial system (as exposed by the financial crisis), and galvanize regulatory efforts spanning regions. To this effect, the Financial Stability Board[2] has created a road map that envisages the imposition of loss-absorbency requirements for systemically important financial institutions[3]. It also proposes creating an effective resolution mechanism for these institutions and mandates their higher regulatory supervision.

As the Financial Stability Board guidelines are adopted and implemented, they will expose the business models of systemically important financial institutions (and also their products and quantitative models) to heightened regulatory scrutiny. This will potentially impact business operations, innovation in product design, and organizational structures. Apart from this, the imposition of additional loss-absorbance capital requirements may affect growth and may require balance sheet restructuring. Non-compliance may limit the institutions' ability to distribute dividends, which may in turn adversely impact their stock performance. Finally, additional management time will be required in devising and ensuring adherence to a recovery and resolution plan.

The emerging regulations present these institutions with multiple opportunities to improve their data management infrastructure, reporting, and communication capabilities and also scale-up their existing IT systems.

The Financial Stability Board roadmap, though still in a transition phase, is set to fundamentally impact the way systemically important financial institutions conduct their businesses.

[1] Jurisdictional fragmentation can occur when the jurisdictions of the regulatory bodies are divided along national boundaries

[2] The FSB, established in April 2009, brings together national authorities responsible for financial stability for significant international financial centers and global financial institutions

[3] A firm is considered systemically important if its failure would have economically significant spill-over effects which, if left unchecked, could destabilize the financial system and have a negative impact on the global economy

2 Introduction

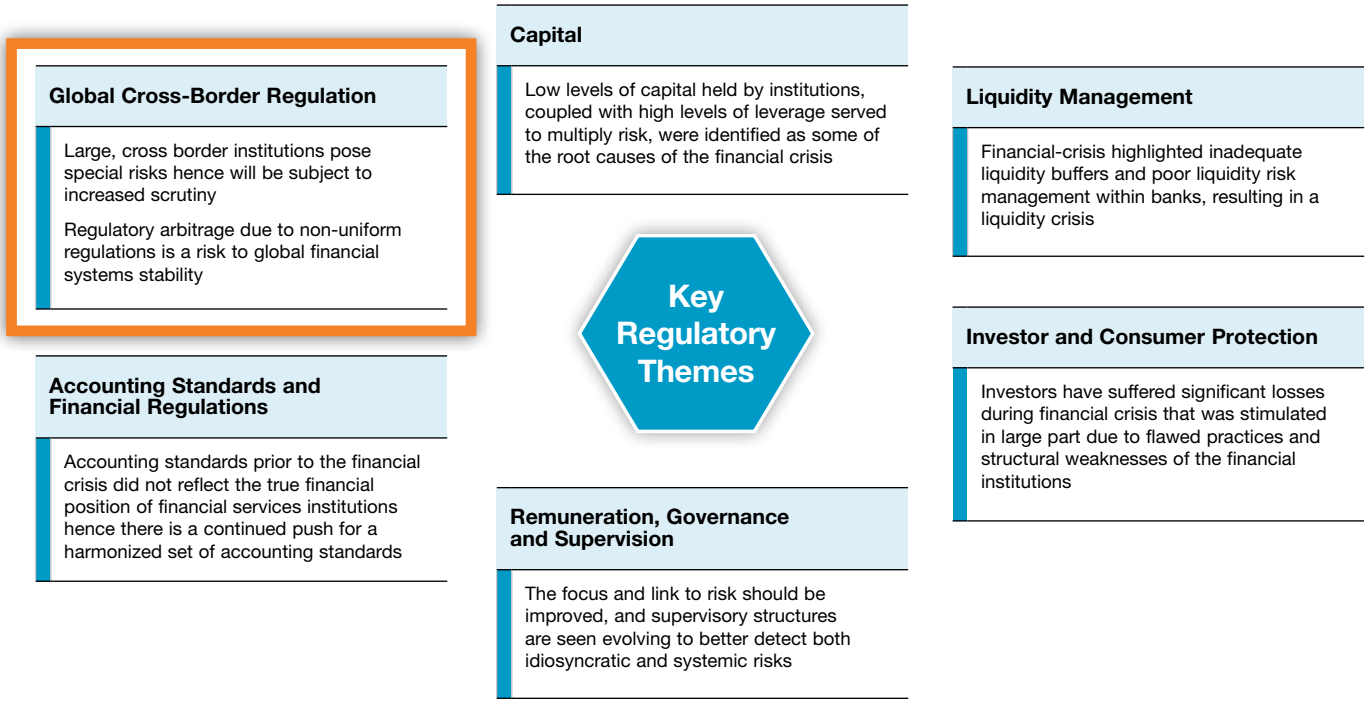
The financial crisis exposed weaknesses in the global financial system. Chief among them was the web of interconnections across global financial institutions and investments, which resulted in a cascading effect that gained strength and toxicity. Key weaknesses revealed by the financial crisis include:

