

Regulatory Reforms around Capital Requirements

**A look at evolving regulations for capital requirements
and the business and technology implications for
global financial services institutions**



Contents

1 Highlights	3
2 Introduction	4
3 Current and Evolving Regulatory Reforms around Capital Requirements	5
3.1 Meeting Capital Adequacy Requirements	5
3.2 Areas of Regulatory Reforms to Improve Capital Quality	6
3.3 New Basel Norms for Higher Global Minimum Capital Standards	7
4 Business Implications for Financial Services Institutions	9
4.1 The Impact of Regulatory Changes on Banks	9
4.2 How Financial Services Institutions Can Deal with a Tougher Regulatory Environment	10
4.3 Next Steps for the Financial Services Industry	10
5 The Path Forward: Imperatives for Financial Services Institutions	12
5.1 Key Focus Areas for Financial Services Institutions before Implementing Basel III Norms	12
5.2 Key Recommendations	13
References	15

1 Highlights

After the endorsement of new Basel III norms at the G20 summit in Seoul, it has become clear that regulatory reforms are largely complete except for the upcoming treatment of systemic institutions. Capital and funding are the key focus areas of Basel III as regulators believe that improving the quality of capital will drive banks to improve their underlying risk-management.

The impact of the new Basel III rules on the global financial sector is expected to be substantial.

In response to the new regulations, banks have already started building their capital and funding stocks, though financial services institutions face a major challenge to achieve compliance with the new rules and capital ratios. Basel III regulations will be implemented over a period of time (until 2019), making the technology implementation challenge much harder. Many banks have already started working in the direction of adopting new requirements before the stipulated timelines, in order to send positive signals to the market and the investors. The complexity of the implementation will depend on the level of financial services institutions preparedness for Basel II implementation and also on how they plan to build comprehensive risk-management systems. Institutions who are Basel II compliant will be at an advantage while implementing the solution over those who will have to start from scratch.

The key technology areas for financial services institutions to focus on while implementing a solution will be design, data quality, and reporting. The system framework should be robust, easily upgradable, and highly configurable. Maintaining data quality and consistency is the biggest challenge and requires industry-level effort.

New capital requirements and other regulations are expected to change the structure and dynamics of the financial services industry. It is believed that the tougher regulations, if implemented properly, will reduce the chances of another systemic failure in the long run but may adversely affect the profitability of the banking sector in the short-term. Financial institutions should redefine their business strategy in the wake of current and evolving regulatory environment, along with exploring new avenues for profit generation and long-term sustainability.

