

Lessons from the Credit Crisis: Recommendations on Deploying Basel II Enhancements

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Issuances by BCBS including enhancements to Basel II framework in July 2009, proposed financial reforms package announced by President Obama and numerous initiatives being taken by the CEBS; are all indicating that a paradigm shift in the regulatory framework for banking is just over the horizon.

OVERVIEW

Around 30 Principles, Consultation Papers, Reports and Working Papers including enhancements to Basel II framework have been issued by the Basel Committee of Banking Supervisors (BCBS) since June, 2006. In the United States, the Obama administration has proposed “Financial Regulatory Reform - A New Foundation” which is being positioned as a comprehensive restructuring of the regulatory landscape. In Europe, the Committee of European Banking Supervisors (CEBS) has also issued a number of consultation papers and principles for addressing various loopholes in the existing regulations for banks.

Issuances by the BCBS, the proposed financial reforms announced by President Obama and the numerous initiatives being taken by the CEBS are all indicating that a paradigm shift in the regulatory framework for banking is just over the horizon.

BACKGROUND

The recent financial crisis, considered to be the most serious since ‘The Great Depression’ and characterized by losses amounting to trillions of dollars around the globe, has sent one loud and clear message to regulatory authorities worldwide: revamp your regulatory systems now. Basel II, whose comprehensive version was published only in June, 2006, has been the key target of critics since the crisis emerged. This criticism despite the fact that it was barely implemented in the United States and that Pillar 2, of which ICAAP (Internal Capital Adequacy Assessment Process) is an important component, of the Basel II accord was not implemented in its true spirit during global implementations either.

On November 20, 2008, the Basel Committee of Banking Supervisors (BCBS) announced a comprehensive strategy to address the lessons learned from the recent banking crisis. The key building blocks of the Committee's strategy are as follows:

- Strengthen the risk capture of the Basel II framework (particularly for trading book and off-balance sheet exposures)
- Enhance the quality of Tier 1 capital

- Build additional shock absorbers into the capital framework that can be drawn upon during periods of stress to help dampen procyclicality
- Evaluate the need to supplement risk-based measures with simple gross measures of exposure in both prudential and risk management frameworks to help contain leverage in the banking system;
- Strengthen supervisory frameworks to assess funding liquidity at cross-border banks;
- Leverage Basel II to strengthen risk management and governance practices at banks;
- Strengthen counterparty credit risk capital, risk management and disclosure at banks; and
- Promote globally coordinated supervisory follow-up exercises to ensure implementation of supervisory and industry sound principles

OVERVIEW OF BASEL II ENHANCEMENTS

BCBS has released a number of papers since the release of the comprehensive Basel II guidelines in June, 2006. On July 13, 2009, BCBS issued final enhancements to their Basel II framework. The key issuances by BCBS are summarized in the following diagram:

S.No.	Date	Title of BCBS Publication	Type	Comment Period	Effective Date	Classification
1	Oct-07	Guidelines for Computing Capital for Incremental Default Risk in the Trading Book	Consultation	15-Feb-08	1-Jan-10	Market Risk
2	Jun-08	Principles for Sound Liquidity Risk Management and Supervision	Consultation	29-Jul-08	N.A.	Liquidity Risk
3	Jul-08	Guidelines for Computing Capital for Incremental Risk in the Trading Book	Consultation	15-Oct-08	1-Jan-10	Market Risk
4	Jul-08	Proposed revisions to the Basel II market risk framework	Consultation	15-Oct-08	1-Jan-10	Market Risk
5	Sep-08	Principles for Sound Liquidity Risk Management and Supervision	Principles	N.A.	N.A.	Liquidity Risk
6	Nov-08	Supervisory guidance for assessing banks' financial instrument fair value practices	Consultation	6-Feb-09	N.A.	Market Risk
7	Jan-09	Principles for stress testing practices and supervision	Consultation	13-Mar-09	N.A.	Risk Management
8	Jan-09	Enhancements to the Basel II framework	Consultation	17-Apr-09	N.A.	Basel II Accord
9	Jan-09	Revisions to Basel II MR Framework	Consultation	13-Mar-09	N.A.	Basel II Accord
10	Jan-09	Guidelines for computing capital for Incremental Risk in the trading book	Consultation	13-Mar-09	N.A.	Market Risk
11	Apr-09	Supervisory guidance for assessing banks' financial instrument fair value practices	Principles	N.A.	N.A.	Market Risk
12	May-09	Principles for stress testing practices and supervision	Principles	N.A.	N.A.	Risk Management
13	Jul-09	Enhancements to the Basel II framework	Guideline	N.A.	N.A.	Basel II Accord
14	Jul-09	Revisions to Basel II MR Framework	Guideline	N.A.	N.A.	Basel II Accord
15	Jul-09	Guidelines for computing capital for Incremental Risk in the trading book	Guideline	N.A.	N.A.	Market Risk