- Lack of transparency
- Noncompliance of accounting practices
- Inadequate risk measurement and management process
- Misaligned compensation and incentive policies
- Lack of sufficient governance and supervision

Throughout 2008 and 2009, regulators around the world acted quickly to take measures to increase the strength of the overall financial system. Though these regulatory reforms are still evolving, regulators have attempted to fill the gaps that emerged during the crisis (especially regarding risk assessment and measurement), strengthen the capital base, adopt global standards for minimum liquidity, and enhance accounting standards to reduce systemic risks.

As regulations are expected to evolve to create a risk-aware financial system, the momentum for change is converging around six key regulatory themes.

Exhibit 1: Key Themes Driving Regulatory Reforms and Structural Changes across Global Financial Services Institutions



Source: Capgemini analysis, 2011

This paper reviews and summarizes the regulatory reforms emerging around Global Cross-Border Regulations.

3 Current and Evolving Regulatory Reforms around Global Cross-Border Regulations

Though there is a need for having globally applicable regulations for the financial markets, fragmentation in jurisdiction based on geography is expected to remain a reality.

3.1. The Potential for Cross-Border Risk Propagation Exposed by the Financial Crisis

The recent financial crisis exposed the systemic risk posed by the global nature of operations of large, complex financial institutions[4]. It revealed that existing liquidity management techniques of an individual firm, which were previously considered unrelated to other firms, had the potential to affect the balance sheet and liquidity of other firms due to a contagion effect.

Essentially, the architecture of the global financial services sector was such that it created complex cross-border linkages, which in turn facilitated cross-border risk propagation during the crisis. It is important to note that these systemic issues were always present in the system, but were exposed during the financial crisis.

Cross-Border Operations

Many large, complex financial institutions that emerged as major contributors to, as well as victims of, the financial crisis had a cross-border scheme of operations. This created a domino effect that transcended geographical boundaries when these institutions had to be liquidated. A good example of this was the bankruptcy of Lehman Brothers in the build-up to the financial crisis and the global implications it had as a result.

Cross-Border Nature of Asset Holdings

At the time of the financial crisis, the large complex financial institutions' asset holdings were highly cross-border in nature. While this trend towards cross-border asset build-up demonstrated global financial integration, it also increased the risk of contagion spreading across borders. For example, non-U.S.banks, though they did not create many of the highly risky products thmeselves, suffered huge losses owing to their holding of hundreds of billions worth of toxic U.S. structured products.

Global Nature of the Financial Markets

The global nature of the financial markets meant that counterparty risk was not just limited to national boundaries, but could cross borders. This phenomenon was especially true in the case of the over-the-counter derivatives markets, where the counterparties essentially transcended geographical boundaries. For example, in Europe it had been a common practice for buyers and sellers belonging to different national markets to trade with each other in the over-the-counter markets.

Global Liquidity Pools

Increased global financial integration made it possible for investors to easily access liquidity at a global-level. If a regulatory action in a region reduced an investor's ability to draw liquidity from that region, he had the option of accessing it from other regions or markets. This resulted in propogation of regulatory action from one region to another, with the lack of coordination among regulators from across regions accentuating the risk of this cross-border spill-over effect. For example, the frequently deployed zero interest rate policies and widespread prevalence of uncoordinated quantitative easing were and are fraught with the risk of having cross-border implications.

[4] A financial institution having a complex business model often involving cross-border asset holdings and business operations

The financial crisis aptly demonstrated that regulations for systemically important financial institutions need to be standardized globally. To this effect, the Financial Stability Board has identified the following key priorities:

- Moral hazard and systemic risk present in the financial services sector need to be addressed to reduce cross-border risk propagation in the event of any future crises.
- There is a need for migration from a strictly regional-focused regulatory approach towards one more globally coordinated, to reduce regulatory arbitrage.
- Regulators also need to ensure that the burden of any future bail-out is proportionately shared by countries in which the firm is operating.

3.2. Emerging Mandates for Cross-Border Regulations for Systemically Important Financial Institutions

The roadmap proposed by the Financial Stability Board introduces some groundbreaking measures to address the systemic and moral hazard risks faced by these institutions today. Key measures that have been proposed are highlighted below.[5]

Though significant strides have been taken in the area of cross-border regulations for financial institutions (especially in terms of consultative documents and roadmaps), it will be a while before an effective mechanism for cross-border regulation becomes operational.