2 Introduction

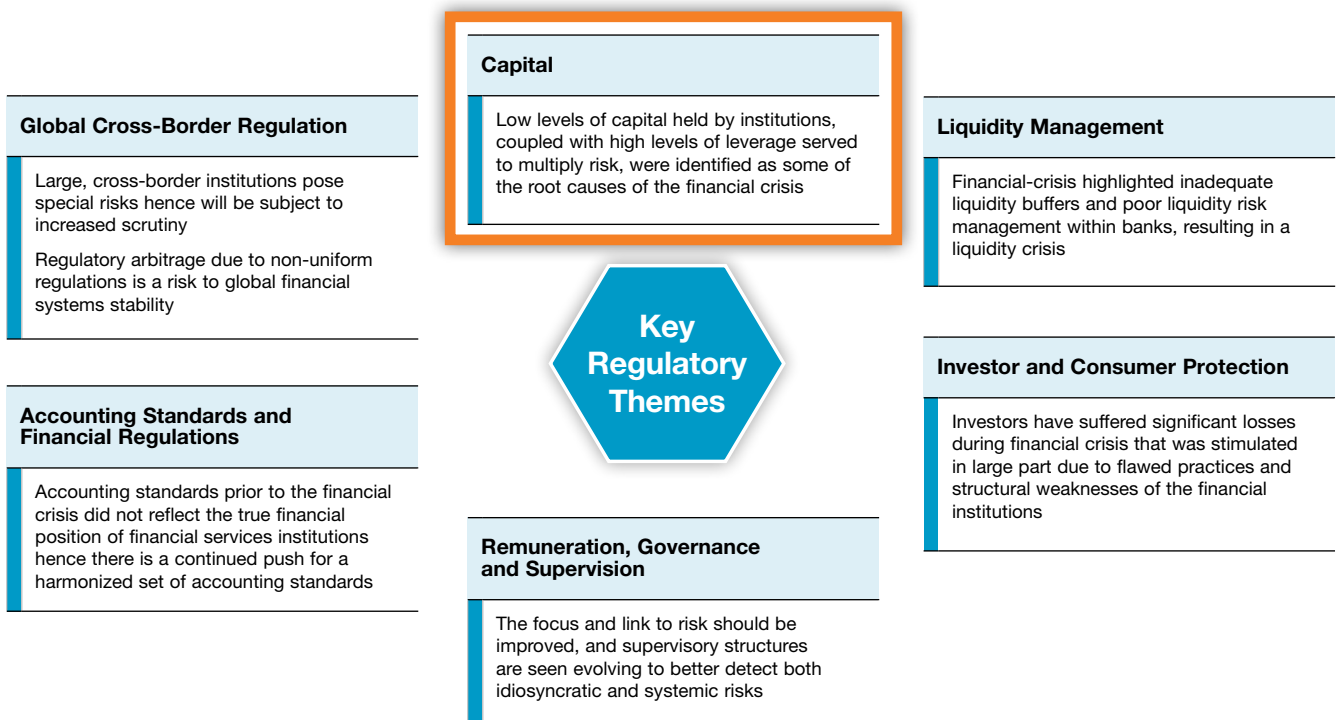
The financial crisis exposed weaknesses in the global financial system. Chief among them was the web of interconnections across global financial institutions and investments, which resulted in a cascading effect that gained strength and toxicity. Key weaknesses revealed by the financial crisis include:

- 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 Capital Requirements.

3 Current and Evolving Regulatory Reforms around Capital Requirements

The failure of regulators to identify the inherent issues within the financial system was the key reason why so many financial institutions were caught completely off-guard.

3.1. Meeting Capital Adequacy Requirements

The past couple of decades have seen both significant change and growth in the financial services sector across global markets. Many markets globally have experienced banking crises, which has led to failure of the financial system disrupting the overall economic activity.

The insecurity in credit markets that began in mid-2007 clearly pointed out numerous weaknesses in managing adequate capital by banks. Some of the major weaknesses of the global financial system that were exposed in the crisis are discussed below.

Low core equity¹ levels

During the financial crisis it became clear that most banks were holding low levels of core equity, meaning that in case of defaults they would fail to honor their debt. This was a big concern for creditors and especially for banks. Raising capital for their operations became difficult due to liquidity crunch.

Poor capital base quality

It emerged post-crisis that the banks were not only facing problems due to low levels of capital, but there were issues around the quality, consistency, and transparency of their capital base.

Inadequate risk coverage

Some financial institutions relied too much on risk models for risk-measurement, thus losing their perspective on the experience-based benefits of risk management. Also, the risk calculations were generally based on single parameter, for example Value at Risk (VaR) or Tier 1 ratio.

Very high leverage ratio

Most banks had very high leverage ratios, making them “too big to fail” and posing systemic threat to the financial system. In addition to these weaknesses, there was a clear lack of expertise around risk and valuation methodologies, calculating transfer of funding costs and liquidity pricing.

¹ Core equity consists of equity capital and declared reserves

“The top three things to get done,” U.S. Treasury Secretary Tim Geithner told the New York Times, “are capital, capital, and capital.”

Source: Financial reform’s unfinished agenda, *The Washington Post*, 06 Jul 2010.

Common Tier 1 capital will also be reduced by unrealized gains and losses, putting an additional burden on banks by partially offsetting capital-preserving accounting treatments.

