Jumping Hurdles:
Adopting Basel II Standards in Islamic Banks

By Abul Hassan

The Basel Committee on Banking Supervision has adopted a new accord, the Basel II. The accord aims to establish market discipline, with the main emphasis on risk-based capital adequacy. According to Basel II, some selected international banks will be allowed to use their own internal risk management systems. Other banks will continue to use standardized risk management systems with enhanced rating systems. Adoption of external rating facilities and guidance for supervisory bodies in relation to external ratings are major components of the risk management process within the Basel II accord.

However, the risks associated with specialized Islamic products and their unique nature, Islamic banks face a challenge in adopting international standards. It may be taken into consideration that some of the risk models may expose Islamic banks to other risks that are not apparent for conventional banks. The methods that are developed for conventional banks should be amended and tailor-made for Islamic banks and such procedures may require extensive input in terms of data availability.

Because of the unique nature of their financial instruments, Islamic banks should keep profit and loss sharing accounts off the balance sheet. Conventional banks cannot do the same for time deposits. Such accounting treatment would expose Islamic banks to capital adequacy risk. Adoption of Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) standards provides a resolution for the issue by requiring Islamic banks to keep all deposits on the balance sheet, without differentiating between current accounts and profit and loss sharing accounts. The International Accounting Standards (IAS) do not have any accounting procedure to overcome this obstacle. In countries where compliance with IAS is mandatory without any room for AAOIFI standards, there may be Islamic banks with profit and loss sharing accounts that are off the balance sheet.

Besides risk-based capital adequacy, Basel II also emphasizes risk management techniques, internal controls and external audits. While capital adequacy definitions are not changed with the new accord, new approaches are described for weighting assets: the standardized approach, the internal ratings-based approach and the model-based approach.

Standardized Approach

Islamic banks are categorized as medium to small firms. Therefore, they may be required to comply with the standardized approach to classify and measure risk exposure for capital adequacy. Currently, the majority of the Islamic banks assess their credit risk by applying the standardised approach, in which capital weighing is based on ratings from external rating agencies such as Standard and Poor's, Fitch Ratings or Moody's.

As Islamic banks move to more advanced approaches, they face the challenge of a lack of data from historical default cases. Quality data must be available to estimate the probability of default

and loss given default. Islamic banks definitely need a pooled data system at the multinational level that would require a relaxation of some confidentiality rules imposed by associated regional banks.

Clarification from the Islamic Financial Services Board on the nature of Islamic banking products and the associated risks under Basel II has helped in identifying proper risk mitigation strategies for Islamic banking. Risk mitigants, including collateral, guarantees and derivate products, are recognized within the standardized approach with a wider range. The effects of specific risk mitigants on overall risk measurement are defined in the accord, but this definition is not extended to Islamic financial instruments. Transactions such as murabahah and ijarah are structured similarly to conventional transactions.

The definition of collateral for partnerships such as mudarabah and musharakah are very troublesome for Basel II. At first look, these partnerships may require collateral neither for expected profits nor against principal investments. If a bank establishes a musharakah transaction, how could it be possible to ask for collateral and from whom would the collateral will be collected? Is it legal in terms of Shariah to collateralize investments of musharakah or mudarabah partnerships? If little collateral is asked against managerial misconduct or none taken in, the transaction will be recorded as an equity partnership with no collateral. Thus, under Basel II, collateral should be applied to equity participation and assets of the equity should be considered either as a deduction from the risk or as collateral for the outstanding risk.

The treatment of derivative products has also been expanded to include more products. Although there are no Islamic financial instruments defined as derivative products for Basel II purposes, parallel salam may be used to hedge against risks arising from salam contracts. Parallel salam contracts may not be derivate products, but the application of salam is very much in line with the intent of derivatives. In terms of credit definitions, however, Basel II will treat the two salam transactions as two separate deals and double the risk. If parallel salams are to be included within the Basel II expanded derivate treatment, banks would match two contracts and deduct the amount of parallel salam from the original salam contract. The resulting reduced risk exposure is similar to that of credit derivatives that conventional banks utilize to hedge their credit risk.

The range of guarantors as collateral has been expanded to include certain companies with acceptable levels of external credit ratings. Islamic banks will benefit from such expansion in terms of credit extended to the real economy. As long as Islamic banks do not include fixed-income securities to their credit portfolio, their percentage of loans within total assets should reflect this tendency.

Special risk treatment for retail exposures is included within the standardized approach. The risk weights are reduced for most retail exposures. Credits extended to small and medium enterprises that meet the required criteria are included within this special treatment. Islamic banks will benefit from reduced risk weights, because the available Islamic financial instruments make it possible for Islamic banks to work extensively with small and medium enterprises. Some of the Islamic financial instruments especially designed for this purpose include istisna, salam and mudarabah.

