Chapter Six

Risk Management in Financial Institutions

Box 4.1

Key features of Basel II and its benefits to the economy

The Basel Committee on Banking Supervision, established by the central bank governors of the Group of Ten countries, released the revised capital adequacy framework (commonly referred to as "Basel II") in June 2004. The objective of Basel II is to better align minimum capital requirement of banks more closely to the risks they face. The revised framework replaces the old "one size fits all" approach on banks in regard to risk management. Given the significant benefits of Basel II to the Hong Kong economy, Hong Kong has been at the forefront of jurisdictions globally taking active steps to incorporate the requirements of the revised framework into their regulatory regimes.

The revised framework under Basel II adopts a three-pillar structure which represents a major step forward in terms of the identification, quantification and management of risk and public disclosure.

Pillar 1 requires banks to maintain a minimum amount of capital for credit, market and operational risks. The new framework provides a spectrum of approaches for banks of different levels of sophistication, depending on their internal risk management capabilities and complexity of operations, to calculate their minimum capital requirement.

Pillar 2 requires banks to assess the full range of risks they run and to determine how much capital to hold against them. The banks' capital adequacy and internal assessment process will also be reviewed for ensuring that capital above the minimum level is held where appropriate.

Pillar 3 aims to bolster market discipline by setting out the disclosure requirements applicable to banks in areas such as their risk profiles, capital adequacy and internal risk management. As a general rule, different banks with different levels of sophistication and risk exposures will be subject to different disclosure requirements.

Hong Kong has implemented Basel I and its subsequent amendments. As an international financial centre that prides itself on adopting best practices that commands wide international acceptance, Hong Kong has committed to adopting Basel II. Implementation of Basel II in Hong Kong will commence in phases starting on 1 January 2007. This is in accordance with the timetable recommended by the Basel Committee for its own members, and will be at about the same time as other major international financial centres, such as London, Frankfurt and Tokyo, and also broadly similar to that of Australia and Singapore.

Recognizing that banks in Hong Kong vary widely in terms of their business focus, size and complexity, as well as the nature and combination of risks they face, the HKMA will adopt a menu-based approach in implementing Basel II. Banks are expected to choose options based on their risk profile and complexity of operations, and the results of their own detailed feasibility studies and cost-and-benefit analyses.

Basel II will provide incentives to banks to adopt the latest advances in the field of risk management. Banks which adopt best practices in the management of risk will be awarded with lower capital requirements. Enhanced risk management will improve banks' ability to offer more sophisticated products to customers, thereby helping bolster development of the banking industry. It will also enhance banks' ability to assess lending to sectors such as the small and medium-sized enterprises, and allow for better risk-adjusted pricing. From a macro perspective, the greater risk sensitivity of Basel II and the inclusion of a wider range of risks will further enhance the safety and stability of the banking sector, strengthening the position of Hong Kong as an international centre.

Features of BASEL-2

i) It provides for greater sensitivity to arbitrage and innovation in the financial market place, which demand more flexible capital rules than BASEL-1 allowed.

ii) It recognizes that different banks have different different risk exposure, may have to employ different methods to assess their unique risk exposure, and may be subject to different capital requirements.

iii) It broadens the types of risk considered in determining capital requirements and establishes minimum capital requirements for credit market and operational risks. BASEL-2 is substantially more risk sensitive than BASEL-1.

iv) It requires each bank to ~~do~~ develop in-house risk-management models and stress tests for assessing its risk exposures under a variety of different market place scenarios.

v) It requires each bank to determine its own capital requirements based on its own calculated risk exposure, subject to review for reasonableness by regulatory authorities.

vi) It promotes greater public disclosure of each bank's true financial condition so that greater market discipline will be applied to bank's perceived to be taking an excessive risk.

Market Risk

Market risk is the risk of the value of a firm's investments going down is a result of market investments. It is also referred to as price risk. Market risk cannot be distinctly separated from other risks, as it results from interplay of these risks. Interest rate risk and exchange risk contribute the ~~p~~ most to the presence of market risk.

Credit Risk

When there is a counterparty failure in performing the repayment obligation on due date, it gives rise to low quality assets which in turn leads to to credit risk. Credit risk is the inherent feature of any firm that is into the business of lending funds either to individuals or to companies.

Effective management of credit risk involves the following key principles:

(i) Evaluation;
(ii) Pricing;
(iii) Monitoring

By evaluating and sanctioning the proposal and appropriately pricing it, the credit risk management policy has indeed performed only half his job. While the measurement of various ratios and other financial analyses is done with great accuracy, their interpretation is mostly not done. There has to be experience to scrutinise all the credit information and interpret the same. ~~However~~ However, good the analyses may have been, the bank will be in no position to distinguish a good borrower from a bad borrower, who has no intention of repaying the loan. Despite all the caution, bad loans do creep into the banks. Thus, valuation and pricing decisions should be followed up with periodic review of the account and the credit rating of the borrower. Any fall in the rating will increase the credit risk. Credit risks persist from the time the loan is granted throughout its life period and continuous review during the period will help in the early detection of the problem loans.

Operational Risk

Operation risk has come into greater focus in the five to six years among OTC derivatives market participants, particularly in the wake of financial crisis, according to a new report, Operational Risk Management in OTC Derivatives in Asia.

OTC derivatives market volumes have recovered in the last year ~~or~~ or so. The main worry with regard to the high volumes is the fact that a lot of these volumes are ~~expect~~ expected to shift to central clearing in the next few years. Moves are under way to ensure this in the leading Asian markets including Japan, Hong Kong, Singapore, Korea, China, Taiwan and India.

In most of the cases, there has been a ~~marked~~ marked improvement in the capabilities of firms to automate processes and ensure that the number of errors are reduced, factors which reduce operational risks. However, there is a significant level of automation that remains to be undertaken, and it would become difficult (especially for the smaller firms) to free up the resources to undertake this.

A firm's strategy, management, people, processes and business conditions all play a role in influencing the levels of risk that the firm faces. On its part, the firm has to ensure that are adequate checks and balances at all levels in its hierarchy, and transparency and accountability, is emphasised upon. Collateral management derivatives valuation and calculation of the cash flows are important financial aspects that deserve attention. In this context, it is important to stress that increasing capital requirements are going to play an important role in the way a firm ameliorates operational risk. Hence, the costs of risk mitigation are expected to go up, and this is another important issue of smaller firms have to be cautious about while deciding the volumes of OTC derivatives they want to trade in the future.

Among the broad regulatory guidelines that are in place for market participants, the BASEL-II and III norms are useful in understanding the calculation of capital required to mitigati operational risk. similarly, the framework suggested by the Committee of European Banking Supervisors (CEBS) is very helpful not just for the banks that trade in OTC derivatives, but also for the buy side and indeed non-financial players because it addresses the day-to-day practical issues that arise from such trading and how to deal with them from the ~~post~~ point of view of operational risk.