Figure 1 : Basel II Enhancements issued by BCBS

Over the past two years, the BCBS has announced a series of initiatives in the following areas:

Owing to tight timelines, business imperatives along with regulatory compliance issues, banks must act now to understand the impact of Basel II enhancements on business strategy and capital planning and ensure a smooth implementation of these enhancements

1. Pillar 1: Minimum Capital Requirements
2. Pillar 2: ICAAP/Supervisory Review
3. Pillar 3: Market Disclosures
4. Market Risk
5. Liquidity Risk
6. Stress Testing

A brief description of key requirements in above areas is furnished below.

1. Pillar 1: Minimum Capital Requirements

Pillar 1 enhancements propose increased risk weighting of resecuritisation exposures under IRB and standardized approaches, de-recognition of ratings based on bank's guarantee, specifying operational criteria for securitisation exposures to use Basel II risk weights, stringent treatment of liquidity facilities in terms of increasing credit conversion factors & elimination of favorable treatment under market disruption, etc.

2. Pillar 2: ICAAP/Supervisory Review

Pillar 2 enhancements have provided supplemental guidance on following areas:

- Firm-wide risk oversight;
- Specific risk management topics:
 - Risk concentrations;
 - Off-balance sheet exposures with a focus on securitisation;
 - Reputational risk and implicit support;
 - Valuation and liquidity risks; and
 - Sound stress testing practices
 - Sound compensation practices

The supplemental guidance on Pillar 2 has reconfirmed the thorough and comprehensive internal capital adequacy assessment process (ICAAP) as a vital component of a strong risk management program.

3. Pillar 3: Market Disclosures

Pillar 3 enhancements propose strengthening disclosures in Table 9 of Securitisation Exposures and propose to cover the following areas:

- Securitisation exposures in the trading book;
- Sponsorship of off-balance sheet vehicles;
- Internal Assessment Approach (IAA) and other ABCP liquidity facilities;
- Resecuritisation exposures;

- Valuation with regard to securitisation exposures; and
- Pipeline and warehousing risks with regard to securitisation exposures

4. Market Risk

BCBS has published two guidelines to strengthen the regulatory capital adequacy framework in trading book. These guidelines titled “Revisions to Basel II MR Framework” and “Guidelines for Computing Capital for Incremental Risk in the Trading Book” issued on July 13, 2009 will come in to force on December 31, 2010 around the world. The new guidelines will require stringent capital requirements in the trading book. The new requirements provide for higher capital requirement for securitisation exposures in the trading book and modified capital calculation formula under the internal model approach.

5. Liquidity Risk

On September 25, 2008, BCBS issued final “*Principles for Sound Liquidity Risk Management and Supervision.*” *These principles are a significant enhancement to the liquidity guidance that was issued earlier in February 2000.*

- the importance of establishing a liquidity risk tolerance
- maintenance of an adequate level of liquidity, including through a cushion of liquid assets
- the necessity of allocating liquidity costs, benefits and risks to all significant business activities
- the identification and measurement of the full range of liquidity risks, including contingent liquidity risks
- the design and use of severe stress test scenarios
- the need for a robust and operational contingency funding plan
- the management of intraday liquidity risk and collateral
- public disclosure in promoting market discipline

Many jurisdictions have also started implementation of these revised principles. For example, recently the U.S. regulatory agencies have released proposed guidance for liquidity risk management for public comments (“Proposed Interagency Guidance – Funding and Liquidity Risk Management” issued in June 2009 by US Federal Reserve.)

6. Stress Testing:

The “Principles of Sound Stress Testing Practices and Supervision” issued by BCBS in May, 2009 has identified four major weaknesses in the stress testing practices:

- Use of stress testing and integration in risk governance;
- Stress testing methodologies;
- Scenario selection; and
- Stress testing of specific risks and products

The BCBS paper has established twenty-one principles for sound stress testing with 15 recommendations to banks and 6 recommendations to supervisors.

RECOMMENDATIONS

Banks need to act now on emerging Basel II requirements because timelines are tight (E.g. IRC (Incremental Risk Charge) – 2010, Pillar 2 - Immediately); and moreover the new requirements have not only compliance issues but business imperatives as well. The new requirements for higher capital charges for securitisation exposures and stringent capital requirements for trading book exposures (as two examples); will significantly impact the business strategy and capital requirements of banks. Advance preparation for these requirements will avoid surprises on cost, time and resources.