Higher-loss Absorbency Requirement for Global Systemically Important Financial Institutions

By virtue of their size, the expansive nature of their operations, and their global presence, global systemically important financial institutions are fundamentally different from other financial institutions. Hence it has been felt that the norms applicable to them should be more stringent to reflect their importance in the stability of the global financial architecture. It has been proposed that the loss-absorption capability of these institutions should be higher than that proposed by even the latest Basel-III norms, i.e., a greater share of their balance sheet should be funded by capital and/or other instruments that enhance the resilience of the institution. The Basel Committee has recently published a study on the additional loss absorbency for global systemically important financial institutions, which is expected to be put into force by late 2011[6].

Setting up an Effective Resolution Mechanism

One of the key concerns that emerged from the financial crisis was the issue of protecting tax-payers' funds from any further bailout of a "too big to fail[7]" entity. Effective cross-border resolution mechanisms need to be put in place for global systemically important financial institutions to protect the interests of tax-payers as well as the integrity of the global financial system. Presently, there are several challenges to the successfully achievement of an effective cross-border resolution. Key among them are differences in national resolution mechanisms, the absence of mutual recognition, and a lack of coordination between the resolution mechanisms of host and home countries.[8]

To facilitate the seamless flow of information across regions, the Financial Stability Board has proposed setting up national-level resolution authorities that would have resolution powers over systemically important financial institutions. The Financial Stability Board has also proposed elimination of discriminatory rules that give domestic investors precedence over their foreign counterparts. Establishing cooperation agreements between regulators has been proposed to enable clear definition of the roles of home and host countries when resolving issues pertaining

[5] *Reducing the moral hazard posed by systemically important financial institutions,* Financial Stability Board, 2010
[6] Global systemically important banks: Assessment methodology and the additional loss absorbency requirement 2011 – The Basel Committee on Banking Supervision
[7] "Too big to fail" encompasses the idea that a business has become so large and ingrained in the economy that a government will provide assistance to prevent its failure. "Too big to fail" describes the belief that if an enormous company fails, it will have a disastrous ripple effect throughout the economy
[8] *Effective Resolution of Systemically Important Financial Institutions,* Financial Stability Board, 2011

to these financial institutions. To facilitate greater coordination between authorities, the Financial Stability Board has recommended setting up crisis management groups by the regulators. The developments on this front are on-going, and are expected to take a firmer shape later in 2011 or by 2012.

Enhanced Supervision

Given the critical role played by systemically important financial institutions in the global financial system, more stringent supervisory standards have been proposed for them as compared to other financial services institutions. The Financial Stability Board has come up with "Systemically Important Financial Institution Supervisory Intensity and Effectiveness Recommendations[9]", and all regulators are expected to follow them when devising supervision methodologies and standards for institutions under their jurisdiction. As a result of these recommendations, the financial institutions may be required to share their business models and product details with regulators (so that they may have a better understanding of the risks present in them), and may have to adhere a higher degree of internal controls (owing to their systemic importance).

Strengthened Financial Infrastructure

Improvement of the financial infrastructure (including payment systems, securities settlement systems, and central counterparties) has been recommended by the Financial Stability Board. Also, regulators have been directed to implement the G-20 commitment for ensuring that all standardized derivatives contracts are traded on exchanges, cleared through central counterparties, and reported to trade repositories (wherever possible).

In order to ensure conformity to the recommendations, the Financial Stability Board has also proposed setting up a Peer Review Committee, which will be tasked with assessing the policies of national-level systemically important financial institutions to ensure that they are globally consistent and have robust recovery and resolution plans.

Adoption of the Financial Stability Board's roadmap is expected to significantly improve the integrity of the global financial system. But as the regulatory reforms are still evolving, firms will have to wait before the mosaic of implementation mechanisms and cross-border regulatory coordination becomes clearer.

[9] Intensity and Effectiveness of SIFI Supervision 2010 – Financial Stability Board