Any special treatment in terms of reduced risk weights will benefit Islamic banks in two ways. First, it will allow Islamic banks to offer better conditions to customers. Second, Islamic banks will be encouraged to work more with small and medium enterprises and utilize more related products. This may result in product shift from dominant murabahah transactions within the credit portfolio to more equity-related products.

Internal Ratings-Based Approach

Banks' internal risk measurement systems are utilized for measuring credit risk. Risk weights and capital charges are generated by banks with the guidance of Basel II and regulatory bodies. The risk-weight calculations are derived from risk management techniques. The internal ratings-based (IRB) approach uses four quantitative areas of data:

- Probability of default (PD) is the probability that a borrower will default within a time period.
- Loss given default (LGD) is the percentage of the risk exposure that will be loss in case of default.
- Exposure at default (EAD) is the amount of risk exposure at the time of default.
- Maturity (M) is the days left for the risk exposure to end.

The capital requirement for specific risk exposure will be a function(f)of PD, LGD, EAD and M.

With the IRB approach, banks are permitted to alter the risk weight formula for small and medium enterprise borrowers. Such an alternative will be especially useful for Islamic banks, considering the relatively larger risk exposure of small and medium enterprises. The advanced risk weight formula will allow for true reflection of risk in terms of small and medium enterprise size and annual sales figures.

The disadvantage of categorizing all small and medium enterprises into one single category is that the differences between small and medium enterprises are overlooked. With the IRB system, such differences are reflected directly in risk measurements and therefore in calculation of capital. Allowing the bank to distinguish the risk weight will also allow for true risk estimation in terms of risks associated with Islamic financial instruments. It has always been a problem to distinguish the differences in risks between small and medium enterprises financing by conventional banks versus financing by Islamic banks. Risk weights that are based on past experiences of Islamic banks will enable a better risk definition in terms of small and medium enterprises and related credit products.

The IRB approach also provides extended coverage for risk mitigation techniques, including collateral and risk derivatives. Considering the absence of risk derivatives for Islamic banks, their treatment is not applicable, except to say that conventional banks gain advantage over Islamic banks.

On the other hand, regarding collateral, extended treatment will benefit Islamic banks a great deal. Perhaps Islamic banks will benefit more than conventional banks, as long as a different set of methods will be allowed by the supervisory bodies. It will be very important to have the cooperation of regulatory bodies to develop a set of risk measurement methods for Islamic banks

that may prove to be much different than the methods for conventional banks. Since the IRB approach includes many aspects of risk measurement to be conducted by banks themselves, the same should be applicable to Islamic banks as well. Islamic banks, together with Islamic banking standardisation authorities such as the AAOIFI and the Islamic Financial Services board (IFSB), should provide the necessary foundation to establish an IRB approach for Islamic banks.

In terms of retail exposures, the IRB approach includes an expanded treatment. These credits are categorized under three headings:

1. Collateralized by residential mortgages.
2. Qualifying revolving retail exposures.
3. Other retail exposures.

Different products of Islamic banks have different collateral structures. For instance, murabahah transactions may have residential mortgages that could be classified according to the first category. In terms of qualifying revolving retail exposures, Islamic banks cannot have revolving credits according to Shariah. Although some credit restructuring may be permitted, and in fact encouraged, if customers face payment problems, these should not be considered as revolving credits. The third category includes many credit types that are convenient for Islamic banks. For instance, project financing is categorized as specialized lending under other retail exposures. Islamic banks may list instruments as specialized lending, including salam and istisna. While classification of such risk is still troublesome, Islamic banks should take the lead to describe risks associated with such credit relationships and establish a risk weight foundation.

Equity participation is also handled differently under the IRB approach. Islamic financial instruments such as mudarabah and musharakah benefit from such special treatment. There are two different methods described for handling equity participation: 1. Banks can provide their own default probabilities for equity participations; and 2. Banks can estimate the market value decrease of the equity participation. In either case, Islamic banks can take advantage of special treatment.

In fact, the IRB approach to equity participation may encourage Islamic banks to utilize more mudarabah and musharakah transactions. But in order to obtain supervisory approval to apply the IRB approach, Islamic banks will have to overcome obstacles in terms of size and risk management.

Model-Based Approach

Under this system, credit risk is measured in terms of risk portfolios, with utilization of specialized models. Through utilization of pre-defined risk models with computerized systems, banks aim to implement standardized risk measurement procedures. Basel II aims to establish comparable risk measurement techniques between banks. However, banks need necessary infrastructure and model descriptions for a variety of risks. To generate a standardized risk measurement system, Islamic banks will require extensive resources and enough experience in various types of risks to draw upon. In fact, a standardized Islamic banking risk measurement model would be a great achievement.