“The combination of a much stronger definition of capital, higher minimum requirements and the introduction of new capital buffers will ensure that banks are better able to withstand periods of economic and financial stress, therefore supporting economic growth”

Nout Wellink,
Chairman of the Basel Committee on Banking Supervision and President of the Netherlands Bank

Source: Group of Governors and Heads of Supervision announces higher global minimum capital standards, Bank for International Settlements, 12 Sep 2010

3.2. Areas of Regulatory Reforms to Improve Capital Quality

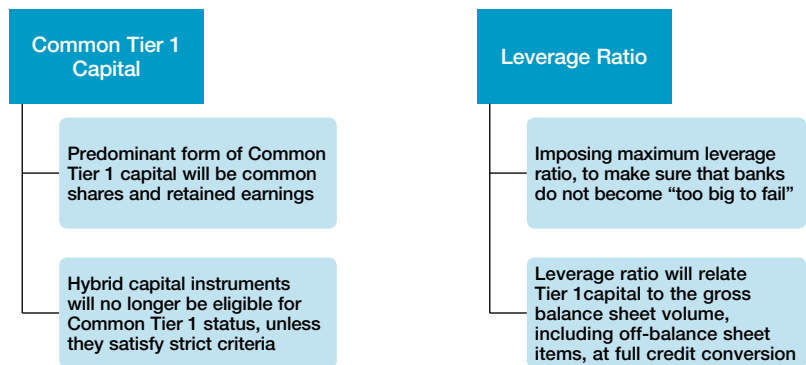
In North America and Europe, regulators focused on the need for increased capital and liquidity buffers. While in Asia, the focus has largely been on risk management, stress testing, and the need for risk and capital management to be aligned with a bank’s core strategy.

Clearly, the underlying theme of regulations across the globe is to ensure that banks have sufficient capital reserves for paying their creditors in the case of a default. Regulators have also introduced a narrowly defined Common Tier 1 ratio². The two key areas where regulators are focusing their efforts to strengthen banks’ capital base are common tier 1 capital and maximum leverage ratio.

Common Tier 1 Capital

Regulator’s view Tier 1 capital as the key measure of a bank’s financial strength, which has made it the core focus area of Basel III regulations on capital requirements. As per the new Basel III norms, banks will be required to hold more high quality capital, though there will be a lengthy transition period in which to implement these new changes. With an increase from the current ratio of 2%, banks will be required to hold common equity at 4.5% of their total assets by 2015. Regulators have also increased the deduction around common Tier 1 capital, such as net-deferred taxes, minority interest, and other intangibles. Along with these deductions, unrealized gains or losses will also be subtracted in the calculation of common Tier 1 capital.

Exhibit 2: Key Focus Areas for Regulators



Source: Capgemini analysis, 2011

Maximum Leverage Ratio

Regulators have also imposed a maximum leverage ratio as they want to reduce the risk of systemic threat to the financial system by controlling a bank’s size, so that it does not become “too big to fail”. Regulators realized that financial institutions, which were the primary entity involved and affected by the crisis (such as investment banks and mortgage houses), had very high leverage ratios in comparison with traditional retail banks.

² Common Tier 1 ratio is the ratio of a bank’s core equity capital to its total risk-weighted assets

3.3. New Basel Norms for Higher Global Minimum Capital Standards

Basel III tier 1 capital levels are tougher and more arduous for banks than those of its predecessor (Basel II), especially when put together with other Basel III proposals for a leverage ratio and liquidity buffers.

While Basel II focused on improving bank's risk-management, Basel III regulations seek to address the issues with proper capital and liquidity management. Regulators realized that the insufficient level of capital held by banks was one of the key reasons for the financial crisis and thus focused attention towards ensuring that banks hold sufficient capital in accordance to their risk exposure.

Basel III regulations on capital requirements focus on the following key areas.