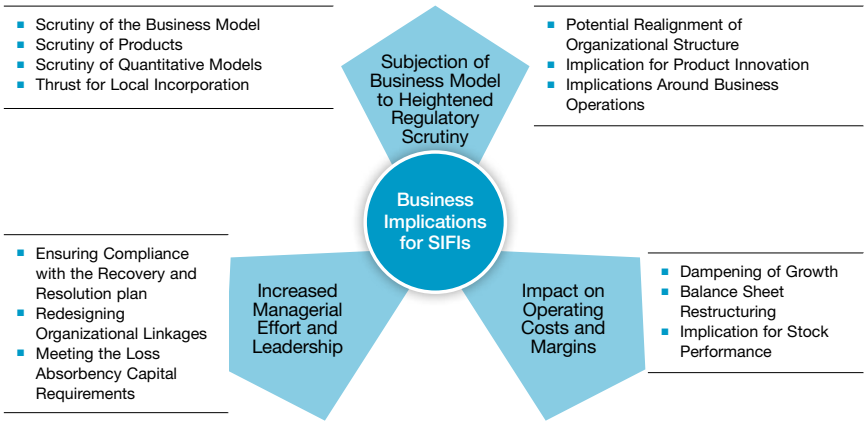
4 Business Implications for Systemically Important Financial Institutions

The majority of the proposals around cross-border reforms are still in the consultative phase and the mosaic will become clearer as further recommendations are made. However, the roadmap laid out by the Financial Stability Board and the consultative documents do give sufficient clues about the possible implications that the final policy framework may have for systemically important financial institutions. The key areas of business impact will likely be:

- Subjection of Business Model to Heightened Regulatory Scrutiny
- Impact on Operating Costs and Margins
- Increased Managerial Effort

The proposals around cross-border reforms are likely to put additional stress on the margins and operating costs of systemically important financial institutions, increase their regulatory burden, and may require additional managerial resources.

Exhibit 2: Business Implications for Systemically Important Financial Institutions



Source: Capgemini Analysis, 2011, Financial Stability Board

4.1. Subjection of Business Model to Heightened Regulatory Scrutiny

Greater and on-going supervision of all elements of systemically important financial institutions' business has been a cornerstone of the recommendations made by the Financial Stability Board. It is felt that a high degree of regulatory oversight is needed to ensure that these institutions do not adopt strategies that may threaten the stability of the global financial system. Some key elements of the enhanced regulatory scrutiny include:

Scrutiny of the Business Model

In order to ensure the continuity of a systemically important financial institution's business operations in the face of future crises, regulators will have the authority to scrutinize their core business operations, third party relations, legal provisions, organizational structure, and Management Information Systems (MIS).

Scrutiny of Products
The products being developed by the systemically important financial institutions are likely to be subjected to granular scrutiny by the regulators in order to assess the risk present in them.

Scrutiny of Quantitative Models
The quantitative models that are extensively used by the systemically important financial institutions to drive their business operations would also come under enhanced regulatory oversight.

Thrust for Local Incorporation
Previously, global systemically important financial institutions could operate outside their home region by setting up branches in other markets. Such branches were not a separate legal entity so as a result, there was no ring fence that separated their assets from those of their foreign parents. Also, most regulators gave investors from the home country the first right to dissolved assets, in case the bank needed to be liquidated. Post-crisis, regulators across the world are trying to devise ways to ring-fence the assets that an institution holds in their country to mitigate systemic risk. As a result, these institutions may have to be incorporated in countries where they have operations.

This heightened scrutiny, though potentially good for enhancing the integrity of the global financial architecture, is fraught with the following implications:

Potential Realignment of Organizational Structure
It is expected that regulators may consider the current structure of an organization's business and its inherent linkages as irresolvable. Such a situation would require the firm to redesign its business structure in a way that meets the needs of the regulators, leading to the need for investment in process redesign.

Implication for Product Innovation
Enhanced scrutiny of the products introduced by systemically important financial institutions has the potential to enhance the integrity of the financial system. However, an overzealous approach towards the same goal may adversely affect innovation at these firms.

Implications around Business Operations
Quantitative models are extensively used by the systemically important financial institutions for carrying out their business operations. In case these models are not aligned with the new regulatory standards, they will have to be redesigned.

4.2. Impact on Operating Costs and Margins

The additional regulatory requirements around loss absorbance have the potential of increasing the stress on an institution's balance sheets:

Dampening of Growth

An increase of just 1% in the capital required to be held by global systemically important financial institutions would dampen the economic growth rate by 0.08 to 1.46[10] basis points per year over an eight-year implementation period. The primary cause of this would be the reduced ability of the institution to hand out loans (due to increased capital requirements), which would in turn result in lesser utilization of their assets and impact their growth prospects.

Balance Sheet Restructuring

According to the recommendations of the Basel Committee, only common equity tier-1 capital would qualify for meeting the systemically important financial institutions' additional loss absorbance requirements. This would be in the range of 1% to 8%[11] of the total risk weighted assets. Thus there will be significant balance sheet implications for these institutions arising out of this additional requirement. Banks may have to adopt measures such as balance-sheet restructuring and re-evaluation of their business models to meet the additional capital requirements.