Importance of Securitisation and Transparency in Managing Risk

Basel II emphasizes capital adequacy, risk management techniques, internal controls, and external audits. Both securitisation and transparency increase the credibility of Islamic banks in the risk management which are discussed below:

Securitization

Securitizing banks' assets is a device for reducing banks' risk exposures as banks gather their income-earning assets and sell them to other investors, including other banks. The concept of securitization is very important for Islamic banks. The structure of a securitized credit portfolio would have participants purchasing part of the risk. Each portfolio would contain similar risks and assets attached to it. The decreased value of assets would have to be accounted for in terms of risk measurement.

The very nature of profit and loss accounts of Islamic banks that participate in credit and market risk of assets directly, such accounts may be considered as securitization in terms of Basel II credit risk exposure. The characteristics of Islamic investment deposits require account holders to receive profits and accept losses. Therefore, any asset pool that is generated by the deposits collected through investment accounts act as risk diversification. In case of losses or diminished assets values, the loss is directly passed on to the investment account holder. Securitization of investment pools through profit and loss investment accounts eliminates credit risk, but many other risks still remain for Islamic banks.

Furthermore, measurement of the risk to which Islamic banks are exposed calls for research in terms of the type of securitization that profit and loss accounts provide. A system in which the amount and maturity of equity investments is equal to the amount and maturity of investment deposits should be compared to the conventional banking system in terms of risk, profitability and utilization.

It may be mentioned here that Basel II treats intermediate term preferred stock, subordinated debt and hybrid capital instruments as Tier 2 capital. Considering the fact that PLS accounts have a higher degree of risk sharing and risk absorption, profit and loss sharing accounts should also be considered as Tier 2 capital.

Transparency

The concept of transparency is one of the key points for establishing market discipline in order to help lower the risk profile of banks. In other word, the issue of transparency is quite relevant for Islamic banks. It is even more important to disclose accurate financial results, since Islamic banking is based on profit and loss sharing. But in reality, Islamic banks are less transparent in terms of financial data compared with conventional banks. However, stock market listed Islamic banks are more transparent than non-listed Islamic banks. The Islamic banking industry should consider that higher financial participation and a higher quality of information will improve the quality of the contracts entered into by Islamic banks and their customers.

Obstacles for Islamic Banks in Implementing Basel II

Islamic banks are slowly but surely handling risk in a much better way as they move towards adopting Basel II. However, before Islamic banks get closer to adopting the more advanced features of Basel II, they need to ensure that a few major obstacles are overcome.

Using advanced approaches for calculating and handling risk is currently difficult in some of the Islamic banks operating in the Middle East and Asian countries due to shortage of data. For example, detailed historical default data is required to calculate the probability of default and the potential loss given the estimates of default. However, this data is not easily available in most of the Islamic countries.

National Commercial Bank, Al-Rajhi Bank and a few other banks are working towards creating a national data pooling system for handling credit risk. Bahrain, Malaysia, Qatar and the UAE have developed national databases and banks in the Middle Eastern countries are working on collecting their own historical data.

Much more needs to be done to develop globally competitive databases for the Islamic banking sector. Furthermore, in order to combine data at a multinational level, the central banks of the Islamic countries need to give their banks the freedom to disclose information. This would require the cooperation of the central banks of all Islamic countries. Corporations of Islamic countries should adopt a similar policy of disclosing data on their exposures. The idea of using a proxy database to start with is being worked upon to ensure that Islamic banks at least start using more advanced Basel II reporting and compliance.

Islamic banking presents unique risks to the financial system. This is because of the profit and loss sharing method of financing and particular contractual features of Islamic financial products. The profit and loss sharing shifts the risks in the institution to investment depositors to some extent. It also makes Islamic banks vulnerable to a range of risks, including those risks that are normally carried by equity investors because of the following features:

- The profit and loss sharing mechanism is very complex. It requires greater auditing of projects to guarantee proper governance and suitable valuation.
- Profit and loss sharing cannot be made dependent on collateral or guarantees to decrease credit risk.
- Product standardisation becomes more complex because of the multiplicity of potential financing methods, increased operational risk, and legal uncertainty in interpreting contracts.
- Because of the absence of Shariah-compliant instruments such as treasury bills, it is difficult to manage asset and liability mismatches and hence, liquidity risks are significant.

Commodity inventories on Islamic bank balance sheets increase price and operational risks. Furthermore, due to contracts of Islamic banks with deferred delivery of products, considerable additional price risks arise.

In order to address the unique risks of Islamic banking, adequate capital and reserves are required. This also requires control of risks in an appropriate disclosure regime. Since information asymmetries are widely present in Islamic banking, there is a strong need for better rules and practices for accounting, governance, disclosure and auditing. Furthermore, there is a need for the development of an infrastructure that facilitates liquidity management.

Islamic financial institutions face a major challenge in analyzing the risk characteristics of Islamic financial products and understanding how to treat these products under Basel II. Islamic banking bodies are working towards clarifying these issues.

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