Improve quality of core capital held by banks

As per the Basel Committee of Banking Supervision, "The new regulatory norms will increase the minimum requirement for common equity (the highest form of loss absorbing capital) from the current 2% level³ to 4.5% after the application of stricter adjustments. This will be phased in by January 1, 2015. The Tier 1 capital requirement, which includes common equity and other qualifying financial instruments based on stricter criteria, will increase from 4% to 6% over the same period".

Exhibit 3: Difference between Basel II and Basel III Norms around the Capital Requirements of Banks

	Basel II	Basel III
Tier 1 Capital	<ul style="list-style-type: none"> ■ Tier 1 Capital Ratio=4% ■ Core Tier 1 Capital Ratio=2% 	<ul style="list-style-type: none"> ■ Tier 1 Capital Ratio=6% ■ Core Tier 1 Capital Ratio (Common Equity after deductions)=4.5%
Capital Conservation Buffer	<ul style="list-style-type: none"> ■ There is no Capital Conservation Buffer 	<ul style="list-style-type: none"> ■ Banks will be required to hold a capital conservation buffer of 2.5% to withstand future periods of stress bringing the total common equity requirements to 7% ■ Capital Conservation Buffer of 2.5%, on top of Tier 1 capital, will be met with common equity, after the application of deductions
Countercyclical Capital Buffer	<ul style="list-style-type: none"> ■ There is no Countercyclical Capital Buffer 	<ul style="list-style-type: none"> ■ A countercyclical buffer within a range of 0%-2.5% of common equity or other fully loss absorbing capital will be implemented according to national circumstances ■ Banks that have a capital ratio that is less than 2.5% will face restrictions on payouts of dividends, share buybacks and bonuses
Capital for Systemically Important Banks only	<ul style="list-style-type: none"> ■ There is no Capital for Systemically Important Banks 	<ul style="list-style-type: none"> ■ Equity surcharge, ranging from 1%-2.5% of their assets, adjusted for risk, on top of the Basel III global minimum of 7% Core Tier 1 Capital

Source: Basel III Compliance Professionals Association, 2010

Introduce a capital conservation buffer

The capital conservation buffer above the minimum regulatory requirement is fixed at 2.5%. The conservation buffer ensures that banks will maintain minimum capital that can help absorb the losses by banks during times of financial and economic stress.

³ Before the application of regulatory adjustments

Capital requirements are supplemented by a non-risk-based leverage ratio that will serve as a backstop to the risk-based measures.

Introduce a countercyclical buffer

The Basel Committee on Banking Supervision states that, “A countercyclical buffer within a range of 0-2.5% of common equity (or other fully loss absorbing capital) will be implemented according to national circumstances”. A countercyclical buffer helps in shielding the banking sector from excessive aggregate credit growth. For a given country, the countercyclical buffer will only come into effect when excess credit growth is experienced which could pose a threat to the entire financial system due to risk build-up.

Set stricter regulations for systemically important banks

Regulators are developing an integrated approach for systemically important financial institutions, which is expected to include capital surcharges, contingent capital, and bail-in debt. As per the Basel Committee on Banking Supervision, “The Global Systemically Important Financial Institutions would face an equity surcharge ranging from 1-2.5% of their assets, adjusted for risk, on top of the Basel III global minimum of 7% core Tier 1 capital”. The new regulations will help in measurements that will be used to determine bank’s surcharge, including balance sheet size, cross-border claims and liabilities, dependence on wholesale funding, and lending to other financial institutions.

Introduce leverage ratio of 3%

Regulators have taken steps to test a bank’s tier 1 leverage ratio of 3%, which will ensure that banks lend no more than 33 times their capital, significantly lower than what some banks were lending before the financial crisis. Though these new norms are to be introduced in 2018, banks will need to disclose their leverage ratios from 2015 onwards.

The timelines for the implementation of new Basel III norms will start in 2013 and will go until 2019.