Therefore banks should start reviewing their preparedness for incorporating new requirements and have a project plan in place on developing the strategy for new requirements. The key areas needing banks’ attention are:

Basel II Solution

Modifications will be required in banks’ Basel II calculators (internal or external) to incorporate the proposed changes to the Basel II framework. These changes are primarily in the Credit Risk-Securitisation, Market Risk and additional Pillar 3 disclosures. Banks that have invested in a transparent, business-user friendly Basel II solution should find it easier to roll out these changes.

Market Risk

Banks who are using or planning to use the internal model approach for market risk capital requirements of Basel II will have to incorporate Incremental Credit Risk (IRC) modeling, stressed VaR and modified regulatory capital requirements for market risk.

There are multiple approaches available to model IRC, for example, the Credit Metrics Approach and the analytical approach. Banks need to seriously analyze the impact of IRC modeling requirements on the market risk capital requirements. This will enable banks to formulate appropriate, timely and well planned business strategies and capital planning.

Liquidity Risk

Intraday Liquidity Management, Collateral Management, Stress Testing, Measuring and Allocating Liquidity Risk, Public Disclosures are the new buzz words in liquidity risk management. Banks need to strengthen their liquidity risk management infrastructure including enhancing their asset liability management solutions to meet new regulatory requirements.

The gaps in existing liquidity risk infrastructure need to be identified with respect to the new requirements. The new requirements are quite challenging and in most cases the banks will have to significantly strengthen their existing asset liability management framework. It is high time that banks put in place a proper project plan to implement the new requirements and allocate appropriate resources towards it.

Stress Testing Framework

Banks need to put in place a robust stress testing framework that can be deployed across all risk categories and is capable of generating stressed regulatory and economic capital requirements under historical/hypothetical scenarios using sensitivity analysis or scenario analysis.

Banks should specifically prefer an analytical solution which can maintain a library of scenarios, define stress scenarios, apply various types of shocks and be usable for all risks to satisfy these emerging requirements.

- integrated stress testing framework,
- reverse stress testing requirements,
- multiple techniques and scenarios,
- flexible infrastructure,
- Inter-linkages between risk factors

Additional Pillar 3 Disclosures & Reporting

Banks will have to provide additional Pillar 3 disclosures and be prepared for more regulatory reporting in the new regulatory environment. These requirements will be in the form of modified reporting or additional reporting.

The banks, which calculate and store the results at the lowest level of granularity and have flexible reporting solution, will find it much easier to comply with new reporting requirements.

Pillar 2 and ICAAP

During Basel II implementation, banks have not given ICAAP its due attention. Many have perceived its objective as mostly a compliance matter rather than as a vehicle for serious review and improvement of the risk management practices of the bank. ICAAP has the real potential of transforming risk management and as such should be seen as a real business imperative. The recent crisis has clearly shown major weaknesses in risk management practices as many financial

institutions did not fully understand the risks associated with their structured products. BCBS, in its supplementary guidance, has re-emphasised the importance of ICAAP and its components and it may also be noted that while other enhancements are generally effective beginning December 31, 2010, the Pillar 2 supplementary guidance is effective immediately. Going forward, the ICAAP of the banks will be subjected to greater scrutiny by the supervisors as well.

Therefore banks must seriously put in place a comprehensive ICAAP at the core of the risk management process of the bank. The financial institutions must put in place appropriate policies, procedures, limits and controls for Identifying, measuring, monitoring and reporting of risk subject to board and senior management oversight. The financial institutions will have to implement effective capital planning, stress testing and liquidity risk principles and risk adjusted performance measurement as a part of ICAAP program.

CONCLUSION

The proposed improvements in the Basel II accord are not just minor revisions but a fundamental change of capital requirements and risk management. Regulators have responded to the current crisis and now it's the turn of the banks to do their part. These requirements are quite challenging and require substantial efforts on the part of the banks as these will significantly impact their business strategy and capital planning. Therefore banks must adopt a well planned strategy for adoption of these new requirements to ensure a smooth implementation.

Financial institutions who have deployed Oracle Reveleus products should find it easier to meet emerging Basel II requirements because of the flexible, transparent and business-user friendly nature of these products which have been deployed in banks of all sizes globally. Oracle Reveleus Basel II, Oracle Reveleus Market Risk, Oracle Reveleus ICAAP and Oracle Asset Liability Management are well positioned to meet the emerging requirements and turn the implementation of these challenging requirements into a smooth journey.



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