Implication for Stock Performance

The Basel Committee has also proposed that systemically important financial institutions who do not meet the loss absorbance requirements be subjected to dividend payment limitations. Any instance of non-compliance will have a direct impact on the stock performance of the firm and the perceptions of its investors.

4.3. Increased Managerial Effort

The Financial Stability Board's proposed roadmap is expected to put additional strain on the managerial resources:

Ensuring Compliance with the Recovery and Resolution Plan

The management at systemically important financial institutions will be required to develop a recovery and resolution plan and dedicate human resources to ensure its implementation. This would entail additional expenditure on manpower as well as investment of management time and effort.

Organizational and Capital Restructuring

The regulators may require a systemically important financial institution to restructure its business processes. This would in turn require investment of significant management effort in redesigning processes and organizational linkages. Also, the additional loss absorbance capital requirement may require capital restructuring, which would put additional strain on the managerial resources of the firm.

[10] According to a study conducted by the Macroeconomic Assessment Group, 2011
[11] According to Basel Committee on Banking Supervision (BCBS), 2011

5 The Path Forward: Imperatives for Financial Services Institutions

The evolving regulatory guidelines will have a significant impact on the way SIFIs organize and manage their data.

The Financial Stability Board roadmap and the subsequent consultative documents have clear business and technology implications for systemically important financial institutions. Though concrete proposals and directives around the new regulations are still evolving, it is clear that the firms will need to upgrade their technology infrastructure to comply with the reporting and information sharing needs of regulators. The following are the key areas around which additional technology investments may have to be made by these institutions.[12]

Investment in Enhancing Data Management Infrastructure
Systemically important financial institutions will have to develop systems (if they do not have them already) to ensure that key information such as risk exposures, liquidity positions, interbank deposits, and short-term exposures to/from major counterparties (including Central Counterparties) are made available to regulators on a daily basis. This will require additional investments in developing data management infrastructure or scaling up the existing legacy infrastructure.

Organization of Information
Firms will have to ensure that their MIS provides information at the legal-entity level, including intra-group transactions and collaterals. If the current methodology for organizing and collating information is not as comprehensive as required by the new reforms, it will require systemically important financial institutions to upgrade their existing MIS systems and tools to ensure compliance.

Standardization of IT Systems
The IT systems would have to be standardized to facilitate easy provision of pertinent data to the regulators. The recommendations by the Financial Stability Board also calls for a greater effort being put into integrating data systems by systemically important financial institutions, given their critical role in risk monitoring and oversight reporting. All this will require significant monetary commitments.

[12] Reducing the moral hazard posed by systemically important financial institutions, Financial Stability Board, 2010

Improved Regulatory Reporting Infrastructure
Enhanced supervision of financial insititutions will also require a greater level of information to be shared with the regulators. Firms will need to make additional investments for developing the necessary reporting systems required to generate the reports in the formats specified by the regulators.

Need for Increased Automation to Effectively Monitor Risk Exposure
In order to ensure the resolvalibilty of the firm, systemically important financial institutions will have to constantly monitor and adhere to their recovery and resolution plan. Additionally, ensuring monitoring of risk measures would also require stress tests to be conducted with greater frequency. The parameters under consideration will increase, so as to ensure the effective capture of as many variables that impact the risk exposure of the intitution as possible. Hence, the tools used for stress testing would have to be automated (though human supervision would be required) to ensure the on-going monitoring of risk exposure.

Given that the work on formalizing the modalities of the Financial Stability Board roadmap is still underway, the exact business and technology implications have yet to emerge. However, per the directional reform guidelines, it is safe to predict that the key areas listed above will become a major focal point for FSIs, both now and in the future.

References

1. *Cross-Border Banking in Europe: Implications for Financial Stability and Macroeconomic Policies* by F. Allen, T. Beck, E. Carletti, P. R. Lane, D. Schoenmaker, & W. Wagner, Centre for Economic Policy Research (CEPR), 2011

2. *Global Financial Regulatory Reforms: Implications for Developing Asia* by Douglas W. Arner, Cyn-Young Park, Asian Development Bank Working Paper Series on Regional Economic Integration, 2010

3. *Intensity and Effectiveness of SIFI Supervision,* Financial Stability Board, 2010

4. *Reducing the moral hazard posed by systemically important financial institutions,* Financial Stability Board, 2010

5. *Global financial surveillance and financial stability* by Richard Portes, The World Bank, 2009

6. *Global systemically important banks: Assessment methodology and the additional loss absorbency requirement,* The Basel Committee on Banking Supervision, 2011

7. *Effective Resolution of Systemically Important Financial Institutions,* Financial Stability Board, 2011

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