Exhibit 4: Phase-in Arrangements for Basel III Capital Requirements

	2013	2014	2015	2016	2017	2018	2019
Min. Core Tier 1 Capital Ratio (% of RWA)	3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Conservation Buffer (% of RWA)	-	-	-	0.625%	1.25%	1.875%	2.5%
Min. Core Tier 1 plus Capital Conservation Buffer (% of RWA)	3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%
Phase-in of deductions from Core Tier 1	-	20%	40%	60%	80%	100%	100%
Min. Tier 1 Capital (% of RWA)	4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%
Min. Total Capital (% of RWA)	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Min. Total Capital plus Capital Conservation Buffer (% of RWA)	8.0%	8.0%	8.0%	8.625%	9.125%	9.875%	10.5%
Countercyclical Buffer	Range between 0-2.5% (common equity or other fully loss absorbing capital)						
Capital instruments that no longer qualify as Non-Core tier 1 Capital or Tier 2 Capital	Phased out over 10 year horizon beginning 2013 (reduction of 10% per year)						

Source: Bank for International Settlements

4 Business Implications for Financial Services Institutions

This more-complex understanding of risks and emerging vulnerabilities is likely to help banks to proactively identify potential disconnects between risk appetite and business decisions.

4.1. The Impact of Regulatory Changes on Banks

In comparison with the pre-crisis situation, Basel III regulations on capital requirements focus on improving both the quality and quantity of the capital held by the banks. For regulators, the key challenge will be to ensure that Basel III regulations achieve a substantial reduction in systemic risk, while not reducing the banking industry's profitability significantly, as the new regulations are expected to absorb a significant amount of today's Tier 1 capital. Also, the stricter requirements on trading book exposures will have significant impact on trading activities, especially in the case of large investment banks.

New capital requirements will have a definite impact on the financial services industry's structure and the way it operates. The industry may undergo the following structural changes in order to comply with tighter regulations while mitigating a significant reduction in its profit margins:

Consolidation or nationalization of banks

In order to comply with new capital requirements, banks will be required to raise a significant amount of capital. Banks can raise this capital from the capital markets, but it is a challenge for them to do so as investors are still unsure about their ability to provide solid returns. Therefore, banks may face a period of significant consolidation or even nationalization of banks (such as ABN Amro, Santander, and Fortis). Aside from meeting capital requirements, consolidation may occur due to the negative impact of separating deposit and investment businesses of banks on their efficiency.

Slowing the pace of recovery

The new regulations will force banks to reduce their leverage ratios and reduce their risk exposure. This will in effect result in a higher cost of financing and may reduce a bank's lending ability to its customers. Such a scenario could result in a fall in economic activity, enhancing the risk of a slow and volatile global economic recovery. Europe is expected to be affected more than the US, as European banks finance the majority share of their national and regional economic activities.

Change in product landscape

Financial markets significantly changed as a result of the financial crisis. While certain products will be revived, others probably will not be—at least not in their prior forms. As the financial reform framework is further defined and, more importantly, recalibrated, the attractiveness of certain products and businesses is likely to change further. For example, in Europe, Solvency II legislation has proposed 39% capital charge on equities, 29% on real-estate investments, but no capital charge on government bonds.

Impact will depend on individual business models

The impact of new regulatory reforms on financial services institutions will vary depending on their business model and operations. The top management of bank must understand and analyze the potential impact of new reforms on their business model and devise strategies to minimize its impact.

4.2. How Financial Services Institutions Can Deal with a Tougher Regulatory Environment

The new regulations on liquidity and capital are expected to put pressure on banks that will have to raise capital either from debt or equity markets.

In the short-term, to comply with the new capital requirements, firms can divert capital from other sources to increase their core Tier 1 capital. Banks will also have to identify the business areas where they do not see much growth and potentially exit from them to raise liquidity. The other measures that banks can take to raise capital are to convert their hybrid instruments to Tier 1 capital or to improve the efficiency of their risk-weighted assets.

The regulations will deeply impact capital market participants such as investment banks and proprietary traders, and this is expected to lead to a reduction in trading volumes of certain complex securities. The impact of increased capital costs will also be felt by other financial market players, which can partly be offset by changing the business structure and aligning it to the “new normal”. As the costs of capital and funding increases due to new regulations, the banking industry may become much more competitive to attract this capital and thereby put further pressure on a bank’s balance sheet.

4.3. Next Steps for the Financial Services Industry

Despite uncertainty about the exact impact of new regulations on the global financial industry, there are some areas which make sense for banks to focus on. Over the medium term, banks are expected to take the following key steps.

Identify and focus on key business areas

Many banks will have to identify key focus areas in their existing businesses and reallocate capital to their strategically important businesses. This will help financial services institutions improve their profitability as they will be operating in areas of their core competency.

Simplify business operations

Banks across the globe were operating in a complex and intertwined market structure where the failure of one bank led to the failure of another due to the contagion effect. To comply with tighter regulations on capital and liquidity, and to reduce systemic risks, banks should work on reducing their business complexity. Reducing their exposure to complex and hybrid securities will also help banks release tied-up capital, thereby helping to improve their capital adequacy ratios as mandated by Basel III.

Develop institution-wide risk culture

One of the key suggestions of the Basel committee on risk-management was to have internal and customized risk mitigation systems. Regulators believe that different banks have very different risk profiles due to their individual organizational structures and business mix. Hence, a one-size-fits-all approach to risk management is not appropriate and each bank requires a customized risk mitigation approach.

In addition, Basel III strongly recommends banks to develop an institution-wide risk culture, essentially meaning that risk-management should not be limited to risk specialists but should be the responsibility of each member of the organization. Therefore, banks have an opportunity to make efforts in educating their employees around their responsibilities related to effective risk-management.

Invest in technology and data management systems

Maintaining data accuracy, transparency, and consistency across the organization will be the key challenge for financial institutions to mitigate operational and systemic risks. The Basel committee has realized the challenge financial services industry faces today around data quality and has thus recommended the development of data standards which will be consistent for firms globally. Regulators have also set stringent reporting standards which now require banks to provide agencies with detailed reports based on accurate data. This requires banks to now comprehensively analyze their current data and reporting systems, and do a cost-benefit analysis in order to identify the best possible approach for revamping their data management systems.

Banks can either outsource or build their data management systems in-house. Both approaches have their own pros and cons, and it will depend on the financial institution to decide which approach best aligns with its business strategy.

5 The Path Forward: Imperatives for Financial Services Institutions

The technology investment required to comply with Basel III will largely depend on the level of investment already made to meet Basel II regulations.

If a bank has a fully functioning and auditable risk management and measurement system, it can make incremental investments to comply with the solvency part of Basel III. However, to meet the liquidity element of Basel III, the investment could be much higher.

Banks have now started preparing for the implementation of risk and data management solutions, as most of the new regulations have either been formalized or are in the process of getting finalized by the agencies. The key question that financial institutions should ask themselves is whether their current technology infrastructure is capable enough to cope with the new requirements or they will have to build it from scratch?

5.1. Key Focus Areas for Financial Services Institutions before Implementing Basel III Norms

Generally, Basel III regulations are an extension to the current Basel II norms, but newly introduced rules are expected to have significant implications on the business operations and the balance sheets of financial services institutions. The key areas where banks should focus their attention are discussed below.

Gap analysis

The first step that a bank should take is to analyze its current IT systems and define gaps between the current state and new requirements. Banks who have already implemented Basel II requirements will be at an advantage over peers that have not. Basel II compliant banks will find it easier to adopt and implement the new Basel III norms such as a leverage ratio and new capital and liquidity standards.

While certain key elements of Basel III regulations are measured over a period of time (such as liquidity ratios) and will require a new approach requiring a holistic gap analysis which will help banks make correct estimates of efforts and investments required earlier in the process.

Complexity of the task at hand

During Basel II implementation, banks and regulators realized that being compliant with the new large-scale regulations will be complex and time-consuming. Although implementing the new norms will be spread over a decade to provide an adjustment period to the banks, they will still be under pressure to comply on-time or ahead of the stipulated timelines.

In addition to cultural and business challenges, banks have complications around inflexible legacy systems or platforms which were built not in-line with global data and reporting standards.

Extendible and upgradable new platform

Basel III technology infrastructure should be capable of change and extension. Banks need the flexibility to meet current requirements as well as future needs. Firms have to keep in mind while designing their systems that the regulatory reforms continue to evolve as changes and volatility take place across the global markets.

“Under Basel III, the board and senior managers have very specific roles with regards to risk and risk appetite, where the board or governing body is there to set the risk appetite and the senior managers are there to manage the firm within that.

But a bank can only do that on a firm-wide basis if it has a single source of truth, otherwise it faces a heavy data reconciliation process”

Selwyn Blair-Ford,
Head of Global Regulatory Policy,
FRSGlobal

Source: Banks seek technology answers for Basel III - www.risk.net, 02 Mar 2011

Accurate data management

The steepest learning curve for banks implementing Basel II was around how to manage data to ensure high standards of data quality and accuracy. Banks have realized the importance of accurate data not only for mitigating operational risk, but also the important role data plays in effective and sound decision making based on data analysis.

Banks should have a complete understanding of where particular data is being used in the organization, the number of users, how the data is sourced and distributed (internally or externally), and how the data is cleaned and stored. Regulators have also pressed upon the need for having accurate data management systems and comprehensive data governing policies for firms.

5.2. Key Recommendations

The impact of new capital requirements on a financial institution's technology infrastructure can be assessed as moderate. If banks already have Basel II compliant systems which are scalable, the technological impact will be minimal. For example, the new regulatory norms for risk-weighted-asset calculation (which is an extension of the Basel II requirements) will just require an incremental upgrade to the existing system.

However, banks that are not Basel II compliant will have to start afresh and are expected to experience a significant technological impact of the new Basel III regulations.

The global financial industry is undergoing some significant structural changes and this puts technology at the forefront of areas which need considerable improvement including:

Manage data centrally

The Basel committee has categorically advised financial institutions to follow global data management standards. A bank's first step in this direction is to have a centralized data repository that is responsible for ensuring accuracy, completeness, and reliability of organization-wide data.

The centralized data repository will collect, clean, consolidate, coordinate, and distribute data to internal or external users. In addition, such a repository makes it easier to manage data and thus ensures that faulty data is not used in calculating risk exposures, along with ensuring accurate reporting to the regulators.

Develop flexible reporting tools

Regulators have set stringent reporting standards which financial institutions need to now comply. For example, in Europe, regulators have introduced Common and Financial Reporting Standards for capital adequacy and financial reporting respectively. This makes it very important for banks to have an accurate and comprehensive reporting system. Also, reporting tools need to be flexible in order to capture any changes in regulations and standards in future.

Build an internal rating system for capturing credit and market risk

The Basel committee has advised banks to follow an internal rating-based approach which helps in identifying key risk areas and thereby reducing the risk-weighted assets of banks. With regulators pushing for an internal rating system, banks that do not already have their own credit rating system are looking to invest in this area. Before building their internal rating system, banks need to keep in mind that these systems should be flexible and comprehensive.

Enhance trading systems

Basel III regulations also stressed upon having standard products and routing over-the-counter (OTC) trades through central clearing houses. This new development will lead to an increase in the trading volumes due to the large scope of the OTC market.

Current trading systems are already proving to be sub-optimal in handling high trading volumes, which have resulted due to the popularity of high frequency and algorithmic trading (trade size is reduced, which leads to increase of trade volumes). With the proposed move of shifting over-the-counter products through central clearing, current trading systems are not equipped to handle the increase in trading volume. Therefore exchanges, clearing houses, and dealers need to upgrade their systems to handle high volumes.

Most banks have or are in the process of building platforms to comply with new Basel III requirements, but many financial services institutions have only just begun responding to the new regulations.

Many US banks are facing the challenge as they did not adopt Basel II norms and will now have to move directly to Basel III. Financial services institutions which were recently involved in mergers or acquisitions will also have to incorporate attributes of the new entities into their systems to become Basel III compliant.

These financial services institutions are now looking for more robust, upgradable and easily configurable systems, not only for compliance purposes but also from the strategic standpoint.

References

1. *Group of Governors and Heads of Supervision announces higher global minimum capital standards*, Bank for International Settlements, 12 Sep 2010. <http://www.bis.org/press/p100912.htm>
2. *The G20 leaders officially endorse the Basel III framework*, Basel III Compliance Professionals Association (BIIICPA), 12 Nov 2010. <http://www.basel-iii-accord.com/>
3. *Basel III requirements and their bottom-line impact on IT and business integration* by Michael Nace, Integrella, 01 Nov 2010. <http://portal.integrella.com/basel-iii-requirements-and-business-integration>
4. *Banks seek technology answers for Basel III* by Clive Davidson, Risk magazine, 02 Mar 2011. <http://www.risk.net/risk-magazine/feature/2028815/banks-seek-technology-answers-basel-iii/>
5. *Basel III and its implications for the world financial system* by Pascal Gautheron, Jordan Griffiths and Christopher Loh, Asian Banking and Finance, 03 Dec 2010. <http://asianbankingandfinance.net/banking-technology/commentary/basel-iii-and-its-implications-world-banking-system>
6. *FSB proposes capital surcharges for banks* by Brooke Masters, Financial Times, 19 Jul 2011. <http://www.ft.com/intl/cms/s/0/7267e534-b1f0-11e0-a06c-00144feabdc0.html#axzz1XLt5ZPxH>
7. *What Basel III means for banks IT* by Jamuna Ravi, Finextra, 14 Feb 2011. <http://www.finextra.com/community/fullblog.aspx?blogid=4988>

About the Authors

Rajendra Thakur is a Senior Consultant in Capgemini's Strategic Analysis Group within the Global Financial Services Market Intelligence team. He has four years of experience in the banking and capital markets industry with expertise in fixed income.

Ashish Kanchan is a Lead Consultant in the Strategic Analysis Group for Capgemini Financial Services. He has over 10 years of experience in the banking and capital markets industry with expertise in private banking, wealth management, and asset management.

The authors would like to thank **William Sullivan, David Wilson,** and **Paul Pullinger** for their overall leadership of this publication.

For more information, visit www.capgemini.com/risk or e-mail riskmgmt@capgemini.com.

This series from Capgemini Financial Services provides information, research, and analysis on key regulatory and compliance topics for banks, capital markets firms, and insurers to help understand the impact of ever-changing government regulations across the globe. The series is written by our Strategic Analysis Group. Topics are divided into six broad themes:

- Accounting Standards
- Capital Requirements
- Cross-border Regulations
- Remuneration, Governance, and Supervision
- Investor and Consumer Protection
- Liquidity Management

Given the volatile nature of government regulations, this series will provide a refreshed look at how these six regulatory themes continue to evolve and impact the financial services industry. The latest publications are available at www.capgemini.com/financialservices.



About Capgemini and the Collaborative Business Experience

Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies.

Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working, the Collaborative Business Experience™.

The Group relies on its global delivery model called Rightshore®, which aims to get the right balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients.

Present in 40 countries, Capgemini reported 2010 global revenues of EUR 8.7 billion and employs around 112,000 people worldwide.

Capgemini's Global Financial Services Business Unit brings deep industry experience, innovative service offerings and next generation global delivery to serve the financial services industry.

With a network of 21,000 professionals serving over 900 clients worldwide, Capgemini collaborates with leading banks, insurers and capital market companies to deliver business and IT solutions and thought leadership which create tangible value.

For more information please visit www.capgemini.com/financialservices